

**Board of Education Regular Meeting**

**November 18, 2024 6:30 PM**

Poplar Grove Middle School, 2959 Del Rio Pike, Franklin, Tennessee 37069

- I. **MEETING CALLED TO ORDER**
- II. **PLEDGE OF ALLEGIANCE**
- III. **RECOGNITIONS/GOOD NEWS AWARDS**
- IV. **PUBLIC INPUT**
- V. **REPORTS/PRESENTATIONS/DISCUSSIONS**
  - V.1. Teaching & Learning Spotlight
  - V.2. Construction Report
  - V.3. Williamson Chamber Market Update Business Luncheon and Expo
  - V.4. NSBA CUBE 2024 Annual Conference
  - V.5. TSBA 2024 Leadership Conference and Annual Convention
- VI. **APPROVAL OF BOARD AGENDA**
- VII. **APPROVAL OF CONSENT AGENDA**
  - VII.1. Minutes of Board Meeting dated October 21, 2024
  - VII.2. Data Privacy Agreement
  - VII.3. Overnight Field Trip Request - FIS 6th graders to R.E.E.L. Environmental Education
- VIII. **BUSINESS BEFORE THE BOARD**
  - VIII.1. 2025-26 and 2026-27 Calendars
  - VIII.2. Resolution for Adoption of the Williamson County Multi-Hazard Mitigation Plan
  - VIII.3. Real Estate Committee Recommendation for Sale of Battle Avenue Lots
  - VIII.4. Ratification of Lease Agreement with the City of Franklin
- IX. **DIRECTOR OF SCHOOLS REPORT**
- X. **UPDATES**
  - X.1. Teaching and Learning

**X.2. Finance and Administration**

XI. **ANNOUNCEMENTS**

XII. **ADJOURNMENT**

# **FSD Student Artist of the Month**

**Hayoung Park, age 8 • Moore Elementary School**



Franklin Special District Artist of the Month is second-grader Hayoung Park. Hayoung created this beautiful lighthouse collage in Mr. David Reynolds's art class at Moore Elementary School during a lesson where students learned about the function and history of lighthouses and how they have been used in American maritime navigation. Students went on a virtual field trip to the oldest American lighthouse in Boston Harbor and learned about its first female lighthouse keeper. Students created several painted papers using various techniques and materials, culminating in a beautiful collage, including the final sparkly touch of light to light the way.

Hayoung's artwork, along with the work of several other Moore Elementary artists, is on display at the Central Office. Thank you to Chuck Sugg of Sonic Drive-In, for continuing his support of the Student Artist of the Month program this year, helping us to recognize and celebrate FSD students' artistic talents with a generous Sonic gift card.

# Franklin Special Board of Education

Monitoring: <b>Review: Annually, in July</b>	Descriptor Term: <b>Appeals to and Appearances Before the Board</b>	Descriptor Code: <b>1.404</b>	Issued Date: <b>08/08/16</b>
		Rescinds: <b>1.404</b>	Issued: <b>09/14/98</b>

## 1 APPEALS TO THE BOARD

2 Any matter relating to the operation of the school system may be appealed to the Board. However, the Board  
3 desires that all matters be settled at the lowest level of responsibility and will not hear complaints or concerns  
4 which have not advanced through the proper administrative procedure from the point of origin. If all steps of the  
5 administrative procedure have been pursued and there is still a desire to appeal to the Board, the matter shall be  
6 referred in writing to the office of the director of schools and the Board shall determine whether to hear the appeal.

## 7 APPEARING BEFORE THE BOARD

8 Individuals desiring to appear before the Board must submit a written request with descriptive materials to the  
9 office of the director of schools six (6) days before the meeting. If the request is approved by the Executive  
10 Committee, the item will be placed on the agenda. Individuals placed on the agenda will be recognized at the  
11 beginning of the meeting and given time to speak when their topic of interest is addressed on the agenda. All  
12 requests submitted will be included in the board packet.

13 If an individual wishes to address the Board on an item on the agenda, he/she may sign up on the form provided  
14 before the beginning of the board meeting to request time to speak. Delegations must select only one individual  
15 to speak on their behalf unless otherwise determined by the Board.

16 The chair may recognize individuals not on the agenda for remarks to the Board if it is determined that such is in  
17 the public interest. A majority vote of members present can overrule the decision of the chair. Recognition of  
18 individuals who are not citizens of the school system is to be determined by a majority vote of the Board.

19 Individuals speaking to the Board shall address remarks to the chair and may direct questions to individual board  
20 members or staff members only upon approval of the chair. Each person speaking shall state his name, address,  
21 and subject of presentation. Remarks will be limited to three (3) minutes unless time is extended by the Board.  
22 The chair shall have the authority to terminate the remarks of any individual who is disruptive or does not adhere  
23 to Board rules.<sup>1</sup> Members of the Board and the director may have the privilege of asking questions of any person  
24 who addresses the Board.

25 Individuals desiring additional information about any item on the agenda shall direct such inquiries to the office  
26 of the director of schools.

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### Legal References

1. TCA 39-17-306

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### Cross References

- School Board Meetings 1.400
- Agendas 1.403
- Complaints About School Personnel 5.502

# fsd★ Teaching and Learning

Students First ★ Excellence Always ★ No Exceptions

Date: November 1, 2024

To: David Snowden, Director of Schools

From: Mary Decker, Associate Director of Schools for Teaching and Learning

Subject: Summary of Teaching and Learning Activity for the November Board Meeting



## **Spotlight:**

### **New Branding Progress Update**

Ever since the exciting and invigorating launch of the FSD's new and refreshed branding in early August 2024, work has been ongoing to update accordingly the most visible and impactful areas and items in the district. Completion of this endeavor will be steady over the next two-three years, balancing fiscal responsibility with the importance of effectively communicating the Franklin Special District brand promise (Students First/Excellence Always/No Exceptions) and forward-thinking mindset. Below is a summary of the initial steps in the process.

### **Pole Banners**

The first major undertaking was to replace the banners that are placed at all school sites with ones that include the new logo, colors, and "FSD lettering." Major gratitude goes to topnotch Communications Specialist Susannah Gentry for working closely with a local vendor to design the beautiful new banners and to our fantastic Doug Bartke and Brandon Iglar from the maintenance team for making the installation happen swiftly!



### **Website**

Webpages' headers and footers, all references to the district (FSD vs. FSSD, for example), and photos have been updated. The district [video](#) debuted on opening day lives on the website, and

prospective parents can click on links to “Learn About FSD,” “Schedule a Tour,” or “Contact the District” from the “I Want To” tab on the home page. This is truly a work in progress as we continually reevaluate the website to ensure a modern and effective look, as well as ease of navigation and information-finding for parents, staff, and community members.

### **Interior Signs**

Long a fixture on the inside walls of each of our schools, these 3D PVC (heavy duty plastic) signs proudly show the emblems of the FSD. Signs with the new elements are in production and will be placed in buildings in the next several weeks. Please see the attached illustration of the updated interior signs.

### **Leadership Team Identification Badges**

The former badges have been replaced with sharp, newly branded ones featuring recent photos of FSD Leadership Team members.

### **Lanyards and Lapel Pins**

At the August 1, 2024 opening day event held at Rolling Hills Church, every board member and employee received a lanyard and a lapel pin emblazoned with the FSD logo, the tagline “Excellence Has Its Own District,” and on the pin – the distinctive orange star over the deep blue background.

### **Official Letterhead**

This has been updated with the new branding. In January 2025, the district letterhead will also incorporate the Eddy Lane address of the new central office.

### **Employee Email Signature Blocks**

This was one of the earliest items to be revised, with the skilled support and guidance of Instructional Technology Specialists Shelly Robinson and Amber Whitley.

### **Rack Brochure**

Prominently displayed at the front desk of the central office and in schools’ main offices, this colorful and succinct brochure tells the incredible and historic FSD story and summarizes what the district is about for currently enrolled and prospective families alike. We plan to have the brochure available at community events as well.

### **Story Bus**

As of this writing, we are awaiting the imminent completion of the new exterior wrap of the bus that prominently displays the new branding of the FSD. The plan at this point is for the proud tradition of Dr. Snowden, board members, and district administrators riding the Story Bus in the Franklin Veterans Day Parade to continue in the rejuvenated bus (which also underwent an extensive interior renovation during the summer of 2024).

### **Step and Repeats**

You may have seen these large screens at opening day or the State of the Schools event, or in the Performing Arts Center (PAC) lobby where they are on display when not needed at a special function. These beautiful visuals of the refreshed branding provide excellent photo ops!

### **On the 12-month horizon:**

- A permanent kiosk in the PAC lobby where those interested in their child attending the FSD can complete a brief form on an iPad, requesting to be contacted by a district representative

- Replacement of the security vinyl on school glass doors and windows to reflect the new branding.
- Magnets with the new branding for the exterior of maintenance and Food and Culinary Services vehicles.
- Updating of individual school logos to align/flow with the new district logo and branding
- FSD “swag” for purchase from a link on the district website.

This is a thrilling time in the FSD, overflowing with golden opportunities to continue and expand our positive impact on the children and families of Franklin. What a distinct honor to be part of an organization described by the statement: “Excellence has its own district.”

## ***Curriculum & Professional Learning – Summer Carlton***

### **November 5 District Professional Learning Day**

- Teachers, paraprofessionals, and other staff engaged in a day of professional learning that included across-district grade level/content area collaboration time and the choice of two professional learning opportunities to support them in teaching and learning. The below sessions represent some of the learning opportunities provided to staff on this day.
  - **Pathway to Student Engagement:** Students’ cognitive challenges to learning can be seen in the classroom in multiple ways such as multitasking, not seeing relevance in the work, lacking background information, and ultimately, suffering from too much cognitive load. Teachers don’t always know how to reengage students; they seek more information about how to get students to engage, and ultimately, to drive their own learning. The Pathway to Student Engagement will discuss the barriers to engagement. It provides teaching strategies and opportunities that build student/teacher relationships, and tools for students to take charge of their own learning. In this professional learning opportunity, educators will explore the nine cognitive barriers to students’ engagement and learn how to foster student/teacher relationships and collaborative conversations. Knowing the signs of disengagement and the continuum of engagement will guide educators to teach all levels of engagement. You will gain strategies that encourage students to take ownership of their learning. You’ll also get the tools for students to self-assess their levels of engagement and practice, ask questions, get feedback, set goals, and monitor their progress.
  - **Building Resilient Communities - Creating Compassionate Leaders:** The goal of this session is to provide practical strategies for building communities to create a safe and stable classroom for ALL learners. We will discuss routines and procedures that produce a predictable space in which students understand and follow expectations. Through this session, we will also explore the necessary mindset for providing a successful inclusive learning space in which all learners can learn in their least restrictive environment.
  - **Pre-K Discovery Education Early Childhood Resource Training:** Through a unique partnership, Discovery Education is supporting early childhood development in math, language and literacy, social studies, and health and wellbeing, with a collection of research-based resources and instructional tools that can be used by teachers and families. Step-by-step lessons support an active engagement model that invites students to explore, think, share, and grow together. Ready-to-use lesson presentations save teachers time and effort. Engaging short videos spark curiosity and activate whole and small group activities. Brain break activities provide students with tangible strategies for focusing attention, regulating emotions, and more.

- **Kindergarten 95% Tips and Tricks:** This session is great for those that are new to teaching 95% Group or new to kindergarten. We will be looking ahead to the coming lessons and discussing ways to promote student engagement.
- **Nuts and Bolts of 95% Core Phonics for 1st and 2nd Grade:** This session will focus on how to effectively blend the 95% Group curriculum components into both the whole group and small group settings. We will walk through a full lesson in 95%. Participants will leave with tools and ideas to implement immediately.
- **The Writing Revolution and Sentence Expansion:** This session will provide an overview of The Writing Revolution and how its strategies, when used with any text, will show teachers how to explicitly teach writing in a careful sequence of logical steps, beginning at the sentence level. We will introduce Sentence Expansion and how to explicitly teach this strategy which is one of the best techniques available to help students process new information in a manageable way, enabling them both to understand it and to transfer it to long-term memory. Sentence-level strategies shouldn't be dismissed as something that's too basic for older students to engage in. "Sentences are literally miniature compositions." (Bruce Sadler) We will show how content drives the rigor of this strategy and can be used in all grade levels.
- **The Writing Revolution and the Sentence-Level Strategy "Because, But, So":** Ideally the other session comes first, but new people can attend this session and walk away with plenty of good information. This session will give a brief overview of The Writing Revolution and its explicit method of teaching writing. We will continue with another sentence-level activity using basic conjunctions called "Because, But, So." This sentence activity will require students to think analytically and help them develop the ability to write extended and elaborated responses. It fosters close reading while checking their comprehension and providing practice in using new vocabulary words correctly. This approach requires students to engage in far more specific and focused thinking than just asking them to respond to an open-ended question. As always with The Writing Revolution, content drives the rigor so this activity can be used with all grade levels.
- **i-Ready Reading:** This session will dive deeper into the Teacher Toolbox and i-Ready Reading reports to inform instruction.
- **Fact Fluency Folders:** In this session, teachers will create fluency folders for multiplication and division. These folders can be used with 2nd through 5th grade students to build conceptual understanding and fluency with multiplication and division facts. We will give examples of Fluency Choice Boards, which incorporate learning games students can use to solidify the relationship between multiplication and division and become more fluent mathematicians. Teachers will create a choice board for their students based on the materials given and high-quality instructional materials (HQIM).
- **Daily Number Sense:** In this session, teachers will participate in our Daily Number Sense routines. These routines are used in our classrooms daily and spiral through the math curriculum and standards. Teachers will be able to look at their standards and see practical ways to continue spiraling and reviewing their curriculum throughout the year to solidify learning and give students extra time to master content. The materials used during this session will be on a 3rd-5th grade level, but these routines are easily adaptable for 1st and 2nd grade.
- **Success Criteria and Small Groups in the Secondary Math Class:** This session will share ideas for creating clear success criteria, creating and implementing small groups, and differentiating assignments in manageable and effective ways. We will spend time sharing strategies and offering ideas. Participants will also be given time to work with their teams to start creating success criteria, differentiated assignments, and small group

lessons for upcoming topics and units. It would also be beneficial for members of your PLC team to attend with you! We have found working as a team is imperative for managing high levels of differentiation. We hope you leave the sessions with tangible ways you can implement small groups easily and effectively in your own classroom.

- **Big Ideas Training:** 7th and 8th grade math educators will engage in a model lesson walk-through, dive deeper into reports and be provided time for Q&A over their math adoption, Big Ideas Learning.
- **Mastery Connect in Action:** The Mastery Connect in Action PL provides teachers the opportunity to explore new ways to use Mastery Connect in the classroom. From entry routines to grouping students for remediation, teachers will explore a variety of different ways to use Mastery Connect assessments and data to directly inform instructional practices.
- **Actively Learn Deep Dive:** This session will provide a deeper dive for science and social studies educators into Actively Learn. Learn how to maximize this resource in your science and social studies classroom.
- **Effective PLCs (1st - 4th Grade):** This session explores why highly effective PLCs are important and how to create them.
- **ELL Tier 1 Make-and-Take Vocabulary Activities (5th and 6th grade, all subjects):** Considering the increasing number of English language learners, we recognize your need for activities that support these students in Tier 1 settings. This opportunity is available for fifth and sixth grade educators with students who are working on developing their English language skills. Throughout this session, we will concentrate on designing make-and-take activities that emphasize vocabulary linked to the curriculum.
- **Canva for Educators:** In this session, you will be introduced to Canva for Education. You will learn how to find and edit existing templates, use AI features, and create engaging and interactive student lessons. I will share some information about linking Canva to Google Classroom, geared more toward secondary students, but this will be a small component of the session. Come have fun with design and see how Canva can liven up any level or content area.
- **Supporting Special Education Students Behaviorally and Academically in the General Education Classroom:** During this session participants will learn and discuss strategies to support and meet the needs of students with IEPs in the general education setting. Clarity will be provided around the expectations of special education teachers and general education teachers while working with students with disabilities in the classroom setting. Prior to the session, participants will have an opportunity to share specific needs they would like to address in the session. Sped and gen ed welcome!
- **Certified Restraint Training Refresher:** This training is open only to staff who are CURRENTLY trained in Certified Restraint Training. We will have an opportunity to talk through de-escalation strategies and techniques, review and practice physical holding techniques and discuss real classroom scenarios and how to best respond.

## ***Communications – Susannah Gentry***

### **New Branding Items**

- FSD school signs have been hung at all schools to replace the large signs with the old logo. A kiosk is in the process of being branded and placed in the PAC for visitors to use to request information about the school district. Bi-weekly meetings continue to occur with our marketing partner, Mettle5, to ensure we continue to promote our schools in a consistent and professional manner.

### **Open House**

- The Fall Open House, held the week of October 21-25, was a success. Using an appointment format, 51 calendar appointments were made for custom tours of our schools.

### **Be Nice**

- Be Nice events were planned and executed at all schools, and the Board provided FSD staff members with a gift in appreciation of their efforts to model positive character traits and mentor students in our district's "Be Nice" philosophy. Be Nice ambassadors were selected at each school and marched in the Franklin Veterans Day parade on behalf of the district.

### **United Way Campaign**

- The FSD United Way campaign was held October 22-29. We appreciate the employees who choose to donate during this district-wide campaign.

### **aspire 2029 Communication**

- Social media and promotional work are ongoing to communicate the *aspire 2029* strategic planning goals and strategies. The Teaching and Learning team is collaborating on this initiative. Each week this fall, a designated strategy is introduced, and the strategy is described in relation to one of the three goal statements.

### **Founders Day**

- A Founders Day store with apparel purchase options was created in advance of FSD Founders Day (October 28). The FCS team prepared special Founders Day star cookies and gave them to students and faculty.

### **Other Communications Items**

- Creating the monthly birthday cards and FSD student artist recognitions.
- Work continues with a videographer for new web banner videos and photo stills for various projects throughout the year.
- Progress has been made in our website and social media accessibility remediations, in association with our website CMS vendor, to meet the Web Content Accessibility Guidelines (WCAG) accessibility requirements. Third-party sites with whom we partner have also been involved in our process and have committed to making their sites more accessible (such as TSBA and Libib).
- Promotion of several district events on social media includes the McDonald's Fries for School Supplies check presentation and preschool Touch-A-Truck event, PGES election day, PGMS Dia de Muertos, FES Cubbie's Coffee, Founders Day, FMS' The Little Mermaid production, October as Principals Month, FES Bike, Walk, Roll to School Day, National Lunch Week in FSD schools, and all FSD cafeterias with a 100 Health Department score.

### ***Attendance – Celby Glass***

#### **Residency**

- Celby works with families who may have provided inaccurate documents for proof of residency and in some cases, do not reside in our district. She reviews the proofs of residency supplied to ensure they are not falsified, helps collect documents that prove residency if needed, and shares data with Dr. Esslinger if she and the school administrator(s) believe that a family has been dishonest about their residence.

### **Attendance Secretaries**

- The most recent meeting with the attendance secretaries took place on October 23. The following topics were discussed:
  - Court
  - TISA student data/correction
  - ParentSquare attendance message
  - DCS visits to schools
  - New attendance secretary meeting day/time due to the Williamson County Juvenile Court changing the docket days for truancy hearings
  - 10+ absences letter update

### **Safety**

- Celby has spent many hours recently working with administrators, law enforcement, and the Department of Children's Services on very challenging cases. As the conduit between the district and law enforcement, her role has provided tremendous support to administrators in these situations.

### **Current Safety Projects**

- Vape detector installation
- Continuing to work with administrators on threat assessments
- Working with Amy Fisher on the Smart Heart Act process related to AEDs
- Putting together additional bleeding control kits
- Attending the weekly safety meeting, Touchpoint
- Celby will begin to attend a weekly Zoom with WCS safety and security and the SROs that will be led by Sheriff Hughes.

### ***Student Support Services – Lee Kirkpatrick***

#### **School Counselors, Social Workers and Parent Liaisons**

- These teams prepared for the district professional learning day held on November 5. This is always a high-quality learning opportunity when collaboration reveals best practices taking place across the district in school counseling classes. The team also took a field trip in the afternoon to Rogers Behavioral Health to learn about the services offered to families with elementary and middle school age students. Our team book study, *UnSelfie: Why Empathetic Kids Succeed in Our All-About-Me World* by Michele Borba, continues. Counselor and social worker conversations around this book have been rich and prompted ideas that will impact the way school counselors provide targeted support in this area.

### **Voluntary Pre-K**

- The voluntary pre-k team continues to collaborate with special education preschool and the district inclusion team around the implementation of goals identified during the two-year development of the Preschool Inclusion Strategic Plan. On the morning of November 5, a representative from Discovery Education shared new resources designed for early childhood teachers and parents. Finally, a session designed by FSD kindergarten teachers titled *Building Resilient Communities-Creating Compassionate Leaders*, was offered to pre-k-second grade teachers, ELL, intervention and paraprofessionals in the afternoon.

## **Reading & Rtl Coordinator – Gina Looney** **Literacy/Rtl Update**

- The new and improved Story Bus will be making its debut very soon!!
- Many exciting sessions were provided by our very own teachers and coaches on the November 5 district professional learning day. More information will be provided in the next report.
- Dr. Carlton and Dr. Looney recently visited a few classrooms in every school. Math and literacy coaches led the way, and we noted so many outstanding practices. We communicated those to the teachers. Our hope is for this kind of visit to become commonplace, where doors are always open, teachers shine, and knowledge is shared that will benefit students across our district.
- Please enjoy some of the great instruction happening in our schools:



## **PAC Operations Manager – Jeremy Maxwell** **FSD PAC Events**

- October is when the “event season” starts to really kick into gear. So many exciting things happened at the PAC!
  - Oct. 3 - A middle school fall choir concert – the first fall concert of its kind in many years.
  - Oct. 3 - EL team collaboration in the connector gallery.
  - Oct. 14 - The middle school cast and crew of *The Little Mermaid* moved into the PAC for after-school rehearsals.
  - Oct. 15 - EL team collaboration in the connector gallery.
  - Oct. 15 - National Board Certification meeting in the connector gallery.
  - Oct. 16 - Dusti Bowling author visit.
  - Oct. 16 - Calendar committee meeting in the connector gallery.
  - Oct. 17- Dusti Bowling author visit.
  - Oct. 17- District PTO chairs meeting in the connector gallery.

- Oct. 21- Rehearsals began for an elementary school's third grade musical, *Grammar Rocks!*
- Oct. 22 - Parent support group meeting in the connector gallery.
- Oct. 23 - NOOK meeting in the connector gallery.
- Oct. 24 - Two performances of *Grammar Rocks!*
- Oct. 29 – A middle school's beginning orchestra concert.



### **Community Rental Events**

- Of the 20 available dates in October, 18 were rented. Among those:
  - Oct. 1- Photo shoot for a rental company producing *A Christmas Carol*.
  - Oct. 4 - Ballroom dance showcase.
  - Oct. 13-27- A local theatrical company mounted productions of *Annie* and *Beauty and the Beast*.



### **Other Notes of Interest**

- Leadership members from Metro Nashville visited on Oct. 1 and heaped praise on the design, execution, and management of the FSD PAC.
- Several other tours were conducted throughout the month, including for the Nashville Theatre School and for an author interested in holding a speaking event at the PAC
- A new lighting console and three moving lights were installed on Oct. 28, adding much-needed lighting capabilities to the PAC. These will be debuted in the FMS production of *The Little Mermaid*.

### **Special Populations –Cheryl Robey Unified Champion School District Meeting**

- On October 1, a team of special education teachers, administrators, Dr. Snowden and Dr. Robey met with Beth Teegarden, Senior Director of Unified Champion Schools. This organization ensures that all students with disabilities, particularly those with intellectual disabilities, are included in all school activities and events. FSD is interested in becoming a Unified Champion School District and plans to engage in the appropriate next steps to complete the process.

### **District Consultants Meeting**

- District behavior and autism consultants and Dr. Robey met on October 4 to discuss the status of district autism and behavior consultant referrals, current needs at school sites, and the need to schedule a certified restraint and isolation refresher session on the November 5 district professional learning day and the November early dismissal day. Referrals are being addressed as received. Needs at school sites vary depending on the severity of student behaviors.

### **FSD Preschool Strategic Instructional Leadership Team Meeting (ILT)**

- On October 16, the FSD Instructional Preschool Inclusion Leadership Team (ILT) met. Rachel Page, AnLar Technical Assistance Specialist, facilitated the discussion around the Preschool Strategic Action Plan and next steps. The team members also discussed the implementation phase and next steps for the FSD Strategic Action Plan, the plan for November 5 professional learning day, and AnLar's role in supporting implementation.

### **Collaboration with District Deaf Educators**

- On October 17, the deaf educators and Dr. Robey discussed scheduling and the needs of the district deaf and hard of hearing students. There have been a few challenges with the transition of the deaf and hard of hearing program to a different school site and the facilitation of the program with two new deaf and hard of hearing teachers. Overall, things are going well. Having all deaf and hard of hearing students at one school site is beneficial when providing services and meeting the social and emotional needs of the FSD deaf and hard of hearing students.

### **Supervisors Of Special Education Conference**

- From October 21-23, special education supervisors met for the 19<sup>th</sup> Annual Middle Tennessee Supervisors of Special Education Conference at Paris Landing State Park. The agenda included:

- **TISA Funding** with Caryn Burkholder, Joann Runion, & Maryanne Durski, TDOE
- **Statewide Schools Outreach for Tennessee Schools for the Deaf** with Michelle Meyer
- **Dynamic Learning Maps How-Tos** with Adrienne Cook, Metro Nashville Public Schools
- **TRIAD Explosive Behavior Outliers**
- **APR Problem-Solving Work Session**
- **Special Ed Supervisor Collaboration** -A discussion of a variety of topics, and strategies shared with colleagues to meet the daily challenges of how best to be a special ed supervisor.

### **FSD Parent Support Group Session**

- The third FSD Parent Engagement Session was scheduled on October 22. The Tennessee Center for Decision-Making designed a session on transition planning to guide participants through effective transition planning strategies to discover how to tailor educational plans to their child's unique strengths and goals while preparing for a successful future.

### **FSD/TDOE Indicator 10 Site Visit**

- FSD was identified with findings of disproportionate representation of students in high incidence disability categories. According to the FSD Annual Performance Report, FSD has disproportionate representation in the disability categories of autism and specific learning disabilities (SLD) for Black and Asian students. Based on these findings, FSD is required to complete follow-up actions with TDOE staff. On October 25, TDOE representatives April Ebbinger, Allyson Collins, Susan Usery and Jamie Seek met with an FSD school psychologist, a speech/language pathologist, and Dr. Robey to complete an interview and to review files of students identified in the specified categories.

### **FSD Special Education Newsletter**

The November FSD Special Education newsletter may be accessed at the following link:

<https://secure.smore.com/n/dfae7>

### ***Instructional Technology – Shelly Robinson***

#### **Building Level Instructional Technology Leader Training**

- Mrs. Robinson worked alongside Mrs. Whitley to develop the fall building level instructional technology leader training day. The training took place on October 2 and allotted the instructional technology leaders time to build out plans for fulfilling their roles throughout the year. Other highlights from the training included reviewing ParentSquare, a quick virtual professional learning session hosted by a representative from Screencastify, and questions or topics brought forward by the building technology leaders themselves.

#### **ParentSquare Support**

- Mrs. Robinson has been working to ensure she provides full support for staff members who are looking to use ParentSquare as a communication tool. Whether it was sending information for teachers and principals to share with parents in newsletters or answering individual questions, the usage and feedback have been overall very positive.
- Mrs. Robinson had the privilege of conducting a ParentSquare training with all school counselors at their October meeting. During this training, Mrs. Robinson was able to walk the counselors through the features available in ParentSquare, discuss how it could potentially benefit their roles, and answer any questions.

### **i-Ready Support**

- Mrs. Robinson has continued her practice of sending elementary school administrators their school's weekly data in i-Ready. The reports help school administrators identify where their students stand when it comes to meeting the research-based recommendation of 30-45 minutes of usage a week, as well as passing lessons during the time spent on their personalized learning path. When Mrs. Robinson sends such reports, she highlights and summarizes the data to help ensure the program is being used across all elementary schools with fidelity.
- One of the data features offered by i-Ready includes a "projected proficiency," which identifies whether students would meet proficiency on TCAP based on their performance on the diagnostic assessment. The projection includes results based on the assumption that the student receives the expected level of growth. Mrs. Robinson and Mrs. Whitley worked with our representative from i-Ready to create report groups for students who are on the border of being projected as proficient. These report groups can help school administrators, instructional coaches, and teachers ensure those students are meeting their growth targets and getting the support they need to meet their "stretch growth" target.

### **Instructional Technology Newsletter**

- Mrs. Robinson worked closely with Mrs. Whitley to create the fall 2024 Instructional Technology Newsletter. The newsletter can be found [here](#) and includes information about ParentSquare, professional learning opportunities, new features in our online resources, and more. Mrs. Robinson shared the newsletter at the end of October with all elementary school staff and administrators.

### ***Instructional Technology – Amber Whitley*** **Teacher Support**

- New Promethean ActivPanels were installed at one middle school during fall break. Mrs. Whitley worked with teachers to support their utilization of the features of their new boards. They were eager to begin using this technology for instructional purposes and promised to reach out when they were ready for additional support or had questions.
- Several schools have classes involved with MTSU's Invention Convention scheduled for early 2025. Mrs. Whitley is working with students in both buildings to mentor and provide feedback to students about their work to help them improve their products.
- As always, Mrs. Whitley provided support for instructional platforms as questions arose. She worked with teachers on Actively Learn when it was not running properly for students. She assisted with GoGuardian when several teachers needed access while other teachers were out of school. Additionally, she provided support to teachers who had questions about Google Classroom. Other teachers had questions about content on StudySync (ELA adoption), and still others needed assistance with Chromebooks.

### **District Support**

- The district has searched for a platform that could hold all our student data (attendance, behavior, universal screener data, and more) for several years and recently began working with PowerSchool's Unified Insights product. Mrs. Whitley, along with Robb Walters and other members of the Teaching and Learning team, have been meeting bi-weekly with a representative from PowerSchool to lay the foundational work for this new partnership, which will provide one place for school and district staff to find information about student progress.

- Mrs. Whitley provided support to the MAC program during the month of October through the development of Google Forms that are being used for fall, Thanksgiving, and winter breaks. These Forms provide Amanda Parks with timely and valuable information that helps her prepare for the weeks when students are out of school but still need to attend MAC. Additionally, Mrs. Whitley worked with MAC personnel to begin using Screencastify to document processes and procedures in the bookkeeping system.
- Mrs. Robinson and Mrs. Whitley met with the building-level instructional technology leaders at the beginning of October. These meetings occur twice a year: once in the fall and once in the spring. This time began with a professional learning session hosted by Screencastify, where the technology leaders learned about new features within the platform. They were very pleased with what they saw and eager to share with other school staff. Other topics that were covered throughout the day were ParentSquare, ActivPanels with Chromeboxes, Skyward Discipline, the district's new AI policy, and i-Ready. Plans for the spring training day are already in the works.

## ***Student Performance & Federal Programs – Pax Wiemers***

### **Student Performance**

- **Accountability:** In August, we began receiving preliminary accountability results from last school year. Numerous files have been released to us in the state's accountability application, and these have included reports with results for achievement, TVAAS (growth), WIDA growth (ELPA), and chronic absenteeism. These files have provided results for both the district and our schools. To communicate these results with each school, an accountability spreadsheet was created and shared with the school administrators, along with an explanation of what to look for on each tab of the spreadsheet. As more information is given to us, more tabs are added to each school's spreadsheet. While we cannot yet publicize any results due to the state's embargo period not yet being lifted, there has been communication with each school regarding their overall status and designation.
- **Honors:** Our district's administrative honors committee met for the second time this school year on October 30. This committee is comprised of four district supervisors, six middle school administrators, three middle school teachers (one from each 5-8 school), and two parents (one representative from FIS-FMS and one from PGMS). To ensure representative voices on our committee, we have three new teachers representing our 5-8 schools. At our October meeting, we discussed some procedural changes regarding entrance qualifications for world language classes, the use of the most recent TCAP results by administrators, and providing families with a second honors reconsideration request if a student scores at or above the 90th percentile on a spring benchmark assessment for ELA or math. These procedural tweaks will be updated in the FSD Honors Program Guidelines, which will then be added into the draft board policy for enrollment in advanced courses. These changes will go into effect next school year once approved by the board.
- **PowerSchool:** This year we began working on a new data consolidation platform, PowerSchool Student Analytics. Our team has regular meetings with the representatives at PowerSchool, and we are currently working on a number of files for upload into the platform. The purpose of PowerSchool is to combine data from the various platforms we utilize, including i-Ready, aimsweb, Skyward, and more, in order to have one location for all data. Additionally, this will enable us to do advanced analysis and make informed decisions regarding students' progress, attendance patterns, and ongoing school and district data. This year our aim is to work on completing all the file specifications, troubleshooting of the dashboard, and the eventual launch of the platform with district and school administrators.

## **Federal Programs**

- **Comparability/Other Reports:** In October, we completed our annual Title I Comparability report in ePlan that ensures the comparability of our staff to student ratios between our Title I schools and non-Title schools. We showed comparable staffing between schools within similar grade bands. In addition, several other small reports have been uploaded or completed in ePlan. In the coming months, we will complete our annual monitoring of federal programs. This year, we were selected for the Level 1 (self-assessment) monitoring process, which is the least intrusive level.

## **Bond Fund/Capital Projects Status Update – November 2024**

### Central Office Complex:

1. Phase 2: Central Office Building & Sitework: Phase 2 Central Office and Site work GMP is \$29,063,922
  - a. This month we have continued with our interior finishes on both floors: final paint activities are in progress, switch glass windows are being installed, the wellness center athletic flooring is in place, and casework is being finished.
  - b. On the exterior, we are starting the big parking lot pervious pavers, continuing our landscaping and irrigation system installation, setting light poles, and wrapped up the installation of the entry vestibules.
  - c. This coming month will see continued efforts to complete interior finishes and wrap up the exterior finishes, including the installation of the security film on the windows.
  - d. Click the link to see the latest flyover video of the progress: [FSSD Central Office Aerial Oct 2024](#)

### September 2024 PROGRESS

#### CURRENT ACTIVITIES

Interior Painting  
Ceilings / Trim-out  
Interior Storefronts  
Pervious Pavers  
Exterior vestibules  
Casework  
Flooring

#### UPCOMING ACTIVITIES

Landscaping / Irrigation  
Site Lighting  
Plumbing Fixtures  
Interior Doors  
Switch-glass Storefronts





# Franklin Special School District

SINCE 1906

David L. Snowden, Ph.D., Director of Schools • 507 New Highway 96 West • Franklin, TN 37064 • 615-794-6624 • 615-790-4716 (fax) • www.fssd.org

**TO:** Members of the Franklin Special School District Board of Education and Local News Media  
**FROM:** David L. Snowden, Ph.D., Director of Schools  
**DATE:** November 14, 2024  
**RE:** Agenda for the Franklin Special School District Board of Education meeting to be held on Monday, November 18, 2024 at 6:30 p.m., to be held at Poplar Grove Middle School, 1030 Excellence Way, Franklin.

- I. MEETING CALLED TO ORDER 6:30 p.m.
- II. PLEDGE OF ALLEGIANCE 6:32 p.m.
- III. RECOGNITIONS/GOOD NEWS 6:35 p.m.
  1. Student Artist of the Month
  2. Good News
- IV. PUBLIC INPUT *Please limit comments to three (3) minutes per speaker* 6:45 p.m.
- V. REPORTS/PRESENTATIONS/DISCUSSIONS 6:50 p.m.
  1. Teaching and Learning Report
  2. Finance and Administration Report
  3. Williamson Chamber Market Update Business Luncheon and Expo
  4. NSBA CUBE 2024 Annual Conference
  5. TSBA 2024 Leadership Conference and Annual Convention
- VI. APPROVAL OF BOARD AGENDA 7:00 p.m.
- VII. APPROVAL OF CONSENT AGENDA 7:05 p.m.
  1. Minutes of Board Meeting dated October 21, 2024
  2. Data Privacy Agreement
  3. Overnight Field Trip – FIS 6<sup>th</sup> graders to R.E.E.L. Environmental Education Camp
- VIII. BUSINESS BEFORE THE BOARD 7:10 p.m.
  1. 2025-26 and 2026-27 Calendars
  2. Resolution for Adoption of the Williamson County Multi-Hazard Mitigation Plan
  3. Real Estate Committee Recommendation for Sale of Battle Avenue Lots
  4. Ratification of Lease Agreement with the City of Franklin
- IX. DIRECTOR OF SCHOOLS REPORT 7:25 p.m.
- X. UPDATES 7:30 p.m.
  1. Teaching and Learning
  2. Finance and Administration
- XI. ANNOUNCEMENTS 7:35 p.m.
- XII. ADJOURNMENT 7:40 p.m.

*All Franklin Special School District meetings are open to the public.*

**Excellence in Teaching and Learning for All**

The Franklin Special School District is an equal opportunity employer

October 21, 2024  
Franklin, Tennessee

The Franklin Special School District Board of Education met at 6:30 p.m. on Monday, October 21, 2024, at Liberty Elementary School, 600 Liberty Pike, Franklin. A link to the recording may be found at <https://youtube.com/live/2vHzimGgT0g?feature=share> .

The following members were present: Chair Robert Blair, Alicia Barker, Allena Bell, Robin Newman and Kevin Townsel. Absent was: Tim Stillings.

Others present were: Dr. David Snowden, Dr. Mary Decker, Dr. David Esslinger, Carol Riordan, Susannah Gentry, Drew Bingham, Amy Fisher, Bo Alexander, Chip Sternenberg, Dr. Lee Kirkpatrick, Amanda Parks, Dr. Summer Carlton, Dr. Gina Looney, Amber Whitley, Lisa Chatman, Celby Glass, Shelly Robinson, media and community.

## **I. MEETING CALLED TO ORDER**

The meeting was called to order at 6:30.

## **II. PLEDGE OF ALLEGIANCE**

Liberty Elementary Assistant Principal Mrs. Amy Patton welcomed those in attendance and led the Pledge of Allegiance. Chair Robert Blair called for a moment of silence before being seated.

## **III. RECOGNITIONS/GOOD NEWS**

**Student Artist of the Month:** PGMS 6<sup>th</sup> grader **Fayth Thom**'s artwork is showcased this month. Art teacher Lauren Lowry submitted this work as part of a study on proportions. Thanks to **Chuck Sugg and Sonic Drive-In** for their sponsoring the Student Artist of the Month program with a generous gift card for featured artists.

**Recognitions:** PGES **Dr. Erickson** accepted recognition on behalf of Poplar Grove Elementary for being selected as a **national Promising Practices School** by Solution Tree, one only two 2024 Promising Practices schools in Tennessee and one of 52 schools to be so named across the country.

**Sonya Roberts**, our new Human Resources Department Supervisor, was introduced to the Board, and **Summer Carlton, Ed.D.** was recognized as having recently received her doctorate.

## **VI. PUBLIC INPUT**

There was no participation in the public input time at this meeting.

## **VII. REPORTS / PRESENTATIONS / DISCUSSIONS**

**1. Teaching and Learning Spotlight** – "Retention Roadmap Third Grade Edition Family Engagement Sessions" – presented by Dr. Decker (on file). This information as well as

the complete monthly update from the Teaching & Learning Department were presented to the Board prior to the meeting.

2. **Finance and Administration Report** – Bond Fund Capital Projects Status Update - presented in advance by Dr. Esslinger (on file). A tour of the new CO building was given before the meeting for Board members.

### **VIII. APPROVAL OF BOARD AGENDA**

Dr. Snowden requested that the Board agenda have Item 1. “Real Estate Committee Recommendation for Contract Amendment” removed, due to the Committee having met late last week with our attorney and realtor regarding a counter offer with the potential buyer.

Kevin Townsel made a **motion** to approve the Board Agenda with Item X.1. being removed under Business Before the Board. Allena Bell **seconded** the motion, which **passed 5-0**.

### **IX. APPROVAL OF CONSENT AGENDA**

Robin Newman made a **motion** to approve the Consent Agenda as presented. Alicia Barker seconded the motion, which **passed 5-0**.

Approved under Consent Agenda (on file) were:

1. **Minutes of Board Meeting dated September 9, 2024**
2. **2024 Lea Compliance Report**
3. **Overnight Field Trip – FIS 6th graders to Marine Lab**
4. **Budget Amendments**

### **X. BUSINESS BEFORE THE BOARD**

1. **Real Estate Committee Recommendation for Contract Amendment** – The Real Estate Committee met with our real estate agents and legal counsel on October 17<sup>th</sup> to discuss changes the prospective buyer has requested to the contract after discovering, through their discussion with the City of Franklin, they cannot develop the number of lots that was projected. Additionally, they are now only interested in the Annex property and not the three platted lots on Battle Avenue. If the real estate committee determines the new proposed contract to be acceptable for a recommendation to the full Board, we will email you that contract by Friday, October 18<sup>th</sup>. The Real Estate Committee will also be discussing how to proceed with the sale of the three platted lots on Battle Avenue.

**This item was removed from consideration.**

2. **Possible Lease Agreement with the City of Franklin** – The City of Franklin has expressed an interest in leasing the current central office location located at 507 New Hwy 96 West. The length of the lease has been proposed for two and one-half years. Their interest to lease the building is due to the construction of a new City Hall facility located on the same property currently occupied. We have two requests.

The first request is the approval for the Real Estate Committee to continue to negotiate a lease agreement with the City of Franklin administration.

The second request is for the Board to grant the Executive Committee (Board Chair and Director of Schools) authority to approve the Real Estate Committee's recommended lease agreement to expedite the process with the City for their planning purposes. If this request is granted, we would bring the final lease agreement back to the Board at the next meeting for ratification. If you would rather not grant the Executive Committee that authority, we could schedule a Special Called meeting for the Board to approve.

Additionally, the school district can continue to market and sell the property during the lease period with the understanding from any potential buyer that the City of Franklin's lease agreement must be honored.

The administration requested approval of each of the requests.

Robin Newman made a **motion** for 1) approval for the Real Estate Committee to continue to negotiate a lease agreement with the City of Franklin administration, as presented. Allena Bell **seconded** the motion. Mr. Townsel announced that although he worked for the City of Franklin, his role would not have personal interest in this voting matter. **By roll call vote, the motion passed 5-0.**

Alicia Barker made a **motion** for 2) approval for the Board to grant the Executive Committee (Board Chair & Director of Schools) authority to approve the Real Estate Committee's recommended lease agreement to expedite the process with the City for their planning purposes, then bring their recommendation to the Board for ratification. Allena Bell **seconded** the motion. Dr. Snowden cited Policy 1.301 "Executive Committee" to grant this authority. **The motion passed 5-0.**

- 3. FY25 ESSER 3.0 Application for Board Approval School Year 2024-25** – This application is formal approval of the Board for the ESSER budgets. All planning documents but the final sign-off have been submitted online and have moved through State approval, and now require full Board approval to move forward. The administration requested approval.

Kevin Townsel made a **motion** to approve the **FY25 ESSER 3.0 Application for Board Approval School Year 2024-25** as presented. Robin Newman **seconded** the motion. **By roll call vote, the motion passed 5-0.**

- 4. 2024-25 TISA Accountability Report** - The Tennessee Investment in Student Achievement (TISA) public school funding formula, starting with the prior school year, requires each school district to submit an annual accountability report to the TDOE. The 2024-2025 report is included in your packet. The administration recommended approval of the TISA Accountability Report as presented.

Allena Bell made a **motion** to approve the **2024-25 TISA Accountability Report** as presented. Kevin Townsel **seconded** the motion. **By roll call vote, the motion passed 5-0.**

## **XI. DIRECTOR OF SCHOOLS REPORT**

- **National School Bus Safety Week – October 21-25** – Held during the third full week of October each year, National School Bus Safety Week is an active and evolving public education program and an excellent way for parents, students, teachers, motorists, school bus operators, school administrators, and other interested parties - to join forces and address the importance of school bus safety. Please help acknowledge our great drivers and aides, especially during this week, for the service they do each and every day.
- **Remote Learning Drill – October 22** – Our families have been notified during September, and was again one week prior to the drill, that we will be conducting a remote learning drill on Tuesday, October 22 to ensure that schools, students, and parents/guardians can easily transition from in-person to remote learning in the event of an emergency. As part of the drill, all K-8 students will take home their assigned tablet/laptop and will be asked to complete a simple digital assignment on the device. Teachers will practice this task at school with students ahead of the drill so they understand the expectations. This Remote Learning Drill is a state requirement.
- **New Family Open House – Week of October 21-25** - Our Open Houses this year will be spread over a week. A one-on-one tour can be easily scheduled through our website or by scanning a QR code, for any of our Franklin Special schools. This new format lets families explore classrooms, libraries, cafeterias, and playgrounds firsthand, allowing them to get a feel for the learning environment. During the tour, parents can meet teachers and administrators, hear about the educational philosophy, and ask specific questions about the curriculum, extracurricular activities, and special services offered. We want to tailor each visit, so families leave with a sense of understanding and are empowered to make informed decisions about their child’s education. And of course, in addition to a school tour, visitors may come by the Performing Arts Center between 8:00 and 2:00 on these days to get a tour and visit our Legacy Gallery. As of this afternoon, there were 30 or more families signed up for tours throughout the district.
- **Open Enrollment for Insurance – Month of October** - If the Board is interested in signing up for benefits through the district, please contact Katrina Wall in our Human Resource Department.
- **Other dates of note provided for the Board prior to the meeting:**
  - **NSBA CUBE Conference – October 28-30** Las Vegas – Mr. Blair, Mr. Townsel and Mrs. Blair will be representing our Board.
  - **TSBA Annual Convention - November 7-10** Gaylord Opryland Hotel – FSD will be presenting at the Leadership Conference on Friday.
  - **NABSE Conference - November 20-24** Atlanta – Mr. Blair and Mr. Townsel will be representing our Board.
  - **COSSBA Annual Conference – March 21-23** Atlanta – Mr. Blair, Mr. Townsel, Mrs. Bell, Dr. Snowden and Mrs. Riordan are registered, registration is ongoing. The board was requested to RSVP as soon as possible if attending and not yet registered.



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## Data Privacy Agreement for 11/18 Board Meeting Agenda

2 messages

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**Mary Decker** <deckermar@fssd.org>

Tue, Oct 15, 2024 at 12:02 PM

To: Carol Riordan <riordancar@fssd.org>, David Snowden <dsnowden@fssd.org>

Hi Carol,

Dr. Snowden has approved for the data privacy agreement (DPA) template to be placed on the November 18 board agenda for approval. Attached is an example DPA. Below is a detailed description of and rationale for the DPA. Additionally, Chuck Cagle reviewed the DPA.

Thank you!



**Mary Decker, Ed.D.**

*Associate Director of Schools for Teaching & Learning*

Central Office

507 New Highway 96 West

Franklin, TN 37064

615.794.6624

fssd.org

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**From:** Amber Whitley <whitleyamb@fssd.org>

**Date:** Tuesday, October 15, 2024 at 8:19 AM

**To:** Mary Decker <deckermar@fssd.org>, Drew Bingham <binghamdre@fssd.org>, Shelly Robinson <robinsonshe@fssd.org>

**Subject:** TETA/TEC DPA information

Hello!

For years, the FSD has been intentional about student data privacy, ensuring that all resources that collect any student data are district-approved and COPPA and FERPA-compliant. In addition to our existing resource request process and yearly COPPA-compliance checks, an additional item that will strengthen our processes will be having signed data privacy agreements (DPAs) with all vendors with access to student data. We are members of the Tennessee Educators

Technology Association which has recently partnered with TEC Student Data Privacy Alliance Services. The TEC provides members with both the administrative and legal services necessary to negotiate privacy terms with software vendors and secure accurate and complete signed data privacy agreements.

The process for securing a DPA includes the following:

- The district checks the SDPC Auto Exhibit E Creator. If a DPA is available, the district creates an Exhibit E—all set!
- If a DPA is not available, the district submits a “new request” on the SDPC Resource Registry and assigns the request to “TEC” in the “Progress Admin” dropdown menu.
- TEC receives a system alert that a DPA is needed and gets to work.

I've attached a completed DPA as an example.

## **Frequently Ask Questions (FAQs)**

### **Q: What is Personally Identifiable Information (PII)?**

A: Personally identifiable information (PII) is information that can be used to identify an individual, whether alone, such as with direct identifiers (e.g., name, SS#), or in combination with other data, such as indirect identifiers (e.g., D.O.B, address).

### **Q: Where can I learn more about student data privacy?**

A: Many quality resources are available online to assist you. Visit our website to learn more and access some of these.

### **Q: What protections does a signed DPA provide to districts?**

A: TEC's DPA...

- Gives school districts ownership & control of student data
- Defines how a vendor may & may not use student data
- Prohibits “targeted” advertising to students
- Gives school districts the right to audit a vendor
- Defines minimum acceptable data security requirements
- Requires timely district notification in the event of a data breach
- It's a LEGAL and enforceable agreement between a vendor and the school district
- Once a DPA is signed by both parties, it supersedes a vendor's Terms of Service and Privacy Policy where they conflict.

It also requires vendors to conduct criminal background checks on all its employees with access to students.

### **Q: What is the difference between a Privacy Pledge and a Data Privacy Agreement?**

A: TEC's Student Data Privacy Agreements are legally enforceable documents, and vendors agree to comply with all applicable state-specific and federal privacy statutes, including the FERPA, PPRa, COPPA, and IDEA. A Privacy Pledge “is not intended as a comprehensive privacy policy nor to be inclusive of all requirements to achieve compliance with all applicable federal or state laws.”

### **Q: Can teachers use anonymous names to protect student information?**

A: No. Teachers cannot use anonymous names for students, as our attorney has shared that this still creates a ‘unique identifier’ tied to an individual student record, which is not allowed under FERPA.

### **Q: What if a teacher pays for an app for her class and not the district?**

A: Whether a resource is free or paid, if your employees are using them and there is a transfer of any student personally identifiable information (PII), as with login or rostering, then you need a signed DPA, as your district is sharing students' PII to a third party. It does not matter if a teacher pays for the resource on their own; they are still an employee of your district, and sharing student PII with a third party which requires either written parental consent or a DPA.

### **Q: Why should I join the TEC Student Data Privacy Alliance (SDPA) and not just the Student Data Privacy Consortium (SDPC)?**

A: Our educational collaborative school districts launched the TEC SDPA because they could not afford the time, energy, and expense of contacting every software vendor to negotiate a DPA solely as SDPC members. TEC works to save your district time and money and accelerates the protection of your students' data as we do the legwork for you. Furthermore, all TEC SDPA schools and districts are "Basic" members of the Student Data Privacy Consortium with access to SDPC's online Resource Registry platform. As a bonus, joining TEC's Student Privacy Alliance connects you with the fastest-growing student data privacy network of school districts across multiple states. And one of CISA's K12 Recommendations is to "work with other information-sharing organizations."

**Q: How do I know which products are covered under the DPA?**

A: You can refer to the Exhibit "A," also known as the "Description of Services," in the full agreement to read which of the vendor's products are covered by the DPA.

**Q: What do we do if an Exhibit E is just about to expire and a new DPA is not yet available in the Exhibit E Creator tool?**

A: If a DPA is about to expire and a new one has not yet been signed (and this can be for several reasons, including that it is still in negotiations), you can enter it in as a "New Request" so that TEC can keep you informed of its progress and let you know when a new one becomes available. If you use the "View Expiring Agreements" renewal process, please refer to this video demo.

**Q: Can we post district-approved apps to the Resource Registry that do not collect PII or require us to seek a DPA?**

A: Yes. If you are seeking to be transparent about the digital resources in use within your district using SDPC's platform, then you can follow these directions to add them to the Resource Registry for your district.

**Q: What if the teacher has the account?**

A: Unless you live in a state where the sharing of staff data is restricted, such as NH, teachers can create an educator account with all of their information, just as long as they are not providing any student information through that one account. Under FERPA, no student record information can be shared without written parent consent or where there is a legitimate educational interest with a signed DPA.

For instance, if a resource allows a teacher to log in and share a video or provide a demonstration to the whole class, then that would be acceptable, as no student information is being shared. However, if that resource allowed the teacher to enter in her class roster and assign specific assignments to individual students, that would be a problem, as PII has now been shared with that third party to provide that functionality.

**Q: The partnership agreement states as follows: "They (TEC) will handle the legal and time to contact and get the process of getting an agreement signed." What exactly is the "legal" that they are handling? Will TEC provide representation for the school district in the event of a data breach by a vendor? Is TEC authorized to negotiate on behalf of FSSD if any vendor objects to terms in the data protection agreement? If all that they are providing is assistance with getting the DPA signed, then this should be understood in writing prior to our signing an agreement with TEC.**

A: The legal process is as follows: If a vendor requests modifications to the NDPA, even as minor as a single word change, our attorney will handle the negotiations. She ensures that any proposed changes comply with federal and state laws—covering all 11 states we operate in—and that they are practical and reasonable from a district perspective.

Vendors have occasionally requested unreasonable terms, which our attorney promptly addresses. For instance, one vendor recently asked districts to implement specific privacy training, issue certificates upon completion, and allow the vendor to inspect those certifications. Our attorney swiftly rejected this request.

Over the past eight years, our attorney has successfully resolved several breach of contract issues on behalf of our member districts. If a district suspects a vendor is not adhering to the DPA, our attorney contacts the vendor to investigate. In many cases, this has resulted in vendors being required to adjust their products to ensure compliance with the DPA—such as modifying features that allowed students to share PII publicly or products using targeted advertising. Regarding data breaches, our attorney's role thus far has been limited to engaging the vendor and verifying compliance with DPA requirements for breach notifications.


All the services described above have been provided at no additional cost to any of our participating school districts.

To date, we have not encountered a situation requiring our attorney's representation in court or litigation. While we have yet to determine how we would handle the associated legal fees in such cases, given our cost-sharing model, we would strive to make the process as affordable as possible for all affected schools.



*Instructional Technology Specialist*  
Teaching & Learning  
507 New Highway 96 West  
Franklin, TN 37064  
615.794.6624  
fssd.org

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 **Screencastify.pdf**  
1066K

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**Carol Riordan** <riordancar@fssd.org>  
To: Mary Decker <deckermar@fssd.org>  
Cc: David Snowden <dsnowden@fssd.org>

Tue, Oct 15, 2024 at 1:57 PM

Thanks, I have this in the November folder.  
Carol



**Carol Riordan**  
*Executive Assistant to Director and Board*  
Central Office  
507 New Highway 96 West  
Franklin, TN 37064  
615.794.6624  
fssd.org

[Quoted text hidden]

**STANDARD STUDENT DATA PRIVACY AGREEMENT**

TN-NDPA-V1

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**AGREEMENT TYPE**

**Sevier County Schools**

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**LEA**

**and**

**Screencastify, LLC**

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**Provider**

**07/20/2023**

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**Date**

This Student Data Privacy Agreement (“DPA”) is entered into on the date of full execution (the “Effective Date”) and is entered into by and between:

[ Sevier County Schools ], located at [ 226 Cedar Street, Sevierville TN ] (the “Local Education Agency” or “LEA”) and [ Screencastify, LLC ], located at [ 333 N. Green St. Suite 810, Chicago, IL ] (the “Provider”).

**WHEREAS**, the Provider is providing educational or digital services to LEA.

**WHEREAS**, the Provider and LEA recognize the need to protect personally identifiable student information and other regulated data exchanged between them as required by applicable laws and regulations, such as the Family Educational Rights and Privacy Act (“FERPA”) at 20 U.S.C. § 1232g (34 CFR Part 99); the Children’s Online Privacy Protection Act (“COPPA”) at 15 U.S.C. § 6501-6506 (16 CFR Part 312), applicable state privacy laws and regulations and

**WHEREAS**, the Provider and LEA desire to enter into this DPA for the purpose of establishing their respective obligations and duties in order to comply with applicable laws and regulations.

**NOW THEREFORE**, for good and valuable consideration, LEA and Provider agree as follows:

1. A description of the Services to be provided, the categories of Student Data that may be provided by LEA to Provider, and other information specific to this DPA are contained in the Standard Clauses hereto.

2. **Special Provisions. Check if Required**

If checked, the Supplemental State Terms and attached hereto as **Exhibit “G”** are hereby incorporated by reference into this DPA in their entirety.

If checked, LEA and Provider agree to the additional terms or modifications set forth in **Exhibit “H”. (Optional)**

If Checked, the Provider, has signed **Exhibit “E”** to the Standard Clauses, otherwise known as General Offer of Privacy Terms

3. In the event of a conflict between the SDPC Standard Clauses, the State or Special Provisions will control. In the event there is conflict between the terms of the DPA and any other writing, including, but not limited to the Service Agreement and Provider Terms of Service or Privacy Policy the terms of this DPA shall control.
4. This DPA shall stay in effect for three years. Exhibit E will expire 3 years from the date the original DPA was signed.
5. The services to be provided by Provider to LEA pursuant to this DPA are detailed in **Exhibit “A”** (the “Services”).
6. **Notices.** All notices or other communication required or permitted to be given hereunder may be given via e-mail transmission, or first-class mail, sent to the designated representatives below.

The designated representative for the LEA for this DPA is:

Name: Buster Flynn Title: Technology Director

Address: 226 Cedar Street, Sevierville TN

Phone: 8654534671 Email: busterflynn@sevier.org

The designated representative for the Provider for this DPA is:

Name: David Pruitt Title: General Counsel

Address: 333 N. Green St. Suite 810, Chicago, IL

Phone: 312-768-8523 Email: david@screencastify.com

IN WITNESS WHEREOF, LEA and Provider execute this DPA as of the Effective Date.

LEA Sevier County Schools

By: [Signature] Date: July 20, 2023

Printed Name: Buster Flynn Title/Position: Technology Director

Provider Screencastify, LLC

By: DocuSigned by: David Pruitt Date: 07/20/2023  
028682255AAD446...

Printed Name: David Pruitt Title/Position: General Counsel

## **STANDARD CLAUSES**

Version 1.0

### **ARTICLE I: PURPOSE AND SCOPE**

1. **Purpose of DPA.** The purpose of this DPA is to describe the duties and responsibilities to protect Student Data including compliance with all applicable federal, state, and local privacy laws, rules, and regulations, all as may be amended from time to time. In performing these services, the Provider shall be considered a School Official with a legitimate educational interest, and performing services otherwise provided by the LEA. Provider shall be under the direct control and supervision of the LEA, with respect to its use of Student Data
2. **Student Data to Be Provided.** In order to perform the Services described above, LEA shall provide Student Data as identified in the Schedule of Data, attached hereto as **Exhibit "B"**.
3. **DPA Definitions.** The definition of terms used in this DPA is found in **Exhibit "C"**. In the event of a conflict, definitions used in this DPA shall prevail over terms used in any other writing, including, but not limited to the Service Agreement, Terms of Service, Privacy Policies etc.

### **ARTICLE II: DATA OWNERSHIP AND AUTHORIZED ACCESS**

1. **Student Data Property of LEA.** All Student Data transmitted to the Provider pursuant to the Service Agreement is and will continue to be the property of and under the control of the LEA. The Provider further acknowledges and agrees that all copies of such Student Data transmitted to the Provider, including any modifications or additions or any portion thereof from any source, are subject to the provisions of this DPA in the same manner as the original Student Data. The Parties agree that as between them, all rights, including all intellectual property rights in and to Student Data contemplated per the Service Agreement, shall remain the exclusive property of the LEA. For the purposes of FERPA, the Provider shall be considered a School Official, under the control and direction of the LEA as it pertains to the use of Student Data, notwithstanding the above.
2. **Parent Access.** To the extent required by law the LEA shall establish reasonable procedures by which a parent, legal guardian, or eligible student may review Education Records and/or Student Data correct erroneous information, and procedures for the transfer of student-generated content to a personal account, consistent with the functionality of services. Provider shall respond in a reasonably timely manner (and no later than forty five (45) days from the date of the request or pursuant to the time frame required under state law for an LEA to respond to a parent or student, whichever is sooner) to the LEA's request for Student Data in a student's records held by the Provider to view or correct as necessary. In the event that a parent of a student or other individual contacts the Provider to review any of the Student Data accessed pursuant to the Services, the Provider shall refer the parent or individual to the LEA, who will follow the necessary and proper procedures regarding the requested information.
3. **Separate Account.** If Student-Generated Content is stored or maintained by the Provider, Provider shall, at the request of the LEA, transfer, or provide a mechanism for the LEA to transfer, said Student-Generated Content to a separate account created by the student.

4. **Law Enforcement Requests.** Should law enforcement or other government entities ("Requesting Party(ies)") contact Provider with a request for Student Data held by the Provider pursuant to the Services, the Provider shall notify the LEA in advance of a compelled disclosure to the Requesting Party, unless lawfully directed by the Requesting Party not to inform the LEA of the request.
5. **Subprocessors.** Provider shall enter into written agreements with all Subprocessors performing functions for the Provider in order for the Provider to provide the Services pursuant to the Service Agreement, whereby the Subprocessors agree to protect Student Data in a manner no less stringent than the terms of this DPA.

### ARTICLE III: DUTIES OF LEA

1. **Provide Data in Compliance with Applicable Laws.** LEA shall provide Student Data for the purposes of obtaining the Services in compliance with all applicable federal, state, and local privacy laws, rules, and regulations, all as may be amended from time to time.
2. **Annual Notification of Rights.** If the LEA has a policy of disclosing Education Records and/or Student Data under FERPA (34 CFR § 99.31(a)(1)), LEA shall include a specification of criteria for determining who constitutes a school official and what constitutes a legitimate educational interest in its annual notification of rights.
3. **Reasonable Precautions.** LEA shall take reasonable precautions to secure usernames, passwords, and any other means of gaining access to the services and hosted Student Data.
4. **Unauthorized Access Notification.** LEA shall notify Provider promptly of any known unauthorized access. LEA will assist Provider in any efforts by Provider to investigate and respond to any unauthorized access.

### ARTICLE IV: DUTIES OF PROVIDER

1. **Privacy Compliance.** The Provider shall comply with all applicable federal, state, and local laws, rules, and regulations pertaining to Student Data privacy and security, all as may be amended from time to time.
2. **Authorized Use.** The Student Data shared pursuant to the Service Agreement, including persistent unique identifiers, shall be used for no purpose other than the Services outlined in Exhibit A or stated in the Service Agreement and/or otherwise authorized under the statutes referred to herein this DPA.
3. **Provider Employee Obligation.** Provider shall require all of Provider's employees and agents who have access to Student Data to comply with all applicable provisions of this DPA with respect to the Student Data shared under the Service Agreement. Provider agrees to require and maintain an appropriate confidentiality agreement from each employee or agent with access to Student Data pursuant to the Service Agreement.
4. **No Disclosure.** Provider acknowledges and agrees that it shall not make any re-disclosure of any Student Data or any portion thereof, including without limitation, user content or other non-public information and/or personally identifiable information contained in the Student Data other than as directed or

permitted by the LEA or this DPA. This prohibition against disclosure shall not apply to aggregate summaries of De-Identified information, Student Data disclosed pursuant to a lawfully issued subpoena or other legal process, or to subprocessors performing services on behalf of the Provider pursuant to this DPA. Provider will not Sell Student Data to any third party.

5. **De-Identified Data:** Provider agrees not to attempt to re-identify de-identified Student Data. De-Identified Data may be used by the Provider for those purposes allowed under FERPA and the following purposes: (1) assisting the LEA or other governmental agencies in conducting research and other studies; and (2) research and development of the Provider's educational sites, services, or applications, and to demonstrate the effectiveness of the Services; and (3) for adaptive learning purpose and for customized student learning. Provider's use of De-Identified Data shall survive termination of this DPA or any request by LEA to return or destroy Student Data. Except for Subprocessors, Provider agrees not to transfer de-identified Student Data to any party unless (a) that party agrees in writing not to attempt re-identification, and (b) prior written notice has been given to the LEA who has provided prior written consent for such transfer. Prior to publishing any document that names the LEA explicitly or indirectly, the Provider shall obtain the LEA's written approval of the manner in which de-identified data is presented.
6. **Disposition of Data.** Upon written request from the LEA, Provider shall dispose of or provide a mechanism for the LEA to transfer Student Data obtained under the Service Agreement, within sixty (60) days of the date of said request and according to a schedule and procedure as the Parties may reasonably agree. Upon termination of this DPA, if no written request from the LEA is received, Provider shall dispose of all Student Data after providing the LEA with reasonable prior notice. The duty to dispose of Student Data shall not extend to Student Data that had been De-Identified or placed in a separate student account pursuant to section II 3. The LEA may employ a "Directive for Disposition of Data" form, a copy of which is attached hereto as **Exhibit "D"**. If the LEA and Provider employ Exhibit "D," no further written request or notice is required on the part of either party prior to the disposition of Student Data described in Exhibit "D".
7. **Advertising Limitations.** Provider is prohibited from using, disclosing, or selling Student Data to (a) inform, influence, or enable Targeted Advertising; or (b) develop a profile of a student, family member/guardian or group, for any purpose other than providing the Service to LEA. This section does not prohibit Provider from using Student Data (i) for adaptive learning or customized student learning (including generating personalized learning recommendations); or (ii) to make product recommendations to teachers or LEA employees; or (iii) to notify account holders about new education product updates, features, or services or from otherwise using Student Data as permitted in this DPA and its accompanying exhibits

## **ARTICLE V: DATA PROVISIONS**

1. **Data Storage.** Where required by applicable law, Student Data shall be stored within the United States. Upon request of the LEA, Provider will provide a list of the locations where Student Data is stored.
2. **Audits.** No more than once a year, or following unauthorized access, upon receipt of a written request from the LEA with at least ten (10) business days' notice and upon the execution of an appropriate confidentiality agreement, the Provider will allow the LEA to audit the security and privacy measures that are in place to ensure protection of Student Data or any portion thereof as it pertains to the delivery of services to the LEA . The Provider will cooperate reasonably with the LEA and any local, state, or federal

agency with oversight authority or jurisdiction in connection with any audit or investigation of the Provider and/or delivery of Services to students and/or LEA, and shall provide reasonable access to the Provider's facilities, staff, agents and LEA's Student Data and all records pertaining to the Provider, LEA and delivery of Services to the LEA. Failure to reasonably cooperate shall be deemed a material breach of the DPA.

3. **Data Security.** The Provider agrees to utilize administrative, physical, and technical safeguards designed to protect Student Data from unauthorized access, disclosure, acquisition, destruction, use, or modification. The Provider shall adhere to any applicable law relating to data security. The provider shall implement an adequate Cybersecurity Framework based on one of the nationally recognized standards set forth set forth in **Exhibit "F"**. Exclusions, variations, or exemptions to the identified Cybersecurity Framework must be detailed in an attachment to **Exhibit "H"**. Additionally, Provider may choose to further detail its security programs and measures that augment or are in addition to the Cybersecurity Framework in **Exhibit "F"**. Provider shall provide, in the Standard Schedule to the DPA, contact information of an employee who LEA may contact if there are any data security concerns or questions.
4. **Data Breach.** In the event of an unauthorized release, disclosure or acquisition of Student Data that compromises the security, confidentiality or integrity of the Student Data maintained by the Provider the Provider shall provide notification to LEA within seventy-two (72) hours of confirmation of the incident, unless notification within this time limit would disrupt investigation of the incident by law enforcement. In such an event, notification shall be made within a reasonable time after the incident. Provider shall follow the following process:
  - (1) The security breach notification described above shall include, at a minimum, the following information to the extent known by the Provider and as it becomes available:
    - i. The name and contact information of the reporting LEA subject to this section.
    - ii. A list of the types of personal information that were or are reasonably believed to have been the subject of a breach.
    - iii. If the information is possible to determine at the time the notice is provided, then either (1) the date of the breach, (2) the estimated date of the breach, or (3) the date range within which the breach occurred. The notification shall also include the date of the notice.
    - iv. Whether the notification was delayed as a result of a law enforcement investigation, if that information is possible to determine at the time the notice is provided; and
    - v. A general description of the breach incident, if that information is possible to determine at the time the notice is provided.
  - (2) Provider agrees to adhere to all federal and state requirements with respect to a data breach related to the Student Data, including, when appropriate or required, the required responsibilities and procedures for notification and mitigation of any such data breach.
  - (3) Provider further acknowledges and agrees to have a written incident response plan that reflects best practices and is consistent with industry standards and federal and state law for responding to a data breach, breach of security, privacy incident or unauthorized acquisition or use of Student Data or any portion thereof, including personally identifiable information and agrees to provide LEA, upon request, with a summary of said written incident response plan.

- (4) LEA shall provide notice and facts surrounding the breach to the affected students, parents or guardians.
- (5) In the event of a breach originating from LEA's use of the Service, Provider shall cooperate with LEA to the extent necessary to expeditiously secure Student Data.

#### ARTICLE VI: GENERAL OFFER OF TERMS

Provider may, by signing the attached form of "General Offer of Privacy Terms" (General Offer, attached hereto as Exhibit "E"), be bound by the terms of Exhibit "E" to any other LEA who signs the acceptance on said Exhibit. The form is limited by the terms and conditions described therein.

#### ARTICLE VII: MISCELLANEOUS

1. **Termination.** In the event that either Party seeks to terminate this DPA, they may do so by mutual written consent so long as the Service Agreement has lapsed or has been terminated. Either party may terminate this DPA and any service agreement or contract if the other party breaches any terms of this DPA.
2. **Effect of Termination Survival.** If the Service Agreement is terminated, the Provider shall destroy all of LEA's Student Data pursuant to Article IV, section 6.
3. **Priority of Agreements.** This DPA shall govern the treatment of Student Data in order to comply with the privacy protections, including those found in FERPA and all applicable privacy statutes identified in this DPA. In the event there is conflict between the terms of the DPA and the Service Agreement, Terms of Service, Privacy Policies, or with any other bid/RFP, license agreement, or writing, the terms of this DPA shall apply and take precedence. In the event of a conflict between Exhibit H, the SDPC Standard Clauses, and/or the Supplemental State Terms, Exhibit H will control, followed by the Supplemental State Terms. Except as described in this paragraph herein, all other provisions of the Service Agreement shall remain in effect.
4. **Entire Agreement.** This DPA and the Service Agreement constitute the entire agreement of the Parties relating to the subject matter hereof and supersedes all prior communications, representations, or agreements, oral or written, by the Parties relating thereto. This DPA may be amended and the observance of any provision of this DPA may be waived (either generally or in any particular instance and either retroactively or prospectively) only with the signed written consent of both Parties. Neither failure nor delay on the part of any Party in exercising any right, power, or privilege hereunder shall operate as a waiver of such right, nor shall any single or partial exercise of any such right, power, or privilege preclude any further exercise thereof or the exercise of any other right, power, or privilege.

5. **Severability.** Any provision of this DPA that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions of this DPA, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. Notwithstanding the foregoing, if such provision could be more narrowly drawn so as not to be prohibited or unenforceable in such jurisdiction while, at the same time, maintaining the intent of the Parties, it shall, as to such jurisdiction, be so narrowly drawn without invalidating the remaining provisions of this DPA or affecting the validity or enforceability of such provision in any other jurisdiction.
  
6. **Governing Law; Venue and Jurisdiction.** THIS DPA WILL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF THE LEA, WITHOUT REGARD TO CONFLICTS OF LAW PRINCIPLES. EACH PARTY CONSENTS AND SUBMITS TO THE SOLE AND EXCLUSIVE JURISDICTION TO THE STATE AND FEDERAL COURTS FOR THE COUNTY OF THE LEA FOR ANY DISPUTE ARISING OUT OF OR RELATING TO THIS DPA OR THE TRANSACTIONS CONTEMPLATED HEREBY.
  
7. **Successors Bound:** This DPA is and shall be binding upon the respective successors in interest to Provider in the event of a merger, acquisition, consolidation or other business reorganization or sale of all or substantially all of the assets of such business. In the event that the Provider sells, merges, or otherwise disposes of its business to a successor during the term of this DPA, the Provider shall provide written notice to the LEA no later than sixty (60) days after the closing date of sale, merger, or disposal. Such notice shall include a written, signed assurance that the successor will assume the obligations of the DPA and any obligations with respect to Student Data within the Service Agreement. The LEA has the authority to terminate the DPA if it disapproves of the successor to whom the Provider is selling, merging, or otherwise disposing of its business.
  
8. **Authority.** Each party represents that it is authorized to bind to the terms of this DPA, including confidentiality and destruction of Student Data and any portion thereof contained therein, all related or associated institutions, individuals, employees or contractors who may have access to the Student Data and/or any portion thereof.
  
9. **Waiver.** No delay or omission by either party to exercise any right hereunder shall be construed as a waiver of any such right and both parties reserve the right to exercise any such right from time to time, as often as may be deemed expedient.

**EXHIBIT "A"**  
**DESCRIPTION OF SERVICES**

As further described in the services agreement between Provider and LEA, Screencastify provides video recording, editing, sharing and submission software tools and services designed for use in classroom educational settings. Students may be directed by their teachers to create and submit video and audio recordings as part of classroom assignments.

**EXHIBIT "B"**  
**SCHEDULE OF DATA**

Category of Data	Elements	Check if Used by Your System
Application Technology Meta Data	IP Addresses of users, Use of cookies, etc.	<input checked="" type="checkbox"/>
	Other application technology meta data-Please specify:	<input type="checkbox"/>
Application Use Statistics	Meta data on user interaction with application	<input checked="" type="checkbox"/>
Assessment	Standardized test scores	<input type="checkbox"/>
	Observation data	<input type="checkbox"/>
	Other assessment data-Please specify:	<input type="checkbox"/>
Attendance	Student school (daily) attendance data	<input type="checkbox"/>
	Student class attendance data	<input type="checkbox"/>
Communications	Online communications captured (emails, blog entries)	<input type="checkbox"/>
Conduct	Conduct or behavioral data	<input type="checkbox"/>
Demographics	Date of Birth	<input type="checkbox"/>
	Place of Birth	<input type="checkbox"/>
	Gender	<input type="checkbox"/>
	Ethnicity or race	<input type="checkbox"/>
	Language information (native, or primary language spoken by student)	<input type="checkbox"/>
	Other demographic information-Please specify:	<input type="checkbox"/>
Enrollment	Student school enrollment	<input type="checkbox"/>
	Student grade level	<input type="checkbox"/>
	Homeroom	<input type="checkbox"/>
	Guidance counselor	<input type="checkbox"/>
	Specific curriculum programs	<input type="checkbox"/>
	Year of graduation	<input type="checkbox"/>
	Other enrollment information-Please specify:	<input type="checkbox"/>
Parent/Guardian Contact Information	Address	<input type="checkbox"/>
	Email	<input type="checkbox"/>

Category of Data	Elements	Check if Used by Your System	
	Phone	<input type="checkbox"/>	<input type="checkbox"/>
Parent/Guardian ID	Parent ID number (created to link parents to students)	<input type="checkbox"/>	<input type="checkbox"/>
Parent/Guardian Name	First and/or Last	<input type="checkbox"/>	<input type="checkbox"/>
Schedule	Student scheduled courses	<input type="checkbox"/>	<input type="checkbox"/>
	Teacher names	<input type="checkbox"/>	<input type="checkbox"/>
Special Indicator	English language learner information	<input type="checkbox"/>	<input type="checkbox"/>
	Low income status	<input type="checkbox"/>	<input type="checkbox"/>
	Medical alerts/ health data	<input type="checkbox"/>	<input type="checkbox"/>
	Student disability information	<input type="checkbox"/>	<input type="checkbox"/>
	Specialized education services (IEP or 504)	<input type="checkbox"/>	<input type="checkbox"/>
	Living situations (homeless/foster care)	<input type="checkbox"/>	<input type="checkbox"/>
	Other indicator information-Please specify:	<input type="checkbox"/>	<input type="checkbox"/>
Student Contact Information	Address	<input type="checkbox"/>	<input type="checkbox"/>
	Email	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Phone	<input type="checkbox"/>	<input type="checkbox"/>
Student Identifiers	Local (School district) ID number	<input type="checkbox"/>	<input type="checkbox"/>
	State ID number	<input type="checkbox"/>	<input type="checkbox"/>
	Provider/App assigned student ID number	<input type="checkbox"/>	<input type="checkbox"/>
	Student app username	<input type="checkbox"/>	<input type="checkbox"/>
	Student app passwords	<input type="checkbox"/>	<input type="checkbox"/>
Student Name	First and/or Last	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Student In App Performance	Program/application performance (typing program-student types 60 wpm, reading program-student reads below grade level)	<input type="checkbox"/>	<input type="checkbox"/>
Student Program Membership	Academic or extracurricular activities a student may belong to or participate in	<input type="checkbox"/>	<input type="checkbox"/>
Student Survey Responses	Student responses to surveys or questionnaires	<input type="checkbox"/>	<input type="checkbox"/>
Student work	Student generated content; writing, pictures, etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Other student work data -Please specify: Video work product directed by classroom instructor	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transcript	Student course grades	<input type="checkbox"/>	<input type="checkbox"/>
	Student course data	<input type="checkbox"/>	<input type="checkbox"/>

Category of Data	Elements	Check if Used by Your System
	Student course grades/ performance scores	<input type="checkbox"/>
	Other transcript data - Please specify:	<input type="checkbox"/>
Transportation	Student bus assignment	<input type="checkbox"/>
	Student pick up and/or drop off location	<input type="checkbox"/>
	Student bus card ID number	<input type="checkbox"/>
	Other transportation data – Please specify:	<input type="checkbox"/>
Other	Please list each additional data element used, stored, or collected by your application:	<input type="checkbox"/>
None	No Student Data collected at this time. Provider will immediately notify LEA if this designation is no longer applicable.	<input type="checkbox"/>

**EXHIBIT "C"**  
**DEFINITIONS**

**De-Identified Data and De-Identification:** Records and information are considered to be de-identified when all personally identifiable information has been removed or obscured, such that the remaining information does not reasonably identify a specific individual, including, but not limited to, any information that, alone or in combination is linkable to a specific student and provided that the educational agency, or other party, has made a reasonable determination that a student's identity is not personally identifiable, taking into account reasonable available information.

**Educational Records:** Educational Records are records, files, documents, and other materials directly related to a student and maintained by the school or local education agency, or by a person acting for such school or local education agency, including but not limited to, records encompassing all the material kept in the student's cumulative folder, such as general identifying data, records of attendance and of academic work completed, records of achievement, and results of evaluative tests, health data, disciplinary status, test protocols and individualized education programs.

**Metadata:** means information that provides meaning and context to other data being collected; including, but not limited to: date and time records and purpose of creation Metadata that have been stripped of all direct and indirect identifiers are not considered Personally Identifiable Information.

**Operator:** means the operator of an internet website, online service, online application, or mobile application with actual knowledge that the site, service, or application is used for K-12 school purposes. Any entity that operates an internet website, online service, online application, or mobile application that has entered into a signed, written agreement with an LEA to provide a service to that LEA shall be considered an "operator" for the purposes of this section.

**Originating LEA:** An LEA who originally executes the DPA in its entirety with the Provider.

**Provider:** For purposes of the DPA, the term "Provider" means provider of digital educational software or services, including cloud-based services, for the digital storage, management, and retrieval of Student Data. Within the DPA the term "Provider" includes the term "Third Party" and the term "Operator" as used in applicable state statutes.

**Student Generated Content:** The term "student-generated content" means materials or content created by a student in the services including, but not limited to, essays, research reports, portfolios, creative writing, music or other audio files, photographs, videos, and account information that enables ongoing ownership of student content.

**School Official:** For the purposes of this DPA and pursuant to 34 CFR § 99.31(b), a School Official is a contractor that: (1) Performs an institutional service or function for which the agency or institution would otherwise use employees; (2) Is under the direct control of the agency or institution with respect to the use and maintenance of Student Data including Education Records; and (3) Is subject to 34 CFR § 99.33(a) governing the use and re-disclosure of personally identifiable information from Education Records.

**Service Agreement:** Refers to the Contract, Purchase Order or Terms of Service or Terms of Use.

**Student Data:** Student Data includes any data, whether gathered by Provider or provided by LEA or its users, students, or students' parents/guardians, that is descriptive of the student including, but not limited to,

information in the student's educational record or email, first and last name, birthdate, home or other physical address, telephone number, email address, or other information allowing physical or online contact, discipline records, videos, test results, special education data, juvenile dependency records, grades, evaluations, criminal records, medical records, health records, social security numbers, biometric information, disabilities, socioeconomic information, individual purchasing behavior or preferences, food purchases, political affiliations, religious information, text messages, documents, student identifiers, search activity, photos, voice recordings, geolocation information, parents' names, or any other information or identification number that would provide information about a specific student. Student Data includes Meta Data. Student Data further includes "personally identifiable information (PII)," as defined in 34 C.F.R. § 99.3 and as defined under any applicable state law. Student Data shall constitute Education Records for the purposes of this DPA, and for the purposes of federal, state, and local laws and regulations. Student Data as specified in Exhibit "B" is confirmed to be collected or processed by the Provider pursuant to the Services. Student Data shall not constitute that information that has been anonymized or de-identified, or anonymous usage data regarding a student's use of Provider's services.

**Subprocessor:** For the purposes of this DPA, the term "Subprocessor" (sometimes referred to as the "Subcontractor") means a party other than LEA or Provider, who Provider uses for data collection, analytics, storage, or other service to operate and/or improve its service, and who has access to Student Data.

**Subscribing LEA:** An LEA that was not party to the original Service Agreement and who accepts the Provider's General Offer of Privacy Terms.

**Targeted Advertising:** means presenting an advertisement to a student where the selection of the advertisement is based on Student Data or inferred over time from the usage of the operator's Internet web site, online service or mobile application by such student or the retention of such student's online activities or requests over time for the purpose of targeting subsequent advertisements. "Targeted advertising" does not include any advertising to a student on an Internet web site based on the content of the web page or in response to a student's response or request for information or feedback.

**Third Party:** The term "Third Party" means a provider of digital educational software or services, including cloud-based services, for the digital storage, management, and retrieval of Education Records and/or Student Data, as that term is used in some state statutes. However, for the purpose of this DPA, the term "Third Party" when used to indicate the provider of digital educational software or services is replaced by the term "Provider."

**EXHIBIT "D"**  
**DIRECTIVE FOR DISPOSITION OF DATA**

**Sevier County Schools** Provider to dispose of data obtained by Provider pursuant to the terms of the Service Agreement between LEA and Provider. The terms of the Disposition are set forth below:

1. Extent of Disposition

Disposition is partial. The categories of data to be disposed of are set forth below or are found in an attachment to this Directive:

Insert categories of data here

Disposition is Complete. Disposition extends to all categories of data.

2. Nature of Disposition

Disposition shall be by destruction or deletion of data.

Disposition shall be by a transfer of data. The data shall be transferred to the following site as follows:

Insert special instructions

3. Schedule of Disposition

Data shall be disposed of by the following date:

As soon as commercially practicable.

By Enter the Date

4. Signature

\_\_\_\_\_  
Authorized Representative of LEA

\_\_\_\_\_  
Date

5. Verification of Disposition of Data

\_\_\_\_\_  
Authorized Representative of Company

\_\_\_\_\_  
Date

**EXHIBIT "E"**  
**GENERAL OFFER OF PRIVACY TERMS**

**1. Offer of Terms**

Provider offers the same privacy protections found in this DPA between it and Sevier County Schools ("Originating LEA") which is dated July 20, 2023, to any other LEA ("Subscribing LEA") who accepts this General Offer of Privacy Terms ("General Offer") through its signature below. This General Offer shall extend only to privacy protections, and Provider's signature shall not necessarily bind Provider to other terms, such as price, term, or schedule of services, or to any other provision not addressed in this DPA. The Provider and the Subscribing LEA may also agree to change the data provided by Subscribing LEA to the Provider to suit the unique needs of the Subscribing LEA. The Provider may withdraw the General Offer in the event of: (1) a material change in the applicable privacy statutes; (2) a material change in the services and products listed in the originating Service Agreement; or three (3) years after the date of Provider's signature to this Form. Subscribing LEAs should send the signed **Exhibit "E"** to Provider at the following email address: legal@screencastify.com.

Screencastify, LLC

DocuSigned by:  
David Pruitt Date: 07/20/2023  
028682255AAD446...

BY: \_\_\_\_\_  
Printed Name: David Pruitt Title/Position: General Counsel

**2. Subscribing LEA**

A Subscribing LEA, by signing a separate Service Agreement with Provider, and by its signature below, accepts the General Offer of Privacy Terms. The Subscribing LEA and the Provider shall therefore be bound by the same terms of this DPA for the term of the DPA between the Sevier County Schools and the Provider. **\*\*PRIOR TO ITS EFFECTIVENESS, SUBSCRIBING LEA MUST DELIVER NOTICE OF ACCEPTANCE TO PROVIDER PURSUANT TO ARTICLE VII, SECTION 5. \*\***

BY: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title/Position: \_\_\_\_\_

SCHOOL DISTRICT NAME: \_\_\_\_\_

DESIGNATED REPRESENTATIVE OF LEA:  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Email: \_\_\_\_\_

**EXHIBIT "F"**  
**DATA SECURITY REQUIREMENTS**

**Adequate Cybersecurity Frameworks**  
**2/24/2020**

The Education Security and Privacy Exchange ("Edspex") works in partnership with the Student Data Privacy Consortium and industry leaders to maintain a list of known and credible cybersecurity frameworks which can protect digital learning ecosystems chosen based on a set of guiding cybersecurity principles\* ("Cybersecurity Frameworks") that may be utilized by Provider .

**Cybersecurity Frameworks**

	<b>MAINTAINING ORGANIZATION/GROUP</b>	<b>FRAMEWORK(S)</b>
<input type="checkbox"/>	National Institute of Standards and Technology	NIST Cybersecurity Framework Version 1.1
<input type="checkbox"/>	National Institute of Standards and Technology	NIST SP 800-53, Cybersecurity Framework for Improving Critical Infrastructure Cybersecurity (CSF), Special Publication 800-171
<input type="checkbox"/>	International Standards Organization	Information technology — Security techniques — Information security management systems (ISO 27000 series)
<input type="checkbox"/>	Secure Controls Framework Council, LLC	Security Controls Framework (SCF)
<input type="checkbox"/>	Center for Internet Security	CIS Critical Security Controls (CSC, CIS Top 20)
<input type="checkbox"/>	Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD(A&S))	Cybersecurity Maturity Model Certification (CMMC, ~FAR/DFAR)

Please visit <http://www.edspex.org> for further details about the noted frameworks.

\*Cybersecurity Principles used to choose the Cybersecurity Frameworks are located here

**EXHIBIT "G"**  
**Supplemental SDPC State Terms for [State]**  
Version \_\_\_\_\_

[The State Supplement is an *optional* set of terms that will be generated on an as-needed basis in collaboration between the national SDPC legal working group and the State Consortia. The scope of these State Supplements will be to address any state specific data privacy statutes and their requirements to the extent that they require terms in addition to or different from the National Standard Clauses. The State Supplements will be written in a manner such that they will not be edited/updated by individual parties and will be posted on the SDPC website to provide the authoritative version of the terms. Any changes by LEAs or Providers will be made in amendment form in an Exhibit (Exhibit "H" in this proposed structure).]

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**EXHIBIT "H"**  
**Additional Terms or Modifications**  
Version \_\_\_\_\_

LEA and Provider agree to the following additional terms and modifications:

This is a free text field that the parties can use to add or modify terms in or to the DPA. If there are no additional or modified terms, this field should read "None."

LEA and Provider agree to the following additional terms and modifications:

1. **Provider MSA Terms.** This Agreement and Screencastify's Services are subject to Screencastify's Master Subscription Terms and Conditions located at [www.screencastify.com/msa](http://www.screencastify.com/msa) or other similar terms as may be negotiated between Screencastify and Provider ("MSA Terms"), provided however, that (i) section 6 of the MSA Terms applies only to the extent permitted by applicable law and (ii) if there is a direct conflict between this DPA and the MSA Terms, the MSA Terms will be given the priority of the Service Agreement described in Article VII, Section 3.
2. **No Disclosure.** In the second sentence of Article IV, Section 4 (No Disclosure), the words "aggregate summaries of" are deleted.
3. **De-Identified Data.** Subpart (b) in the third sentence of Article IV, Section 5 (De-Identified Data) is deleted and replaced with the following: (b) that party agrees to comply with all applicable federal, state and local laws, rules and regulations pertaining to Student Data privacy and security, all as may be amended from time-to-time.
4. **Data Breach.** In the first sentence of Article V, Section 4 (Data Breach), the words "within seventy-two (72) hours of confirmation of the incident" are replaced with "within seven (7) days of confirmation of the incident".
5. **Definitions.** The definition of De-Identified Data and De-Identification in Exhibit C is deleted and replaced with the following: De-Identified Data and De-Identification: Records and information are considered to be de-identified when all personally identifiable information has been removed or obscured, such that (i) the remaining information does not reasonably identify a specific individual, including any information that that, alone or in combination is linkable to a specific student, (ii) reasonable technical safeguards and business processes are in place that prohibit re-identification of the student to whom the information may pertain, and (iii) business processes are in place to prevent the inadvertent release of de-identified information.

## APPLICATION FOR OVERNIGHT FIELD TRIP

Pursuant to the Franklin Special School District Board of Education Policy 4.302 "Field Trips and Excursions", preparation of all overnight field trips must include application of the field trip with this form and appropriate approval thereto. Please submit this form in ample time for approval of the Board of Education.

**SCHOOL:** Freedom Intermediate School **GRADE:** 6<sup>TH</sup>

**DATE OF REQUEST:** 9/23/24

**TEACHER REQUESTING:** B. Martin (Valor), A. Smith (Fusion), C. Kim (Velocity)

**DATES OF FIELD TRIP:** May 14, 2025 – May 16, 2025

### **DESTINATION:**

R.E.E.L. Environmental Education  
Clyde M. York 4-H Center  
62 4-H Center  
Crossville, TN 38572

### **INSTRUCTIONAL PURPOSES:**

The mission of this academic center is "To engage youth and adults in experiential learning activities that foster social, emotional, physical, and cognitive growth. By using Environmental Education, Outdoor Experiences, and STEM principles, in place-based, and re-imagined ways."

National and State Standards incorporated are as follows:

Science-

#### **6.PS3: Energy**

2) Construct a scientific explanation of the transformations between kinetic and potential energy.

3) Analyze and interpret data to show the relationship between kinetic and the mass of the object in motion and its speed.

#### **6.ESS2: Earth's Systems**

Apply Scientific principles to design a method to analyze and interpret the impact humans and other organisms have on the hydrologic cycle.

### **6.LS2: Ecosystems: Interactions, Energy, and Dynamics**

- 1) Evaluate and communicate the impact of environmental variables on population size.
- 2) Determine the impact of competitive, symbiotic, and predatory interactions in an ecosystem.
- 3) Draw conclusions about the transfer of energy through a food web and energy pyramid in an ecosystem.
- 4) Using evidence from climate data, draw conclusions about the patterns of abiotic and biotic factors in different biomes, specifically the tundra, taiga, deciduous forest, desert, grasslands, rainforest, marine, and freshwater ecosystems.
- 5) Analyze existing evidence about the effect of a specific invasive species on native populations in Tennessee and design a solution to mitigate its impact.
- 6) Research the ways in which an ecosystem has changed over time in response to changes in physical conditions, population balances, human interactions, and natural catastrophes.
- 7) Compare and contrast auditory and visual methods of communication among organisms in relation to survival strategies of a population.

### **6.ESS3: Earth and Human Activity .**

- 3) Assess the impacts of human activities on the biosphere including conservation, habitat management, species endangerment, and extinction.

**TRIP COST PER CHILD: \$200.00**

**COLLECTION METHOD: Teacher log**

**STUDENT BODY OFFERED TRIP:** 6<sup>TH</sup> grade

**NUMBER PARTICIPATING:** Approximately 150 students

**CHAPERONES ATTENDING:** A. Smith, C. Kim, B Martin, R. Komar, E. Wynne, A. Lancaster, and parents from all teams

**DATE AND TIME OF DEPARTURE:** Dates are listed on first page. Groups will depart at approximately 6:30 am

**DATE AND TIME OF RETURN:** Groups will return at approximately 4:00 pm

**MODE OF TRANSPORTATION:** Groups will travel on 55 passenger Charter Buses.

**IF MORE THAN ONE, LIST SPECIFIC DETAILS:** One adult will drive their personal vehicle to utilize in the event of an emergency while at the facility.

**ACCOMMODATION ARRANGEMENTS:** Students and adults will share cabins while at the environmental center. Females will occupy cabins separate from the males. Students will sleep and shower in separate areas from the adults.

**MEAL ARRANGEMENTS:** Students will receive nutritious meals prepared by the 4-H Center's staff. Breakfast, lunch, dinner, and snacks are served family style. Students will have a choice of water, milk, or juice to drink with all meals.

**EMERGENCY CONTINGENCY PLAN:** The health and safety of our students is a top priority. Our school nurse will pack a well-equipped first aid backpack for our students. Our school nurse will also create a spreadsheet with medications that are required to be distributed to the students while attending the trip. During all of the outings, an adult will carry a first aid kit and radio.

An employee of the Franklin Special School District will administer all medication. One adult will drive a personal vehicle to have on site and available for use should any member of the group need medical care not requiring an ambulance.

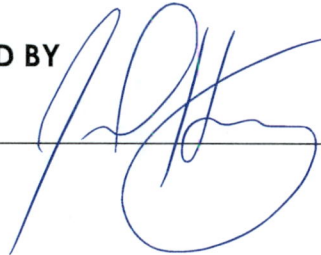
We will require a completed medical form for all participants. Students cannot participate in programs or be housed on site without a signed

form from a parent/guardian. The forms will be turned in upon arrival and kept on file during our stay and return upon our departure.

Parents will be provided with emergency phone and fax numbers to the 4-H Center facility. Teachers will contact the school to communicate any issues that might occur while traveling and contact the specific parent should an issue arise.

**RECOMMENDED BY**

PRINCIPAL: \_\_\_\_\_



DATE: 10-22-24

DIRECTOR OF SCHOOLS: \_\_\_\_\_



DATE: 11/5/24

AUTHORIZATION BY

FSSD BOARD OF EDUCATION: \_\_\_\_\_

DATE: \_\_\_\_\_

## Timeline

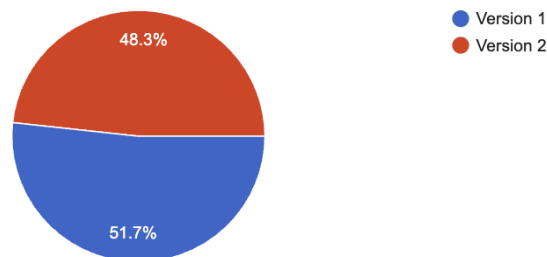
- As in years past, we received feedback from all of the schools regarding calendar priorities. This group is the original calendar committee.
- The top three priorities are:
  - Keep the same length of breaks as we currently have
  - Align with the WCS calendar
  - Don't begin before August 1 (even for teachers)
- A small district team (school and district administrators, staff and parent – although parent had to cancel at the last minute) met 10/16 to review all feedback, WCS calendars and the FSD calendar options.
- All of this information was emailed to the original calendar committee in late October and they were asked to vote on their calendar preference for the 25-26 year and the 26-27 year.

## 2025-2026 FSD Calendar

- The 25-26 V-1 calendar has **8 days' difference with WCS**. WCS has teachers beginning July 28, and this puts us at a 3-day difference for the month of August and gives them more flexibility with dates for the remainder of the year. There is a huge request to not begin school for teachers prior to August 1.
- There are no Williamson County elections in November, 2025, so WCS is moving their PL day typically provided on Election Day to 10/31. The FSD district calendar committee chose to also remove PL from Election Day but is adding it in January for both versions.
- The difference between V-1 and V-2 FSD calendars is V-2 has us in school Monday, December 22, for an abbreviated day, allowing the entire district to be closed on Friday, January 2. **V-2 has 10 days' difference with WCS.**
- **Both the small district committee and the larger original calendar committee chose V-1, with a 4% difference.**

For the 2025-2026 FSD Calendar, my preference is:

58 responses

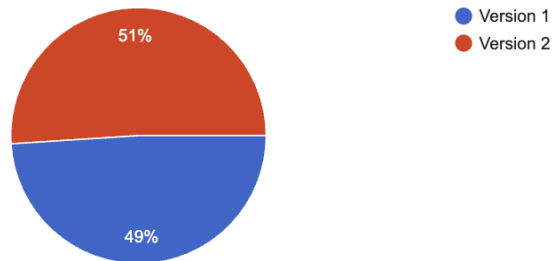


## 2026-2027 FSD Calendar

- The 26-27 V-1 calendar has **4 days' difference with WCS**. We will actually bring our students back on Friday, 8/7, whereas, WCS is bringing students back Monday, 8/10. FSD V-1 has students returning January 6, with a PL day Monday, January 4, and an admin day Tuesday, January 5.
- V-2 calendar has FSD students returning Monday, 8/10 (same as WCS) and returning after winter break on January 5 (same as WCS). In this version, FSD teachers would have an extra PL day in August and not have one in January to keep us more in line with the WCS calendar this year. **V-2 has 2 days' difference with WCS.**
- **The small district committee chose V-1, and the larger original calendar committee chose V-2, with a 3% difference.**

For the 2026-2027 FSD Calendar, my preference is:

49 responses



# Williamson County Schools

## 2025-2026

**1st Semester = 87 Days**

**Draft #1 - 177 Days**

**2nd Semester = 90 Days**

(Copying 24-25 Calendar)

July						
SUN	MON	TUES	WED	THU	FRI	SAT
		1	2	3	4 Independence Day System Closed	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23 New Teacher Induction	24 New Teacher Induction	25 SSS & TA Training	26
27	28 Admin Day All Teachers Report	29 District-Wide PD Day	30 Site-Based PD Day	31 Site-Based PD Day		

August						
SUN	MON	TUES	WED	THU	FRI	SAT
					1 Admin Day Teacher Prep Day (Flex)	2
3	4 First Day - 1/2 Day Students 1st-12th	5 First Full Day Students 1st-12th	6	7	8	9
10	11 First Full Day - Pre-K, EC & K	12 Late Start	13	14	15	16
17	18 Late Start	19	20	21	22	23
24 /31	25 Late Start	26	27 Early Release	28	29 Student Day #20	30

September						
SUN	MON	TUES	WED	THU	FRI	SAT
	1 Labor Day System Closed	2 Late Start	3	4	5	6
7	8 Late Start	9	10	11	12	13
14	15 Late Start	16	17 Constitution Day Students in School Early Release	18	19	20
21	22 Late Start	23	24	25	26	27
28	29 Late Start	30 Student Day #41				

## 2025-2026

**1st Semester = 87 Days**

**Draft #1 - 177 Days**

**2nd Semester = 90 Days**

(Copying 24-25 Calendar)

October						
SUN	MON	TUES	WED	THU	FRI	SAT
			1 Early Release	2	3 End of 1st Qtr - 44 Days Student Day #44	4
5	6 Parent/Teacher Conferences (Flex) (In person, Zoom or phone) No Students	7 District-Wide / Site-Based PD Day (Flex) No Students	8 Fall Break System Closed	9 Fall Break System Closed	10 Fall Break System Closed	11
12 Late Start Columbus Day Students in School	13	14	15	16	17	18
19 Late Start	20	21	22 Early Release	23	24	25
26 Late Start	27	28 City of Franklin Elections - 3 Schools	29	30 Student Days #58	31 Site-Based PD Day No Students	

November						
SUN	MON	TUES	WED	THU	FRI	SAT
						1
2 Late Start	3	4	5	6	7	8
9 Late Start	10	11 Veterans Day Students In School	12	13	14	15
16 Late Start	17	18	19 Early Release	20	21 Student Days #73	22
23 / 30	24 Thanksgiving Break System Closed	25 Thanksgiving Break System Closed	26 Thanksgiving Break System Closed	27 Thanksgiving Break System Closed	28 Thanksgiving Break System Closed	29

December						
SUN	MON	TUES	WED	THU	FRI	SAT
	1 Late Start	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18 1/2 Day Students 1st Semester Ends - 43 Student Days Total Student Days #87	19 Winter Break System Closed	20
21	22 Winter Break System Closed	23 Winter Break System Closed	24 Winter Break System Closed	25 Winter Break System Closed	26 Winter Break System Closed	27
28	29 Winter Break System Closed	30 Winter Break System Closed	31 Winter Break System Closed			

## 2025-2026

**1st Semester = 87 Days**

**Draft #1 - 177 Days**

**2nd Semester = 90 Days**

(Copying 24-25 Calendar)

January						
SUN	MON	TUES	WED	THU	FRI	SAT
				1 New Year's Day System Closed	2 Admin Day Teacher Prep Day (Flex)	3
4	5 Students Full Day	6	7	8	9	10
11 Late Start	12	13	14 Early Release	15	16	17
18 MLK Day System Closed	19 Late Start	20	21	22	23	24
25 Late Start	26	27	28 Early Release	29	30 2nd Semester Student Day #19	31

February						
SUN	MON	TUES	WED	THU	FRI	SAT
1 Late Start	2	3	4	5	6	7
8 Super Bowl	9 Late Start	10	11 Early Release	12	13 District-Wide PD Day (In Person) No Students	14 Valentine's Day
15 Presidents Day Mid-Winter Break No Students or Teachers	16	17	18	19	20	21
22 Late Start	23	24	25	26	27 2nd Semester Student Day #37	28

March						
SUN	MON	TUES	WED	THU	FRI	SAT
1 Late Start	2	3	4 Early Release	5	6 End of 3rd Qtr - 42 Days Second Semester Student Day #42	7
8 Spring Break System Closed	9 Spring Break System Closed	10 Spring Break System Closed	11 Spring Break System Closed	12 Spring Break System Closed	13 Spring Break System Closed	14
15 Late Start	16	17	18	19	20	21
22 Late Start	23	24	25 Early Release	26	27	28
29 Late Start	30	31 2nd Semester Student Day #54				

## 2025-2026

**1st Semester = 87 Days**

**Draft #1 - 177 Days**

**2nd Semester = 90 Days**

(Copying 24-25 Calendar)

April						
SUN	MON	TUES	WED	THU	FRI	SAT
			1	2	3 Spring Holiday System Closed	4
5 Easter	6 Late Start	7	8 Early Release	9	10	11
12	13 Late Start	14 TCAP Window	15 TCAP Window	16 TCAP Window	17 TCAP Window	18
19	20 TCAP Window	21 TCAP Window	22 TCAP Window	23 TCAP Window	24 TCAP Window	25
26	27 TCAP Window	28 TCAP Window	29 TCAP Window	30 TCAP Window 2nd Semester Student Day #75		

May						
SUN	MON	TUES	WED	THU	FRI	SAT
					1 TCAP Window	2
3	4	5	6	7	8	9
10 Mother's Day	11	12	13	14 Franklin Rodeo	15 Franklin Rodeo	16 Franklin Rodeo
17	18	19	20	21 1/2 Day Students 2nd Semester Ends - 48 Student Days 2nd Semester Total Student Days #90 Total Student Days #177 Graduation Window	22 Admin Day Graduation Window	23 Graduation Window
24 Graduation Window	25 Memorial Day System Closed	26	27	28	29	30
31						

June						
SUN	MON	TUES	WED	THU	FRI	SAT
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19 Juneteenth	20
21 Father's Day	22	23	24	25	26	27
28	29	30				

# Williamson County Schools

## 2026-2027

1st Semester = 83 Days

Draft #2 - 177 Days

2nd Semester = 94 Days

(Copying 25-26 Calendar)

July						
SUN	MON	TUES	WED	THU	FRI	SAT
			1	2	3 Independence Day Observed System Closed	4 Independence Day
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29 New Teacher Induction	30 New Teacher Induction	31 SSS & TA Training	

August						
SUN	MON	TUES	WED	THU	FRI	SAT
						1
2	3 Admin Day All Teachers Report	4 District-Wide PD Day	5 Site-Based PD Day	6 Site-Based PD Day State & County Primary Elections	7 Admin Day Teacher Prep Day (Flex)	8
9	10 First Day - 1/2 Day Students 1st-12th	11 First Full Day Students 1st-12th	12	13	14	15
16	17 First Full Day - Pre-K, EC & K	18 Late Start	19	20	21	22
23	24 Late Start	25	26 Early Release	27	28	29
30	31 Late Start Student Day #16					

September						
SUN	MON	TUES	WED	THU	FRI	SAT
		1	2	3	4	5
6	7 Labor Day System Closed	8 Late Start	9	10	11	12
13	14 Late Start	15	16 Early Release	17 Constitution Day Students in School	18	19
20	21 Late Start	22	23	24	25	26
27	28 Late Start	29	30 Student Day #37			



## 2026-2027

**1st Semester = 83 Days**

**Draft #2 - 177 Days**

**2nd Semester = 94 Days**

(Copying 25-26 Calendar)

January						
SUN	MON	TUES	WED	THU	FRI	SAT
					1 New Year's Day System Closed	2
3	4 Admin Day Teacher Prep Day (Flex) No Students	5 Students Full Day	6	7	8	9
10	11 Late Start	12	13 Early Release	14	15	16
17	18 MLK Day System Closed	19 Late Start	20	21	22	23
24 / 31	25 Late Start	26	27 Early Release	28	29 2nd Semester Student Day #18	30

February						
SUN	MON	TUES	WED	THU	FRI	SAT
	1 Late Start	2	3	4	5	6
7	8 Late Start	9	10 Early Release	11	12 District-Wide PD Day (In Person) No Students	13
14 Valentine's Day Super Bowl	15 Presidents Day Mid-Winter Break No Students or Teachers	16	17	18	19	20
21 / 28	22 Late Start	23	24	25	26 2nd Semester Student Day #36	27

March						
SUN	MON	TUES	WED	THU	FRI	SAT
	1 Late Start	2	3 Early Release	4	5	6
7	8 Late Start	9	10	11	12 End of 3rd Qtr - 46 Days Second Semester Student Day #46	13
14	15 Spring Break System Closed	16 Spring Break System Closed	17 Spring Break System Closed	18 Spring Break System Closed	19 Spring Break System Closed	20
21	22 Late Start	23	24 Early Release	25	26 Spring Holiday System Closed	27
Easter 28	29 Late Start	30	31 2nd Semester Student Day #53			

## 2026-2027

**1st Semester = 83 Days**

**Draft #2 - 177 Days**

**2nd Semester = 94 Days**

(Copying 25-26 Calendar)

April						
SUN	MON	TUES	WED	THU	FRI	SAT
				1	2	3
4	5 Late Start	6	7 Early Release	8	9	10
11	12 Late Start	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30 2nd Semester Student Day #75	

May						
SUN	MON	TUES	WED	THU	FRI	SAT
						1
2	3	4	5	6	7	8
9 Mother's Day	10	11	12	13 Franklin Rodeo	14 Franklin Rodeo	15 Franklin Rodeo
16	17	18	19	20	21	22
23	24	25	26	27 1/2 Day Students 2nd Semester Ends - 48 Student Days 2nd Semester Total Student Days #94 Total Student Days #177 Graduation Window	28 Admin Day Graduation Window	29 Graduation Window
30 Graduation Window	31 Memorial Day System Closed					

June						
SUN	MON	TUES	WED	THU	FRI	SAT
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18 Juneteenth Observed	19 Juneteenth
20 Father's Day	21	22	23	24	25	26
27	28	29	30			

# July 2025



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4 Independence Day	5
	District Closed	District Closed	District Closed	District Closed	District Closed	
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29 EQuIP	30 EQuIP	31 EQuIP		

# August 2025



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 District Kickoff District PL Day	2
3	4 School PL Day	5 Admin Day Meet & Greet	6 School PL Day	7 Grades 1-8 First Day of School Early Dismissal 1	8 Grades 1-8 First Full Day 2	9
10	11 3	12 4	13 5	14 6	15 Kindergarten First Full Day of School 7	16
17	18 8	19 9	20 10	21 11	22 Pre-K First Full Day 12	23
24	25 13	26 14	27 15	28 16	29 Early Dismissal 17	30
31						

# September 2025



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	<b>1</b> Labor Day District Closed	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>
<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>
<b>28</b>	<b>29</b>	<b>30</b>				

# October 2025



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3 Early Dismissal 41	4
5	6 Fall Break District Closed	7 Fall Break District Closed	8 Fall Break District Closed	9 Fall Break District Closed	10 Fall Break District Closed	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	First Nine Weeks - 41 Days

# November 2025



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
	16	17	18	19	20	
9	10	11 Veterans Day	12	13	14	15
	21	22	23	24	25	
16	17	18	19	20	21	22
	26	27	28	29	Early Dismissal 30	
23	24	25	26	27 Thanksgiving Day	28	29
	District Closed	District Closed	District Closed	District Closed	District Closed	
30						

# December 2025



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 31	2 32	3 33	4 34	5 35	6
7	8 36	9 37	10 38	11 39	12 40	13
14	15 41	16 42	17 43	18 44	19 45 Abbreviated Day	20
21	22 District Closed	23 District Closed	24 District Closed	25 Christmas Day District Closed	26 District Closed	27
28	29 District Closed	30 District Closed	31 District Closed			Second Nine Weeks 45 Days  First Semester - 86 Days

# January 2026



V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 New Year's Day District Closed	2 District PL Day (No Students)	3
4	5 Admin Day (No Students)	6 Students Return 1	7 2	8 3	9 4	10
11	12 5	13 6	14 7	15 8	16 9	17
18	19 MLK Day District Closed	20 10	21 11	22 12	23 13	24
25	26 14	27 15	28 16	29 17	30 18	31

# February 2026



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 19	3 20	4 21	5 22	6 23	7
8	9 24	10 25	11 26	12 27	13 Early Dismissal 28	14
15	16 Presidents Day School PL Day (No Students)	17 29	18 30	19 31	20 32	21
22	23 33	24 34	25 35	26 36	27 37	28

# March 2026



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 38	3 39	4 40	5 41	6 Early Dismissal 42	7
8	9 Spring Break	10 Spring Break	11 Spring Break	12 Spring Break	13 Spring Break	14
15	16 1	17 2	18 3	19 4	20 5	21
22	23 6	24 7	25 8	26 9	27 10	28
29	30 11	31 12				Third Nine Weeks 42 Days

# April 2026



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3 Spring Holiday District Closed	4
5 Easter	6	7	8	9	10	11
	15	16	17	18	19	
12	13	14	15	16	17	18
	20	21	22	23	24	
19	20	21	22	23	24	25
	25	26	27	28	29	
26	27	28	29	30		
	30	31	32	33		

# May 2026



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
	35	36	37	38	39	
10	11	12	13	14	15	16
	40	41	42	43	44	
17	18	19	20	21	22	23
	45	46	47	48	49 Last Day of School Abbreviated Day	
24	25 Memorial Day District Closed	26 Administrative Day	27	28	29	30
31						Fourth Nine Weeks 49 Days  Second Semester 91 Days

# July 2025



# V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4 Independence Day	5
	District Closed	District Closed	District Closed	District Closed	District Closed	
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29 EQuIP	30 EQuIP	31 EQuIP		

# August 2025



# V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 District Kickoff District PL Day	2
3	4 School PL Day	5 Admin Day Meet & Greet	6 School PL Day	7 Grades 1-8 First Day of School Early Dismissal 1	8 Grades 1-8 First Full Day 2	9
10	11 3	12 4	13 5	14 6	15 Kindergarten First Full Day of School 7	16
17	18 8	19 9	20 10	21 11	22 Pre-K First Full Day 12	23
24	25 13	26 14	27 15	28 16	29 Early Dismissal 17	30
31						

# September 2025



# V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Labor Day District Closed	2	3	4	5	6
7	8	9 18	10 19	11 20	12 21	13
14	15 22	16 23	17 24	18 25	19 26	20
21	22 27	23 28	24 29	25 30	26 31	27
28	29 32	30 33	34	35	36	
	37	38				

# October 2025



V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3 Early Dismissal 41	4
5	6 Fall Break District Closed	7 Fall Break District Closed	8 Fall Break District Closed	9 Fall Break District Closed	10 Fall Break District Closed	11
12	13	14	15	16	17	18
19	20 1	21 2	22 3	23 4	24 5	25
26	27 6	28 7	29 8	30 9	31 10	25
	27 11	28 12	29 13	30 14	31 15	First Nine Weeks - 41 Days

# November 2025



# V-2

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3	4	5	6	7	8
	16	17	18	19	20	
9	10	11 Veterans Day	12	13	14	15
	21	22	23	24	25	
16	17	18	19	20	21	22
	26	27	28	29	Early Dismissal 30	
23	24	25	26	27 Thanksgiving Day	28	29
	District Closed	District Closed	District Closed	District Closed	District Closed	
30						

# December 2025



# V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
	31	32	33	34	35	
7	8	9	10	11	12	13
	36	37	38	39	40	
14	15	16	17	18	19	20
	41	42	43	44	45	
21	22	23	24	25	26	27
	Abbreviated Day 46	District Closed	District Closed	Christmas Day District Closed	District Closed	
28	29	30	31			
	District Closed	District Closed	District Closed			Second Nine Weeks 46 Days  First Semester - 87 Days

# January 2026



V-2

				Thursday	Friday	Saturday
				1 New Year's Day District Closed	2 District closed	3
4	5 District PL Day (No Students)	6 Admin Day (No Students)	7 Students Return 1	8 2	9 3	10
11	12 4	13 5	14 6	15 7	16 8	17
18	19 MLK Day District Closed	20 9	21 10	22 11	23 12	24
25	26 13	27 14	28 15	29 16	30 17	31

# February 2026



# V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
	18	19	20	21	22	
8	9	10	11	12	13	14
	23	24	25	26	Early Dismissal 27	
15	16 Presidents Day School PL Day (No Students)	17	18	19	20	21
		28	29	30	31	
22	23	24	25	26	27	28
	32	33	34	35	36	

# March 2026



V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 37	3 38	4 39	5 40	6 Early Dismissal 41	7
8	9 Spring Break	10 Spring Break	11 Spring Break	12 Spring Break	13 Spring Break	14
15	16 1	17 2	18 3	19 4	20 5	21
22	23 6	24 7	25 8	26 9	27 10	28
29	30 11	31 12				Third Nine Weeks 41 Days

# April 2026



# V-2

			Wednesday	Thursday	Friday	Saturday
			1	2	3 Spring Holiday District Closed	4
5 Easter	6	7	8	9	10	11
	15	16	17	18	19	
12	13	14	15	16	17	18
	20	21	22	23	24	
19	20	21	22	23	24	25
	25	26	27	28	29	
26	27	28	29	30		
	30	31	32	33		

# May 2026



# V-2

					Friday	Saturday
					1	2
3	4	5	6	7	8 34	9
10	11 35	12 36	13 37	14 38	15 39	16
17	18 40	19 41	20 42	21 43	22 44	23
24	25 45 Memorial Day	26 46 Administrative Day	27 47	28 48	29 49 Last Day of School Abbreviated Day	30
31						Fourth Nine Weeks 49 Days  Second Semester - 90

# July 2026



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4 Independence Day
5	6 District Closed	7 District Closed	8 District Closed	9 District Closed	10 District Closed	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28 EQUIP	29 EQUIP	30 EQUIP	31	

# August 2026



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3 District Kickoff District PL Day	4 School PL Day	5 Admin Day Meet & Greet	6 School PL Day	7 Grades 1-8 First Day of School Early Dismissal 1	8
9	10 Grades 1-8 First Full Day 2	11 3	12 4	13 5	14 6	15
16	17 Kindergarten First Full Day of School 7	18 8	19 9	20 10	21 11	22
23	24 Pre-K First Full Day 12	25 13	26 14	27 15	28 16	29

# September 2026



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 18	2 19	3 20	4 Early Dismissal 21	5
6	7 Labor Day District Closed	8 22	9 23	10 24	11 25	12
13	14 26	15 27	16 28	17 29	18 30	19
20	21 31	22 32	23 33	24 34	25 35	26
27	28 36	29 37	30 38			

# October 2026



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 39	2 40	3
4	5 41	6 42	7 43	8 44	9 45 Early Dismissal	10
11	12 Fall Break District Closed	13 Fall Break District Closed	14 Fall Break District Closed	15 Fall Break District Closed	16 Fall Break District Closed	17
18	19 1	20 2	21 3	22 4	23 5	24
25	26 6	27 7	28 8	29 9	30 10	31 First Nine Weeks 45 Days

# November 2026



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 11	3 Election Day District PL Day (No Students)	4 12	5 13	6 14	7
8	9 15	10 16	11 Veterans Day 17	12 18	13 19	14
15	16 20	17 21	18 22	19 23	20 Early Dismissal 24	21
22	23 District Closed	24 District Closed	25 District Closed	26 Thanksgiving Day District Closed	27 District Closed	28
29	30 25					

# December 2026



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 26	2 27	3 28	4 29	5
6	7 30	8 31	9 32	10 33	11 34	12
13	14 35	15 36	16 37	17 38	18 Abbreviated Day 39	19
20	21 District Closed	22 District Closed	23 District Closed	24 District Closed	25 Christmas Day District Closed	26
27	28 District Closed	29 District Closed	30 District Closed	31 District Closed		Second Nine Weeks 39 Days First Semester 84 Days

# January 2027



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					<b>1</b> New Year's Day District Closed	<b>2</b>
<b>3</b>	<b>4</b> School PL Day	<b>5</b> Admin Day	<b>6</b> Students Return 1	<b>7</b> 2	<b>8</b> 3	<b>9</b>
<b>10</b>	<b>11</b> 4	<b>12</b> 5	<b>13</b> 6	<b>14</b> 7	<b>15</b> 8	<b>16</b>
<b>17</b>	<b>18</b> MLK Day District Closed	<b>19</b> 9	<b>20</b> 10	<b>21</b> 11	<b>22</b> 12	<b>23</b>
<b>24</b>	<b>25</b> 13	<b>26</b> 14	<b>27</b> 15	<b>28</b> 16	<b>29</b> 17	<b>30</b>

# February 2027



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	<b>1</b>  18	<b>2</b>  19	<b>3</b>  20	<b>4</b>  21	<b>5</b>  22	<b>6</b>
<b>7</b>	<b>8</b>  23	<b>9</b>  24	<b>10</b>  25	<b>11</b>  26	<b>12</b>  Early Dismissal 27	<b>13</b>
<b>14</b>	<b>15</b> Presidents Day  District Closed	<b>16</b>  28	<b>17</b>  29	<b>18</b>  30	<b>19</b>  31	<b>20</b>
<b>21</b>	<b>22</b>  32	<b>23</b>  33	<b>24</b>  34	<b>25</b>  35	<b>26</b>  36	<b>27</b>

# March 2027



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 37	2 38	3 39	4 40	5 41	6
7	8 42	9 43	10 44	11 45	12 Early Dismissal 46	13
14	15 Spring Break District Closed	16 Spring Break District Closed	17 Spring Break District Closed	18 Spring Break District Closed	19 Spring Break District Closed	20
21	22 1	23 2	24 3	25 4	26 Spring Holiday District Closed	27
28 Easter	29 5	30 6	31 7			Third Nine Weeks 46 Days

# April 2027



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
				8	9	
4	5	6	7	8	9	10
	10	11	12	13	14	
11	12	13	14	15	16	17
	15	16	17	18	19	
18	19	20	21	22	23	24
	20	21	22	23	24	
25	26	27	28	29	30	
	25	26	27	28	29	

# May 2027



# V-1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3 30	4 31	5 32	6 33	7 34	8
9	10 35	11 36	12 37	13 38	14 39	15
16	17 40	18 41	19 42	20 43	21 44	22
23	24 45	25 46	26 Last Day of School Abbreviated Day 47	27 Admin Day	28	29
30	31 Memorial Day	1	2	3	4	5 4th Quarter - 47 Days Second Semester 93 Days

# July 2026



# V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4 Independence Day
5	6 District Closed	7 District Closed	8 District Closed	9 District Closed	10 District Closed	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28 EQUIP	29 EQUIP	30 EQUIP	31	

# August 2026



# V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3 District Kickoff District PL Day	4 School PL Day	5 Admin Day Meet & Greet	6 School PL Day	7 School PL Day	8
9	10 Grades 1-8 First Day of School Early Dismissal 1	11 Grades 1-8 First Full Day 2	12 3	13 4	14 5	15
16	17 6	18 Kindergarten First Full Day of School 7	19 8	20 9	21 10	22
23	24 11	25 Pre-K First Full Day 12	26 13	27 14	28 15	29

# September 2026



# V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 17	2 18	3 19	4 Early Dismissal 20	5
6	7 Labor Day District Closed	8 21	9 22	10 23	11 24	12
13	14 25	15 26	16 27	17 28	18 29	19
20	21 30	22 31	23 32	24 33	25 34	26
27	28 35	29 36	30 37			

# October 2026



# V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
				38	39	
4	5	6	7	8	9	10
	40	41	42	43	Early Dismissal 44	
11	12	13	14	15	16	17
	Fall Break District Closed	Fall Break District Closed	Fall Break District Closed	Fall Break District Closed	Fall Break District Closed	
18	19	20	21	22	23	24
	1	2	3	4	5	
25	26	27	28	29	30	31
	6	7	8	9	10	First Nine Weeks 44 Days

# November 2026



# V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 11	3 Election Day District PL Day (No Students)	4 12	5 13	6 14	7
8	9 15	10 16	11 Veterans Day 17	12 18	13 19	14
15	16 20	17 21	18 22	19 23	20 Early Dismissal 24	21
22	23 District Closed	24 District Closed	25 District Closed	26 Thanksgiving Day District Closed	27 District Closed	28
29	30 25					

# December 2026



## V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 26	2 27	3 28	4 29	5
6	7 30	8 31	9 32	10 33	11 34	12
13	14 35	15 36	16 37	17 38	18 Abbreviated Day 39	19
20	21 District Closed	22 District Closed	23 District Closed	24 District Closed	25 Christmas Day District Closed	26
27	28 District Closed	29 District Closed	30 District Closed	31 District Closed		Second Nine Weeks 39 Days First Semester - 83 Days

# January 2027



# V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					<b>1</b> New Year's Day District Closed	<b>2</b>
<b>3</b>	<b>4</b> Admin Day	<b>5</b> Student Return 1	<b>6</b> 2	<b>7</b> 3	<b>8</b> 4	<b>9</b>
<b>10</b>	<b>11</b> 5	<b>12</b> 6	<b>13</b> 7	<b>14</b> 8	<b>15</b> 9	<b>16</b>
<b>17</b>	<b>18</b> MLK Day District Closed	<b>19</b> 10	<b>20</b> 11	<b>21</b> 12	<b>22</b> 13	<b>23</b>
<b>24</b>	<b>25</b> 14	<b>26</b> 15	<b>27</b> 16	<b>28</b> 17	<b>29</b> 18	<b>30</b>

# February 2027



# V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 19	2 20	3 21	4 22	5 23	6
7	8 24	9 25	10 26	11 27	12 Early Dismissal 28	13
14	15 Presidents Day District Closed	16 29	17 30	18 31	19 32	20
21	22 33	23 34	24 35	25 36	26 37	27

# March 2027



V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 38	2 39	3 40	4 41	5 42	6
7	8 43	9 44	10 45	11 46	12 Early Dismissal 47	13
14	15 Spring Break District Closed	16 Spring Break District Closed	17 Spring Break District Closed	18 Spring Break District Closed	19 Spring Break District Closed	20
21	22 1	23 2	24 3	25 4	26 Spring Holiday District Closed	27
28 Easter	29 5	30 6	31 7			Third Nine Weeks 47 Days

# April 2027



# V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
	10	11	12	13	14	
11	12	13	14	15	16	17
	15	16	17	18	19	
18	19	20	21	22	23	24
	20	21	22	23	24	
25	26	27	28	29	30	
	25	26	27	28	29	

# May 2027



# V-2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3 30	4 31	5 32	6 33	7 34	8
9	10 35	11 36	12 37	13 38	14 39	15
16	17 40	18 41	19 42	20 43	21 44	22
23	24 45	25 46	26 47 Last Day of School Abbreviated Day	27 Admin Day	28	29
30	31 Memorial Day	1	2	3	4	5 Fourth Quarter - 47 Days Second Semester - 94 Days

# **Williamson County Hazard Mitigation Plan 2024**

**Prepared By:**

The Williamson County Hazard Mitigation Planning Committee  
The Williamson County Emergency Management Agency



**Assistance Provided By:**

The Tennessee Emergency Management Agency  
*as part of the Tennessee Mitigation Initiative*

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## Executive Summary

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Over the past two decades, hazard mitigation has gained increased national attention due to the large number of natural disasters throughout the U.S. and the rapid rise in costs associated with those disaster recoveries. It has become apparent that money spent mitigating potential impacts of a disaster event can result in substantial savings of life and property. With these benefit-cost ratios extremely advantageous, the *Disaster Mitigation Act of 2000* was developed as U.S. Federal legislation reinforcing the importance of pre-disaster mitigation planning by calling for local governments to develop mitigation plans (*44 CFR 201*).

A local hazard mitigation plan aims to identify the community's notable risks and specific vulnerabilities and then to create/implement corresponding mitigation projects to address those areas of concern. This methodology helps reduce human, environmental, and economic costs from natural and man-made hazards by creating long-term mitigation initiatives.

The advantages of developing a local hazard mitigation plan are numerous and include improved post-disaster decision-making, education on mitigation approaches, and an organizational method for prioritizing mitigation projects. Communities with a mitigation plan receive larger amounts of Federal and State funding opportunities for mitigation projects and can receive these funds faster than communities without a plan.

This 2024 update of the *Williamson County Hazard Mitigation Plan (HMP)* addresses Building Resilient Communities and Infrastructure (BRIC), Flood Mitigation Assistance (FMA), and Hazard Mitigation Grant Program (HMGP) requirements. Each jurisdiction within the county participated in the preparation of the update, including:

- City of Brentwood
- City of Fairview
- City of Franklin
- City of Spring Hill
- Town of Nolensville
- Town of Thompson Station
- Williamson County School District/Franklin Special School District
- Williamson County Unincorporated

In reference to federal code title *44 CFR 201*, the plan is required to be submitted to both the Tennessee Emergency Management Agency (TEMA) (State) and the Federal Emergency Management Agency (FEMA) (Federal) for review to be approved. When the plan is deemed "approval pending adoption" by FEMA (*44 CFR 201.6(c)5*), each of the participating jurisdictions will adopt the plan through a local resolution.

**EMAP Standard:** EMAP Compliance The Williamson County Emergency Management Agency (WCEMA) continues to pursue the highest standards in the emergency management profession through seeking accreditation with the Emergency Management Accreditation Program (EMAP). All plans, policies, and procedures within the WCEMA are to be written in accordance with the EMAP Emergency Management Standard (EMS) 5-2022.

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## Section One: The Planning Process

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### 1.1 Purpose and Need, Authority and Statement of Problem

#### 1.1.1 Purpose and Need

FEMA defines “hazard mitigation” as any sustained action taken to reduce or eliminate the long-term risk to life and property from a hazard event. Hazard mitigation planning is the process through which hazards are identified, likely impacts determined, mitigation goals set, and appropriate mitigation strategies defined, prioritized, and implemented. The HMP aims to identify, assess, and mitigate risk to better protect the people and property of Williamson County from the effects of natural hazards. This HMP documents the hazard mitigation planning process and identifies relevant hazards, vulnerabilities, and strategies the County and incorporated jurisdictions will use to decrease vulnerability and increase resiliency and sustainability. Additionally, this HMP demonstrates the participating communities’ commitment to reducing risks from identified hazards and serves as a tool to help decision-makers direct mitigation activities and resources.

#### 1.1.2 Authority

This Hazard Mitigation Plan will be adopted by Williamson County and all participating jurisdictions in accordance with the authority granted to local communities by the State of Tennessee. This Plan was and will be updated per state and federal rules and regulations governing local hazard mitigation plans. The Plan shall be reviewed annually and go through a complete update process every five years to remain eligible for hazard mitigation grants. The following legislation was used for guidance:

- I. Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 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 44 CFR 201.6 and 201.7 dated October 2011.
- II. Tennessee Code Annotated
  - a. T.C.A. 58-2-106(b)(16)
  - b. T.C.A. 58-2-106(b)(1)
  - c. T.C.A. 58-2-103(a)(5)

#### 1.1.3 Statement of Problem

Each year in the United States, natural disasters take the lives of hundreds of people and injure thousands more. Taxpayers pay billions of dollars annually to help communities, organizations, businesses, and individuals recover from disasters. Unfortunately, this only partially reflects the cost of disasters because additional expenses incurred by insurance companies and non-governmental organizations are not reimbursed by tax dollars. Many natural disasters are predictable, and much of the damage caused by these events can be reduced or even eliminated.

Technological and human caused threats do pose a risk to the Williamson County people also. However, mitigation grants such as the HMGP, BRIC, and FMA do not cover these threats. As such, threat risks are assessed in the local risk assessment and will be considered for inclusion in the local prevention plan.

The original Williamson County Hazard Mitigation Plan was created and approved by FEMA in 2019. Per federal requirements stated in *44 CFR 201*, all local hazard mitigation plans are required to go through a FEMA approval process every five years to remain eligible for hazard mitigation grants. This plan will be re-evaluated and updated every five years to ensure local governments are continuing to assess the hazards and risks within their communities. This plan update has been prepared to meet requirements set forth by FEMA and the Tennessee Emergency Management Agency (TEMA) to ensure Williamson County is eligible for funding and technical assistance from state and federal hazard mitigation programs. All communities are welcome to address man-made hazards and risks in their hazard mitigation plan. However, it's important to note that the State and Federal governments only evaluate and approve based on natural hazards only as per federal code title 44 CFR 201.

## **1.2 Methodology, Update Process, and Participation Summary**

This Hazard Mitigation Plan was developed under the guidance of a Hazard Mitigation Planning Committee (HMPC). The Committee included representatives of Williamson County, the City of Brentwood, the City of Fairview, the City of Franklin, the Town of Nolensville, the City of Spring Hill, the Town of Thompson's Station, and the Williamson County School District, and the Franklin Special School District.

Information in this plan will be used to help guide and coordinate mitigation activities and decisions for local land use policy in the future. Proactive mitigation planning will help reduce the cost of disaster response and recovery to communities and their residents by protecting critical community facilities, reducing liability exposure, and minimizing overall community impacts and disruptions. This plan identifies activities that can be undertaken by both the public and the private sectors to reduce risk to safety, health, and property caused by natural and man-made hazards.

### **1.2.1 Local Government Participation**

The planning regulations and guidance stress that each local government seeking FEMA approval of their mitigation plan must participate in the planning effort in the following ways:

- Participate in the process as part of the HMPC;
- Detail where within the planning area the risk differs from that facing the entire area;
- Identify potential mitigation actions; and
- Formally adopt the plan.

The role of additional participants may include more actions. For membership in the HMPC, "participation" means the following:

- Providing facilities for meetings;
- Attending and participating in the HMPC meetings;
- Collecting and providing other requested data (as available);
- Identifying mitigation actions for the plan;
- Reviewing and providing comments on plan drafts;
- Informing the public, local officials, and other interested parties about the planning process and providing opportunities for them to comment on the plan;
- Coordinating, and participating in the public input process; and

The HMPC met all the above-stated participation requirements. Williamson County and all its incorporated jurisdictions participated in the 2024 Plan update, as well as reviewed and provided timely comments on all draft components of the Plan. A summary of past and current community participation is shown below in *Table 1*. All participants were invited to this committee via email by the Williamson County Emergency Management Agency (WCEMA) Hazard Mitigation Planner under the authority granted by the County Emergency Management Director. With each meeting, initial attendees who had not initially responded were contacted once more to ensure participation in the planning process. All municipalities within Williamson County were active participants in the planning process and contributed mitigation projects to this plan as well as participated in the creation of the multi-jurisdictional projects list.

**Table 1: Multi-Jurisdictional HMPC Participation**

Jurisdiction	2017 Participation	2024 Participation
City of Brentwood	YES	YES
City of Fairview	YES	YES
City of Franklin	YES	YES
City of Spring Hill	YES	YES
Franklin Special School District	YES	YES
Town of Nolensville	YES	YES
Town of Thompson's Station	YES	YES
Williamson County School District	YES	YES
Williamson County	YES	YES

The HMPC for the 2024 plan update included key community representatives. *Table 2* details the HMPC members, meeting dates, associated FEMA Lifeline, and committee member attendance. FEMA Lifelines are a fundamental way for a community to recover, however, all participants might not be associated with a FEMA Lifeline. If they are not associated with a FEMA Lifeline, then they will be indicated as not applicable (NA).

The local Hazard Mitigation Planner under the authority of the Emergency Management Director invited individuals who represented regional and local agencies that have authority in regulating county/city development, individuals that represent vulnerable populations, as well as those that are responsible for responding to the identified hazards of prime concern. These partners include jurisdictional police, fire, public works, and health departments, community representatives, nonprofit organizations, local floodplain administration, the county/city school boards, elected officials, and electric utility companies. All committee members provided key information to recognize and mitigate hazards of prime community concern. A more detailed summary of HMPC meeting dates, members seeking approval and FEMA lifeline association follows in *Table 2*. Meeting sign-in sheets or proof of attendance are included in Appendix A. Although not all of these members were able to attend the HMPC meetings, they were instrumental in providing assistance and were active throughout the planning process.

Appendix F contains a list of references including the various agencies and other sources utilized during this planning process to ensure a more wholistic assessment of the hazards and goals of the community.

**Table 2: HMPC Members**

Name	Title	Associated FEMA Lifeline	Organization/ Jurisdiction	Meeting Dates								
				03/30/2023	04/26/2023	05/08/2023	06/19/2023	01/03/2024	01/04/2024	01/05/2024	01/08/2024	
Sean Cothron	IT Director	Communications	Williamson County									
Jeff Stark	Planning & Training Exercise Coordinator	Communications	Metro-Nashville Davidson County									YES
Donny Parker	Senior Safety & Training Coordinator	Energy	Middle Tennessee Electric					YES		YES		YES
Mac Nolen	Director of Solid Waste	Hazardous Materials & Transportation	Williamson County			YES		YES		YES		YES
Cathy Montgomery	Health Department Director	Health & Medical and Food, Hydration, & Shelter	Williamson County					YES		YES		YES
John Walsh	President	Health and Medical	Emergency Awareness and Readiness Service for the Deaf and Hard of Hearing (EARS)		YES	YES					YES	

**Table 2: HMPC Members**

Name	Title	Associated FEMA Lifeline	Organization/ Jurisdiction	Meeting Dates								
				03/30/2023	04/26/2023	05/08/2023	06/19/2023	01/03/2024	01/04/2024	01/05/2024	01/08/2024	
Greg Boyd	Emergency Management Director	Safety & Security	City of Spring Hill	YES	YES	YES						YES
Scott Williar	Emergency Management Coordinator	Safety & Security	City of Franklin		YES							
Gino Fantoni	Emergency Management Specialist	Safety & Security	City of Franklin	YES				YES		YES		YES
Jessica Stewart	Emergency Communications Operations Manager	Safety & Security	Williamson County					YES				
Todd Hoppenstedt	Public Works Director	Safety & Security and Transportation	City of Brentwood	YES								
Russell Peterson	Emergency Management Continuity Program Manager	Safety & Security	City of Brentwood	YES	YES	YES		YES		YES		YES

**Table 2: HMPC Members**

Name	Title	Associated FEMA Lifeline	Organization/ Jurisdiction	Meeting Dates								
				03/30/2023	04/26/2023	05/08/2023	06/19/2023	01/03/2024	01/04/2024	01/05/2024	01/08/2024	
Scott Hughes	Fire Chief	Safety & Security	City of Fairview	YES								
Clint Derryberry	Planner	Safety & Security	Maury County			YES						
Ken McLawhon	Town Administrator	Safety & Security	Town of Thompson's Station		YES							
Brian Goss	Fire Chief	Safety & Security	City of Brentwood					YES				
Celby Glass	Supervisor of Attendance and Safety	Safety & Security	Franklin Special School District									
Marc Waltz	Fire & Emergency Coordinator	Safety & Security	Williamson County School District					YES				

**Table 2: HMPC Members**

Name	Title	Associated FEMA Lifeline	Organization/ Jurisdiction	Meeting Dates								
				03/30/2023	04/26/2023	05/08/2023	06/19/2023	01/03/2024	01/04/2024	01/05/2024	01/08/2024	
Sam Killingsworth	Fire Captain	Safety & Security	Town of Nolensville		YES							
Kristen Corn	City Attorney	Safety & Security	City of Brentwood									
James Colvin	Assistant Police Chief	Safety & Security	City of Brentwood					YES				
Mark Elrod	Sheriff	Safety & Security	Williamson County									
Heidi Mariscal	Planning, Training, & Exercise Coordinator	Safety & Security	Metro-Nashville Davidson County									
Kim Anthony	Emergency Management Planning Manager	Safety & Security	State of Tennessee									

**Table 2: HMPC Members**

Name	Title	Associated FEMA Lifeline	Organization/ Jurisdiction	Meeting Dates								
				03/30/2023	04/26/2023	05/08/2023	06/19/2023	01/03/2024	01/04/2024	01/05/2024	01/08/2024	
Jack Casner	District Coordinator	Safety & Security	State of Tennessee		YES							
Don Sowers	Tennessee State CERT Coordinator	Safety & Security	State of Tennessee									
Carey Clark	Grants Program Manager	Safety & Security	Rutherford County									
Amanda Siegel	Emergency Management Director	Safety & Security	Hickman County									
Jay Bonson	Fire Coordinator	Safety & Security	Williamson County							YES		
Mark King	Assistant Chief	Safety & Security	Williamson County					YES				

**Table 2: HMPC Members**

Name	Title	Associated FEMA Lifeline	Organization/ Jurisdiction	Meeting Dates							
				03/30/2023	04/26/2023	05/08/2023	06/19/2023	01/03/2024	01/04/2024	01/05/2024	01/08/2024
Katy Clouse	Executive Director of the Arc of Williamson County	Safety & Security and Food, Hydration, and Shelter	Williamson County					YES		YES	
Hanna Dennis	Field Supervisor for the TN Department of Human Services Sensory Division	Safety & Security	Williamson County								
Devon Russell	Parks and Recreation Event Manager	Safety & Security	Williamson County								
Matthew Lupo	Fire Marshal & Assistant Fire Chief	Safety & Security	Town of Nolensville					YES			YES
Dallas Clements	Emergency Management Reservist	Safety & Security	Williamson County								YES
Ed Hudgens	Emergency Management Reservist	Safety & Security	Williamson County								YES

**Table 2: HMPC Members**

Name	Title	Associated FEMA Lifeline	Organization/ Jurisdiction	Meeting Dates							
				03/30/2023	04/26/2023	05/08/2023	06/19/2023	01/03/2024	01/04/2024	01/05/2024	01/08/2024
Jeff Standifer	Emergency Management Reservist	Safety & Security	Williamson County					YES			
Phil Sherrod	Emergency Management Reservist	Safety & Security	Williamson County					YES		YES	
James Hooper	Emergency Management Reservist	Safety & Security	Williamson County					YES	YES		
Gene Cheatham	Emergency Management Reservist	Safety & Security	Williamson County					YES		YES	YES
Jill Burgin	Emergency Management External Affairs Officer	Safety & Security	Williamson County	YES	YES				YES		
Andrew Gossett	Emergency Management Reservist	Safety & Security	Williamson County						YES		

**Table 2: HMPC Members**

Name	Title	Associated FEMA Lifeline	Organization/ Jurisdiction	Meeting Dates							
				03/30/2023	04/26/2023	05/08/2023	06/19/2023	01/03/2024	01/04/2024	01/05/2024	01/08/2024
Joshua Walter	Emergency Management Operations Manager	Safety & Security	Williamson County					YES	YES		YES
Todd Horton	Director of Emergency Management	Safety & Security	Williamson County		YES	YES					
Nicholas Sturgeon	Emergency Management Officer	Safety & Security	Williamson County	YES	YES	YES		YES	YES	YES	YES
Ashlae Sympson	Emergency Management Officer	Safety & Security	Williamson County		YES				YES		
Tyler Scroggins	Public Works Director	Transportation	City of Spring Hill								
Bob Leeman	Planning & Codes Director	Water Systems	City of Brentwood	YES				YES		YES	

**Table 2: HMPC Members**

Name	Title	Associated FEMA Lifeline	Organization/ Jurisdiction	Meeting Dates							
				03/30/2023	04/26/2023	05/08/2023	06/19/2023	01/03/2024	01/04/2024	01/05/2024	01/08/2024
Mario Forgione	Development Compliance Specialist	Water Systems	Williamson County			YES		YES		YES	YES
Floyd Heflin	NFIP Coordinator & County Engineer	Water Systems	Williamson County								
Nicholas Parks	Stormwater Compliance Specialist	Water Systems	Williamson County								
Mekayle Houghton	Executive Director of the Cumberland River Compact	Water Systems	Williamson County								YES
Paul Tampien	Williamson County ARES	Communications	Williamson County		YES						
Erin Jakuboski	Williamson County Department of Emergency Communications	Communications	Williamson County		YES						

**Table 2: HMPC Members**

Name	Title	Associated FEMA Lifeline	Organization/ Jurisdiction	Meeting Dates								
				03/30/2023	04/26/2023	05/08/2023	06/19/2023	01/03/2024	01/04/2024	01/05/2024	01/08/2024	
Bill Jorgensen	Williamson County Office of Public Safety	Communications and Safety & Security	Williamson County		YES							

### 1.2.2 Hazard Mitigation Planning Process

The 2024 Williamson County Hazard Mitigation Plan was updated following guidance put forth by FEMA in the *Local Mitigation Planning Policy Guide* which became effective on April 19, 2023. This guidance emphasized the need for a whole community planning approach to include representatives from all sectors of the community with an emphasis on the increased need for vulnerable and underserved population representation. The guidance also highlighted the increased emphasis on risk, vulnerability, and resilience assessments, the inclusion of high-hazard dams, and future weather trends/patterns.

FEMA guidance proposes a structured four-phase approach to completing an HMP as follows:

- 1) Planning Process
- 2) Risk Assessment
- 3) Mitigation Strategy
- 4) Plan Maintenance

#### Phase I - Planning Process

##### *Organize to Prepare the Plan*

The planning process officially began with a meeting held on 03/30/2023 at the Williamson County Public Safety Center. The meeting covered the scope of hazard mitigation, the purpose of planning, eligible grants, risk assessments and vulnerabilities impacting the community. During the planning process, the committee communicated through face-to-face meetings, email, and telephone conversations.

The City of Spring Hill is in both Williamson County and Maury County. As such, the Maury County Emergency Management Agency was invited to participate and attended meetings throughout the planning process. The other surrounding counties were sent drafts of the HMP so that they could contribute to the plan and were invited to the Hazard Mitigation Planning Committee (HMPC) meetings. Members from both the Nashville-Metro Davidson County Office of Emergency Management and the Maury County Emergency Management Agency opted to attend at least one HMPC meeting. All other surrounding jurisdictions opted not to participate.

##### *Involve the Public*

Early discussions established the significance of involving the public. The HMPC agreed to an approach using established public information mechanisms and resources within the community. Public involvement activities for this plan update included public meeting notices in flyer form, stakeholder and public meetings, and the collection of public and stakeholder comments on the draft plan. In order to ensure socially vulnerable and underserved populations were included in organizing efforts, the WCEMA contacted organizations that had roots within the community such as neighborhood shopping stores (Ex. Kroger, Costco, Tractor Supply, etc.) and the Emergency Awareness and Readiness Services (EARS) – for the Deaf and Hard of Hearing. The WCEMA also contacted the local Chamber of Commerce to offer an opportunity to participate in the planning process. Due to the nature of the public meetings; neighboring communities, agencies, utilities, academia, civic organizations, and other interested parties were given the opportunity to participate.

Numerous notices were shared on April 8<sup>th</sup>, 2023, at the monthly Williamson County Amateur Radio Emergency Service (WCARES) meeting. These notices invited the group as a whole to

attend and those invited were given a chance to discuss the plan with the responsible individual at the WCEMA. These notices provided as flyers invited members of the group to attend the April 26<sup>th</sup>, 2023 Hazard Mitigation Plan Public meeting. In addition to dispersing these flyers at the monthly WCARES meeting, these flyers were placed strategically around the county in places such as grocery stores, parks, libraries, and in neighborhoods. To ensure the greatest representation of the Williamson County citizenry, planners utilized the FEMA Resilience Analysis and Planning Tool (RAPT) to identify areas of priority for publishing flyers. Finally, the WCEMA Hazard Mitigation Planner and External Affairs Officer both spoke on mitigation and notified the public of the public meeting on the local WAKM 950 AM radio. This channel covers the entirety of Williamson County and covers or partially covers 22 middle-Tennessee counties. Documentation to support outreach efforts such as emails, community flyers, and social media postings can be found in Appendix A.

In addition to the public meeting held on 04/26/2023, the emergency management representative with the Town of Nolensville held an additional public mitigation meeting on 06/19/2023. Although similar outreach efforts were made to the public, nobody participated from the public. Documentation to support outreach efforts for this meeting such as emails, community flyers, and social media postings can be found in Appendix A.

Sign-in sheets from all meetings are included in Appendix A. The meeting date and topics discussed are summarized below in *Table 3*. The meetings on 04/26/2023, 06/19/2023, and 01/04/2024 (virtual) were open to the public and announced via papers across the county.

**Table 3: Summary of Hazard Mitigation Planning Meetings**

Meeting Number	Meeting Topic	Meeting Date	Meeting Location
Meeting #1 (HMPC)	Overview of hazard mitigation	03/30/2023	Williamson County Public Safety Center – 304 Beasley Drive, Franklin TN, 37064
	Hazard Mitigation Planning Process		
	Purpose of the HMP		
	Area growth and changes		
	Identification of Hazards		
	Future weather predictions		
	Assessment of risk, vulnerabilities, resilience		
	Review of NFIP		
	Previous HMP goals/projects		
	New goals/projects		

Meeting Number	Meeting Topic	Meeting Date	Meeting Location
Meeting #2 (Public)	Overview of hazard mitigation.	04/26/2023	
	Hazard mitigation planning process		
	Area growth and changes		
	Assessment of risk and vulnerabilities		
Meeting #3 (HMPC)	Recap of mitigation concepts	05/08/2023	
	Introduction of mitigation project requirements		
	Recap of natural hazards and the Williamson County Threat and Hazard Identification and Risk Assessment (THIRA).		
	Recommendations for applicable mitigation projects		
	Next steps for later meetings		
Meeting #4 (Public)	Overview of hazard mitigation	06/19/2023	Town of Nolensville Meeting Room – 7218 Nolensville Road, Nolensville TN, 37135
	Hazard Mitigation Planning Process		
	Purpose of the HMP		
	Area growth and changes		
	Identification of Hazards		
	Future weather predictions		
	Assessment of risk, vulnerabilities,		

Meeting Number	Meeting Topic	Meeting Date	Meeting Location
	resilience		
	Review of NFIP		
	Previous HMP goals/projects		
	New goals/projects		
Meeting #5 (HMPC)	Hazard mitigation overview	01/03/2024	This meeting was held virtually via WebEx.
	Hazard mitigation planning process		
	Purpose of the Hazard Mitigation Plan (HMP)		
	Area growth and changes		
Meeting #6 (Public)	Overview of hazard mitigation	01/04/2024	This meeting was held virtually via WebEx.
	Hazard Mitigation Planning Process		
	Purpose of the HMP		
	Area growth and changes		
	Identification of Hazards		
	Future weather predictions		
	Assessment of risk, vulnerabilities, resilience		
	Review of NFIP		
	Previous HMP goals/projects		
	New goals/projects		
Meeting #7 (HMPC)	Identification of hazards/threats {Review of Threat and Hazard Identification and Risk	01/05/2024	This meeting was held virtually via WebEx.

Meeting Number	Meeting Topic	Meeting Date	Meeting Location
	Assessment (THIRA)}		
	Future weather predictions from East Tennessee State University (ETSU)		
	Assessment of risk, vulnerabilities, and resilience		
Meeting #8 (HMPC)	Review of the National Flood Insurance Program (NFIP)	01/08/2024	This meeting was held virtually via WebEx.
	Previous HMP goals/projects		
	New goals/projects		

*Coordination*

Early in the planning process, the committee determined that the risk assessment, mitigation strategy development, and plan approval would be greatly enhanced by inviting other local and state partners to participate in the process. The coordination involved contacting these agencies through email, flyers, in-person, and phone conversations. All groups and agencies were advised on how to become involved in the plan development process and were solicited asking for their assistance and input. A summary of agencies and organizations actively involved in the HMPC is as follows:

- City of Brentwood
- City of Fairview
- City of Franklin
- City of Spring Hill
- Emergency Awareness and Readiness Service (EARS) – for the Deaf and Hard of Hearing
- Tennessee Cumberland River Compact
- Tennessee Department of Human Services Sensory Division
- Tennessee Emergency Management Agency (TEMA)
- The Arc of Williamson County
- The Franklin Special School District
- Town of Nolensville
- Town of Thompson’s Station
- Volunteer Tennessee
- Williamson County
- Williamson County School District

Coordination with other community planning efforts was 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. Williamson County uses a variety of planning mechanisms such as land development regulations and ordinances to guide growth and development. Integrating existing planning efforts, mitigation policies, and action strategies into this plan establishes a credible and comprehensive plan that ties into and supports other community programs.

Table 4 identifies the existing planning mechanisms that were reviewed and how they were incorporated into the 2024 Hazard Mitigation Plan Update.

**Table: 4 Planning Mechanism Review**

Existing Planning Mechanisms	Reviewed? (Yes/No)	Method of Use in Hazard Mitigation Plan
State Hazard Mitigation Plan	Yes	Identifying hazards, assessing vulnerabilities, and mitigation strategies
Local Emergency Operations Plan	Yes	Identify major capabilities
Community Data Profile	Yes	Development trends, capability assessment
Stormwater Ordinance	Yes	Capability assessment, mitigation strategies
Building and Zoning Codes and Ordinances	Yes	Different years of code regulations utilized in different jurisdictions
CDC Social Vulnerability Index	Yes	Analyze vulnerable populations in jurisdictions
FEMA’s National Risk Index	Yes	Analyze natural hazard risk within each jurisdiction
Land Use Maps	Yes	Assessing vulnerabilities, development trends, and mitigation strategies
Critical2TN Infrastructure Database	Yes	Assessing vulnerabilities, mitigation strategies
NOAA Archives	Yes	Analyze weather data and trends
ETSU Geoinformatics & Disaster Science Lab	Yes	Analyze future weather trends and patterns
U.S. Census Bureau	Yes	Analyze community demographic data and trends
Local County Hazard Mitigation Plan	Yes	Analyze previous plan for updates
Flood Insurance Rate Maps	Yes	Analyze flood-prone areas within the community
Budget Hearings	Yes	Financial budgeting

These and other documents were reviewed and considered, as appropriate, during the collection of hazard identification, vulnerability assessment, and capability assessment. Data from these plans and ordinances were incorporated into the risk assessment and hazard vulnerability sections of the plan as appropriate. The data was also used in determining the capability of the community in being able to implement certain mitigation strategies.

## **Phase II – Risk Assessment**

### *Identify the Hazard, Assess the Risk and Vulnerabilities*

The committee completed a comprehensive effort to identify/update, document, and profile all hazards that have, or could have, an impact on the community. The committee also conducted a capability assessment to review and document the planning area's current capabilities and gaps. By collecting information about existing government programs, policies, regulations, ordinances, and emergency plans, the committee could assess the activities and measures already in place that contribute to mitigating some of the risks and vulnerabilities identified. A more detailed description of the risk assessment process and the results are included in Chapter 2 Risk and Vulnerability Assessment as well as within the *2023 Williamson County Emergency Management Agency Threat and Hazard Identification and Risk Assessment (THIRA) (094-C-2023)*.

## **Phase III – Mitigation Strategy**

### *Set Goals and Review Actions*

The HMPC meetings and various public meetings facilitated brainstorming and discussion sessions that described the purpose and process of developing planning goals and objectives, a comprehensive range of mitigation alternatives, and a method of selecting and defending recommended mitigation actions using a series of selection criteria. This information is included in Chapter 3 Mitigation Strategy.

### *Draft an Action Plan*

A complete first draft of the plan was prepared based on information and input collected during the HMPC meetings, and various agencies and individuals were invited to comment on this draft. Public and agency comments were integrated into the final draft for TEMA and FEMA Region IV to review and approve, contingent upon final adoption by Williamson County.

## **Phase IV – Plan Maintenance**

### *Adopt the Plan*

To secure buy-in and officially implement the plan, the plan was reviewed and adopted by the appropriate governing bodies.

### *Implement, Evaluate, and Revise the Plan*

Implementation and maintenance of the plan is critical to the overall success of hazard mitigation planning and actions. Chapter 4 Plan Integration and Maintenance discusses incorporating the plan into existing planning mechanisms and how to address continued public involvement.

## **1.3 Plan Update**

The 2024 Williamson County Hazard Mitigation Plan contained a threat and hazard identification and risk assessment for all jurisdictions and a corresponding action list aimed at

mitigating risk. The information in this risk assessment primarily comes from the 2023 *Williamson County Emergency Management Agency Threat and Hazard Identification and Risk Assessment (THIRA) (094-C-2023)* which the whole of the HMPC approved in the early mitigation meetings. Since that time, progress has been made by both the County and incorporated jurisdictions on the implementation of the mitigation strategy with 16 completed actions and 33 in progress. This chapter includes an overview of the approach to updating the plan and identifies new analyses and information included in this plan update.

### 1.3.1 The New Plan

The updated plan involved a comprehensive review and revision of each section of the 2017 HMP and included an assessment of the success of the County and the incorporated jurisdictions in evaluating, monitoring, and implementing the mitigation strategy outlined therein. Only the information and data still valid from the 2017 HMP was carried forward as applicable in this update. The following requirements were addressed during this plan update process with consideration of the priorities and goals of the HMPC:

- Consider changes in vulnerability due to action implementation;
- Document success stories where mitigation efforts have proven effective;
- Document areas where mitigation actions were not effective;
- Document any new hazards that may arise or were previously overlooked;
- Document NFIP as related to the county and jurisdictions;
- Incorporate new data or studies on hazards and risks;
- Incorporate new data related to future climate patterns and trends;
- Incorporate new capabilities or changes in capabilities;
- Incorporate social vulnerability data and vulnerable population information;
- Incorporate growth and development-related changes to inventories; and
- Incorporate new action recommendations or changes in action prioritization;
- Enhanced public outreach and multi-agency coordination efforts.

### 1.3.2 2017 HMP Strategy Review

During the 2017 update of the Williamson County Hazard Mitigation Plan, the HMPC identified 81 actions as relevant to the county. Of these 81 actions, 16 have been completed, 33 are in progress, and 32 have not been started. Actions that had not been pursued were discussed for relevance to the new plan and were either carried over to the 2024 plan or deleted from the strategy. 41 of these projects were determined to still be viable and are carried over or revised in this plan update. Details and the status of all previous actions are in *Table 5*.

The mitigation planning process that occurred in 2023 and 2024 included a review of the prior HMP that was submitted to and approved by FEMA. This review primarily looked at the risks that were identified to form the initial basis for the risk assessment process. As stated earlier, the plan was also used to perform an update on previously submitted mitigation actions. However, not all components of the plan were revised or carried over to the new plan as the plan update intends to incorporate more vulnerable populations, climate trends, public and stakeholder involvement, and more thorough risk assessments. Many of the positions and people from the previous plan were incorporated to continue bringing experienced individuals into the planning process. However, the HMPC was expanded to include a more diverse basis of individuals who contributed to the overall planning effort.



**Table 5: Mitigation Action Progress Summary (2017 Plan)**

Project Number in 2017 HMP	Action Description	Responsible Dept.	Location	Current Status			2024 Plan Update		Funding Source				Priority Score	Est. Cost	New or Existing Infrastructure
				Complete	In-Progress	Not yet Started	Delete Action	Carry Forward or Revise	HMGF	BRIC <sup>1</sup>	FMA	Local			
<b>Flooding</b>															
1	Purchase 5 properties located in the floodway/floodplain.	City of Franklin	Citywide in floodway/floodplain	X			X						NA	NA	NA
3	Participation in the NFIP and CRS with initial FIRMS dated November 1981; Updates in 1989, 1993, 2003, 2006, and 2016.	Williamson County Government	County-wide		X			X				X	14	\$1,500	Both
6	Convert three manual stream gauges to automated/monitored.	City of Brentwood	Citywide	X								X	13	\$60,000	New
8	Enforcement of updated floodplain regulation.	Town of Thompson's Station Planning & Zoning	1110 Fountain View Blvd, Thompson's Station TN, 37179		X			X	X			X	12	\$5,000	Both
12	Continuous cleaning of drainage ditches and drainage way to help alleviate flooding.	City of Spring Hill	Citywide		X			X				X	11	\$100,000	Pre-Existing

<sup>1</sup> BRIC previously referred to as PDM in the 2017 Hazard Mitigation Plan

Williamson County Hazard Mitigation Plan (HMP)

294-HMP-2024

Project Number in 2017 HMP	Action Description	Responsible Dept.	Location	Current Status			2024 Plan Update		Funding Source				Priority Score	Est. Cost	New or Existing Infrastructure
				Complete	In-Progress	Not yet Started	Delete Action	Carry Forward or Revise	HMGF	BRIC <sup>1</sup>	FMA	Local			
14	Voluntary acquisition and removal of qualified properties as disaster declarations make grant funding available. Current repetitive loss properties do not meet benefit cost requirements.	Williamson County, State of Tennessee, and FEMA	County-wide			X		X		X	X			\$4,340,000	Both
17	Re-establish riparian buffer zones at all applicable water resources owned by the City of Franklin.	City of Franklin, Parks Department	Citywide			X	X				X	NA	NA		Pre-Existing
18	Adopt new storm water regulations sizing storm water detention ponds to 100 year.	City of Spring Hill	Citywide	X			X				X	NA	\$0.0		Pre-Existing
19	Participation in NFIP.	City of Spring Hill	Citywide	X				X			X	11	\$1,000		Pre-Existing
26	Purchase dump truck for clearing of underbrush and dead trees along the Harpeth river, Spencer Creek, and future park properties along existing tributaries.	City of Franklin Parks Department	Citywide			X	X				X	NA	NA		Pre-Existing
29	SW16002, Parkview Drainage Project	City of Franklin, Stormwater	Citywide			X	X				X	NA	NA		Pre-Existing
30	SW16003, 100 Block of Battle Avenue Drainage improvement.	City of Franklin, Stormwater	Citywide			X	X				X	NA	NA		Pre-Existing
32	Maintain dedicated emergency access ways.	City of Brentwood	Citywide		X			X			X	12	\$10,000		New

Williamson County Hazard Mitigation Plan (HMP)

294-HMP-2024

Project Number in 2017 HMP	Action Description	Responsible Dept.	Location	Current Status			2024 Plan Update		Funding Source				Priority Score	Est. Cost	New or Existing Infrastructure
				Complete	In-Progress	Not yet Started	Delete Action	Carry Forward or Revise	HMGF	BRIC <sup>1</sup>	FMA	Local			
36	Harpeth river bank stabilization at WRF FY17-18	City of Franklin, Stormwater	Citywide	X			X					X	NA	NA	Pre-Existing
40	Continued application and enforcement of the Zoning ordinance (floodplain management) and Storm Water Management Regulations.	Williamson County Government	County-wide		X			X		X			12	\$25,000	Both
41	Use GIS/FIRM mapping in engineering department to identify floodplain and floodway.	City of Spring Hill, City Engineer and Public Works	Citywide	X			X					X	NA	\$0.0	Pre-Existing
43	Enforce maximum lot coverage requirement/encourage green space.	City of Brentwood	Citywide		X			X				X	11	\$0.00	New
44	Regular maintenance on ditches and culverts.	Town of Thompson's Station Maintenance Department	1110 Fountain View Blvd, Thompson's Station TN, 37179		X			X		X			10	\$10,000	Both
48	Establish and maintain riparian buffers per Tennessee Department of Environmental Conservation (TDEC).	Town of Thompson's Station Planning and Zoning	1110 Fountain View Blvd, Thompson's Station		X			X		X			9	\$5,000	Both

Williamson County Hazard Mitigation Plan (HMP)

294-HMP-2024

Project Number in 2017 HMP	Action Description	Responsible Dept.	Location	Current Status			2024 Plan Update		Funding Source				Priority Score	Est. Cost	New or Existing Infrastructure
				Complete	In-Progress	Not yet Started	Delete Action	Carry Forward or Revise	HMGF	BRIC <sup>1</sup>	FMA	Local			
			TN, 37179												
53	Clean and improve drainage ditches and retention areas within the park system, as well as protection of property from flood events.	City of Franklin, Parks Department	Citywide		X			X				X	10	\$3,000	Pre-Existing
55	A study of how to and/or mitigation of flooding along Lewisburg Pike and Heath Place at Carnton.	City of Franklin, Stormwater	Citywide			X	X					X	NA	NA	New
56	Procure AVL capabilities for all city vehicles enabling real time vehicle asset tracking for more accurate deployment of resources.	City of Franklin	Citywide		X			X				X	11	\$10,000	New
58	Elevate waste water lift station control panels to prevent loss from flooding.	City of Franklin, Water	Citywide	X			X					X	NA	NA	NA
59	A study of how to and/or mitigation of flooding of the Cool Springs Mall and nearby stream.	City of Franklin, Stormwater	Citywide			X	X					X	NA	NA	NA
61	Conduct inspections on stormwater detention ponds to ensure they are maintained and function properly.	City of Spring Hill	Citywide	X				X				X	10	\$10,000	Pre-Existing
65	Undertake a new development drainage study.	City of Franklin, Stormwater	Citywide			X	X					X	NA	NA	New

Williamson County Hazard Mitigation Plan (HMP)

294-HMP-2024

Project Number in 2017 HMP	Action Description	Responsible Dept.	Location	Current Status			2024 Plan Update		Funding Source				Priority Score	Est. Cost	New or Existing Infrastructure
				Complete	In-Progress	Not yet Started	Delete Action	Carry Forward or Revise	HMGF	BRIC <sup>1</sup>	FMA	Local			
66	Continuous cleaning of drainage ditches to help alleviate flooding.	Town of Nolensville Public Works Department	Citywide		X			X				X	10	\$35,000	Pre-Existing
69	Milcrofton Long Lane water line connection project.	City of Franklin, water	Citywide			X	X					X	NA	NA	New
70	Jordan Branch (Cool Springs E) Stream Restoration FY17	City of Franklin, Stormwater	Citywide			X	X					X	NA	NA	New
73	Ralston Creek at Liberty Hills Stream restoration	City of Franklin, Stormwater	Citywide		X			X				X	10	\$50,000	New
74	Figuers Drive area drainage improvements FY17-19.	City of Franklin, Stormwater	Citywide			X	X					X	NA	NA	Pre-Existing
75	Establish an open space prioritization and acquisition program to endure maximum success with limited funds.	City of Franklin, Parks department	Citywide			X	X					X	NA	NA	Pre-Existing
78	Utilize GIS mapping to better determine floodplain and floodway.	City of Brentwood	Citywide		X			X				X	11	\$0.00	New
79	Enforce strict detention requirements.	City of Brentwood and downstream communities	Citywide		X			X				X	10	\$0.00	New
<b>Tornado</b>															
7	Designate Community shelter location	Town of Thompson's Station	1110 Fountain			X		X				X	12	\$0.00	New

Williamson County Hazard Mitigation Plan (HMP)

294-HMP-2024

Project Number in 2017 HMP	Action Description	Responsible Dept.	Location	Current Status			2024 Plan Update		Funding Source				Priority Score	Est. Cost	New or Existing Infrastructure
				Complete	In-Progress	Not yet Started	Delete Action	Carry Forward or Revise	HMGP	BRIC <sup>1</sup>	FMA	Local			
			View Blvd, Thompson's Station TN, 37179												
20	Fund and construct Tornado shelters at High use parks	City of Spring Hill				X	X					X	NA	NA	Pre-Existing
22	Reinforce critical infrastructure at Water Treatment Plant.	City of Franklin, Water	Citywide			X	X					X	NA	NA	New
23	Install pumps at lift stations bypass pumping during power outages	City of Franklin, Water	Citywide			X	X					X	NA	NA	New
24	Tornado shelters at all staffed city facilities	All jurisdictions	All Staffed City Facilities			X	X					X	NA	NA	New
27	Distribute brochures to trail heads, park offices, and park properties on protecting residents near the river from tornados and flooding. Educating citizens regarding steps to take to reduce vulnerability, minimize future tornado and flooding damage.	City of Franklin, Parks Department	Citywide			X	X					X	NA	NA	New
31	Hardening of fleet facility.	City of Franklin, Streets	Citywide			X	X					X	NA	NA	New
34	Fortify/harden existing school structures in order to withstand high winds/tornado impacts	Williamson County School	All school locations		X			X				X	13	\$46,000	Both

Williamson County Hazard Mitigation Plan (HMP)

294-HMP-2024

Project Number in 2017 HMP	Action Description	Responsible Dept.	Location	Current Status			2024 Plan Update		Funding Source				Priority Score	Est. Cost	New or Existing Infrastructure
				Complete	In-Progress	Not yet Started	Delete Action	Carry Forward or Revise	HMGF	BRIC <sup>1</sup>	FMA	Local			
		District, Franklin Special School District													
35	Annual service agreement for weather monitoring system and tornado sirens	City of Brentwood/City of Franklin	Citywide	X	X			X				X	14	\$4,000	Both
38	Construct new city hall that includes tornado sheltering for 200+ employees and visitors during the day and provides for some sheltering during downtown special events.	City of Franklin	Citywide		X			X				X	10	\$5,000,000	New
42	Installation of fiber optic cable connecting the City of Franklin, City of Brentwood, Williamson County, and Metro Nashville	City of Franklin MIT, City of Brentwood, Williamson County, and Metro Nashville	Citywide			X	X					X	NA	NA	New
46	Construct fire station 7 that includes tornado sheltering for its occupants.	City of Franklin, Fire	Citywide	X			X					X	NA	NA	New
47	Procure a 4000+ fuel truck	City of Franklin, Streets	Citywide			X	X					X	NA	NA	New

Williamson County Hazard Mitigation Plan (HMP)

294-HMP-2024

Project Number in 2017 HMP	Action Description	Responsible Dept.	Location	Current Status			2024 Plan Update		Funding Source				Priority Score	Est. Cost	New or Existing Infrastructure
				Complete	In-Progress	Not yet Started	Delete Action	Carry Forward or Revise	HMGF	BRIC <sup>1</sup>	FMA	Local			
49	Promote the use of social media, text messaging, X, etc. for public announcement of tornado warning and watches similar to amber alerts/Nixle.	City of Spring Hill	Citywide	X				X				X	12	\$5,000	Pre-Existing
52	Fortify new jail structure to withstand weather impacts from high winds/tornados	Williamson County Sheriff's Office	408 Century Court, Franklin, TN 37064 & 135 4th Ave S, Franklin, TN 37064		X			X				X	10	\$280,000,000	Both
54	Hardening of sheds for heavy equipment storage or underground storage of key vehicle assets.	City of Franklin, Streets/Solid waste/Water	Citywide			X	X					X	NA	NA	New
64	Upgrade 800MHz radio system to latest software release for better communications with other agencies.	City of Franklin MIT	Citywide			X	X					X	NA	NA	New
71	Complete remaining fiber to connect critical infrastructure.	City of Franklin, IT	Citywide			X	X					X	NA	NA	New
72	Complete fiber and Wifi installation to alleviate dependencies on outside vendors in case of major events. Complete fiber to radio	City of Franklin MIT	Citywide			X	X					X	NA	NA	New

Williamson County Hazard Mitigation Plan (HMP)

294-HMP-2024

Project Number in 2017 HMP	Action Description	Responsible Dept.	Location	Current Status			2024 Plan Update		Funding Source				Priority Score	Est. Cost	New or Existing Infrastructure
				Complete	In-Progress	Not yet Started	Delete Action	Carry Forward or Revise	HMGF	BRIC <sup>1</sup>	FMA	Local			
	tower sites, camera system to monitor all sites.														
<b>Winter Weather</b>															
2	Purchase of snow chains for patrol cars for the purpose of increased mobility on snow- and ice-covered roads.	City of Spring Hill, Police Department	Citywide		X			X				X	10	\$1,500	Both
4	Need for a truck with dump capabilities, spreader capabilities, and a backhoe with a front-end loader.	Town of Nolensville Public Works Department	Town-wide	X			X				X	NA	\$0.00	Pre-Existing	
5	Replace aging/damaged snow removal equipment.	City of Brentwood Public Works Department	Citywide		X			X			X	12	\$50,000	New	
9	Purchase new snow removal equipment (Truck, plow, salt spreader).	Town of Thompson's Station Maintenance Department	1110 Fountain View Blvd, Thompson's Station TN, 37179		X			X	X	X	X	10	\$100,000	New	
13	Develop and adopt a snow and ice control plan.	City of Spring Hill	Citywide	X			X				X	NA	\$1,000	Pre-Existing	
16	Maintain/update snow removal routes.	City of Brentwood, Public Works Department	Citywide		X			X			X	13	\$0.00	New	

Williamson County Hazard Mitigation Plan (HMP)

294-HMP-2024

Project Number in 2017 HMP	Action Description	Responsible Dept.	Location	Current Status			2024 Plan Update		Funding Source				Priority Score	Est. Cost	New or Existing Infrastructure
				Complete	In-Progress	Not yet Started	Delete Action	Carry Forward or Revise	HMGF	BRIC <sup>1</sup>	FMA	Local			
21	Establish salt inventory and storage areas.	Town of Thompson’s Station Maintenance Department	1110 Fountain View Blvd, Thompson’s Station TN, 37179			X		X	X			X	10	\$5,000	New
28	Clearing of ice and snow for emergency vehicles and citizens.	City of Franklin, Streets Department	Citywide		X			X				X	11	\$10,000	Pre-Existing
33	Stockpile 2,300-2,500 tons of salt at two weather protected strategic locations.	City of Brentwood, Public Works Department	Citywide		X			X				X	12	\$100,000	New
37	Stockpile salt for roadways at 1,500 tons annually.	Williamson County Highway Department	302 Beasley Drive, Franklin, TN 37064		X			X				X	13	\$135,750	Pre-Existing
39	Annually, prior to winter, check/prepare all snow removal equipment	City of Brentwood, Public Works Department	Citywide		X			X				X	10	\$25,000	New
57	Stage trucks pre-loaded with salt prior to expected winter weather events.	City of Brentwood, Public Works Department	Citywide		X			X				X	11	\$5,000	Pre-Existing
60	Removal of dead trees, shrubbery, and stumps and evaluation, treatment and trimming of trees in area parks and other park properties.	City of Franklin, Parks Department	Citywide		X			X				X	12	\$4,000	New

Williamson County Hazard Mitigation Plan (HMP)

294-HMP-2024

Project Number in 2017 HMP	Action Description	Responsible Dept.	Location	Current Status			2024 Plan Update		Funding Source				Priority Score	Est. Cost	New or Existing Infrastructure
				Complete	In-Progress	Not yet Started	Delete Action	Carry Forward or Revise	HMP	BRIC <sup>1</sup>	FMA	Local			
67	Expansion of current storage shed for salt stockpile to double current size (current size is 65 tons).	City of Fairview, Streets Department	Citywide			X	X					X	NA	NA	Pre-Existing
81	Trimming of trees along roadway to protect Middle Tennessee Electric Membership Cooperation Power lines.	Thompson's Station and Middle Tennessee Electric Membership Cooperation	1110 Fountain View Blvd, Thompson's Station TN, 37179		X			X	X			X	11	\$10,000	Both
<b>Drought and Extreme Heat</b>															
10	Institute a ban on all fireworks within the city.	City of Spring Hill	Citywide			X	X					X	NA	\$10,000	Pre-Existing
11	Institute a social media awareness program via X, Facebook, etc. informing residents what actions to take to minimize health concerns.	City of Spring Hill	Citywide	X			X					X	NA	\$10,000	Pre-Existing
15	Impose water restrictions based on Brentwood's Drought Mitigation Plan	City of Brentwood	Citywide		X		X					X	NA	NA	Pre-Existing
25	Recoupment of funds due to drought/fire damage	Town of Nolensville Public Works Department	Citywide			X	X					X	NA	NA	Pre-Existing

Williamson County Hazard Mitigation Plan (HMP)

294-HMP-2024

Project Number in 2017 HMP	Action Description	Responsible Dept.	Location	Current Status			2024 Plan Update		Funding Source				Priority Score	Est. Cost	New or Existing Infrastructure
				Complete	In-Progress	Not yet Started	Delete Action	Carry Forward or Revise	HMGF	BRIC <sup>1</sup>	FMA	Local			
45	Evaluate structure vulnerability to wildfire events at parks, work with Franklin Fire Department. Protection of buildings in natural settings from wild fire with good landscaping practices.	City of Franklin, Parks Department in coordination with City of Franklin Fire Department.	Citywide			X	X					X	NA	NA	New
50	Specify and adopt native plants, shrubbery and trees for incorporation into the city’s new uniform development code.	City of Spring Hill Planning Department	Citywide	X				X				X	11	\$1,000	Pre-Existing
51	Enforcement of the State of Tennessee Forestry Department Burn permitting and Burn banning program.	City of Brentwood	Citywide		X			X				X	12	\$0.00	Both
62	Enforcement of the State of Tennessee Forestry Department Burn permitting and Burn banning program.	Town of Thompson’s Station Building and Planning	1110 Fountain View Blvd, Thompson’s Station TN, 37179		X			X				X	11	\$5,000	Both
63	Impose water restrictions in drought conditions in accordance with the city’s	City of Spring Hill Water Department	Citywide	X				X				X	10	\$1,000	Pre-Existing

Williamson County Hazard Mitigation Plan (HMP)

294-HMP-2024

Project Number in 2017 HMP	Action Description	Responsible Dept.	Location	Current Status			2024 Plan Update		Funding Source				Priority Score	Est. Cost	New or Existing Infrastructure
				Complete	In-Progress	Not yet Started	Delete Action	Carry Forward or Revise	HMGF	BRIC <sup>1</sup>	FMA	Local			
	emergency response plan and drought management plan.														
68	In brown-out situations, provide fans to social service agencies for distribution to homeless shelters and locations designated by Spring Hill Social Services	City of Spring Hill and Spring Hill Social Services	Citywide		X			X				X	10	\$15,000	Pre-Existing
76	Purchase a wildland fire truck with a CAF system.	City of Franklin, Fire	Citywide	X			X					X	NA	NA	New
77	Clearing of underbrush and dead trees along the Harpeth River of city owner properties.	City of Franklin, Parks and Recreation Department	Citywide			X	X					X	NA	NA	New
80	Enforcement of the State of Tennessee Forestry Department Burn permitting and Burn banning program.	State Forestry Department with the Nolensville Fire and Rescue and Williamson County Emergency Communications cooperation and enforcement at the local level	County-wide			X	X					X	11	N/A	Pre-Existing

## 1.4 Multi-Jurisdictional Special Considerations

### 1.4.1 Hazards Assessment

All of the natural hazards identified within this plan have an impact on both Williamson County and the incorporated jurisdictions. Some hazards have a larger impact on the County rather than the incorporated jurisdictions and vice versa. Impacts of identified hazards differ the most at the rural and urban interface where flooding can have different severity levels. Therefore, the flooding section emphasizes the depth, duration, and timing of severe flooding events. Below is a table that shows whether a hazard will have multi-jurisdictional impacts.

Hazards	Will the hazard have multi-jurisdictional differences?
Flood	Yes
Tornado	Yes
Wildfire/Brush Fire	Yes
Drought/Excessive Heat	Yes
Severe Winter Weather	Yes
Earthquake/Seismic Activity	Yes
Geological Incident	Yes
Pandemic	Yes

## 1.5 Public Participation

Public involvement included press releases, public meetings, and a public comment period on the draft plan. Organizations representing vulnerable and underserved populations were contacted in an effort to gain further input from populations most at risk during hazardous events. The formal public meetings for this plan are summarized in *Table 3* (Section 1.2.2) discussed early in this chapter. The HMPC meetings on 04/26/2023, 06/19/2023, and 01/04/2024 were open to the public.

A public notice was posted in numerous physical places and online for each of these events. Documentation to support the public outreach efforts can be found in Appendix A. All sign-ups and sign-in sheets are available in Appendix A. Over the past five years, the community was kept involved in the planning process through the implementation of projects in the plan.

## 1.6 County Data Profile

### 1.6.1 Resources and Assets

The Williamson Medical Center provides 24-hour emergency care to residents of the county and is home to 185 beds. The county also has 275 volunteer firefighters with 14 stations, and 368

total paid staff at the Sheriff's office. The Williamson County Office of Public Safety employs a total of 85 full-time positions which also includes the Department of Emergency Communications (ECOMM) and the WCEMA. The WCEMA makes up 22 of the full-time positions and employs an additional 21 part-time positions. The Williamson County School District facilitates the learning of approximately 42,000 students via their system of 50 schools within the county. Of the 50 schools, there are 11 high schools, 11 middle schools, 27 elementary schools, and one K-8 school. According to the RWJ Foundation County Health Rankings profile, in Williamson County, the average, per-pupil spending among school districts was \$6,403 above the estimated amount needed to support students in achieving average US test scores.

Williamson County houses two radio stations {WAKM AM 950 and WHEW AM 1380 (Spanish)}. The main phone companies in the area are T-Mobile, AT&T, and Verizon. Residents in the county can either obtain internet via Comcast, AT&T, Spectrum, or United Telephone Company. Communication resources, a vital component of emergency response and preparedness, is above the national average in Williamson County. Between 2017 and 2021, 97.7% of households had a computer and 95% had broadband internet access according to the United States Census Bureau.

The Harpeth River is the largest waterway in the county. Other smaller waterways that can be found throughout Williamson County are the McCutcheon Creek, Leipers Creek, Grassy Branch Creek and the Gin Branch River. A further analysis of these water systems will be explored in the hazard flood section as related to their propensity for flood events when applicable. The main roadways that travel through the county are US Highway 31, 41, 431 and State Highways 6, 11, 16, 46, 96, 100, 106, 246, 247, 248, 252, 253, 396, 397, 441, and 840. The nearest interstates are I-40 and I-65.

The nearest international airport is BNA (approx. 24.6 miles) with approximately 450 flights per day. Given the congested public transportation options and the rural environment of Williamson County, 45% of working individuals endure a commute of more than 30 minutes and 81% of all working individuals drive alone to work. Two commercial railways and two transportation pipelines pass through Williamson County.

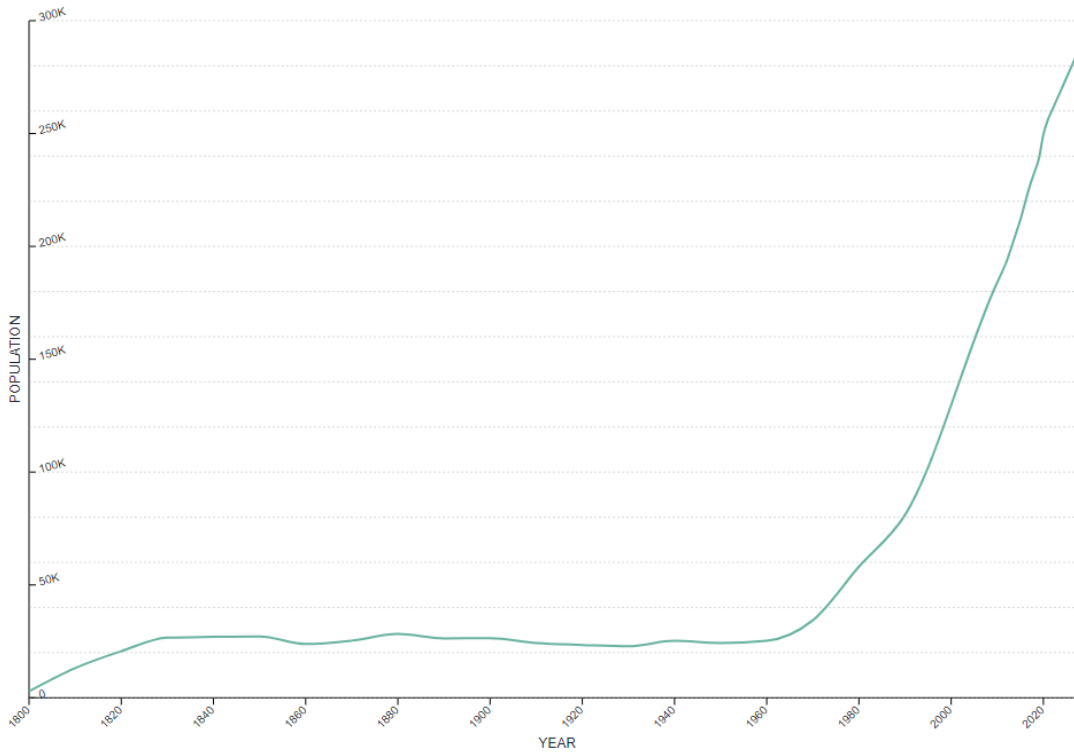
Williamson County is governed by an elected County Mayor and Board of Commissioners (twenty-four members). The incorporated jurisdictions within Williamson County are governed by an elected Mayor and Council. There are multiple regulatory committees that are appointed by both the County Mayor and the Board of Commissioners.

### **1.6.2 Development and Growth**

Along with most of Middle Tennessee, Williamson County, has been experiencing rapid growth over the past few years. The population of the county increased by ~7.4% between the 2010 and 2020 censuses from 183,182 to 247,726. 4% of the 85,311 Williamson County households live with income below the poverty level. Most of Williamson Counties' employed population work within the professional, scientific, and technical services industry (12.1%) and the retail trade industry (10.6%). Williamson County is a member of Joint Economic and Community Development Boards to ensure and promote economic growth within the county and for its constituents. This is part of a 10-county regional market that includes the Counties of Cheatham, Davidson, Dickson, Maury, Montgomery, Robertson, Rutherford, Sumner, Williamson, and Wilson. As stated, Williamson County has experienced much growth since the last planning

period, specifically residentially/industrially/commercially. It is noteworthy that through the increased growth in recent years, the Williamson County School District, Optum Inc., and Nissan North America are the three top employers in the county. This growth is expected to continue with some projections suggesting that we may have a population of 293,057 in the year 2029, and doubling the existing population by 2040.

Williamson County, Tennessee Population 2024  
270,027



**1.6.3 Demographics**

Throughout the planning process, the Williamson County HMPC remained committed to recognizing socially vulnerable and underserved populations. In order to maintain this commitment, the HMPC reached out to key stakeholders as discussed in Section 1.2 and reviewed the CDC/ATSDR Social Vulnerability Index (SVI). SVI information is located in Appendix B.

Table 6 below illustrates the population data of the county according to the 2020 U.S Census. Other important demographics obtained via the U.S Census Bureau and County Health Rankings (RWJ Foundation) are presented in list form. Of the 247,726 residents living within Williamson County:

- The median household income is \$116,492 (in 2021 dollars)
- 4% live below the national poverty line
- 19% live in rural areas
- 9.1 Food Environment Index compared to 6.2 in Tennessee and 7.8 in the U.S.
- 4.3% of the under 65 years of age population live with a disability

- 7.1% of the under-65 population do not have health insurance
- Population as of 2020 was approximately 450 people per square mile

**Table 6: Population Data**

Demographic	Percentage		
	Male	Female	Total
Age Group			
Under 5	6.10%	5.70%	5.90%
Under 18	28.10%	26.20%	27.10%
18-64	59.60%	59.90%	59.70%
Over 65	12.30%	14.00%	13.20%
Race/Ethnicity (one)			
White (not Hispanic/Latin)	87.10%		
Asian	4.70%		
Black or African American	4.10%		
American Indian or Alaskan Native	0.40%		
Hispanic/Latino	4.90%		
Education	Williamson	Tennessee	
Population Aged 25-64 With High School Degree Or Higher	96.40%	89.50%	
Population Aged 25-64 With Bachelor's Degree Or Higher	61.40%	28.70%	

Data sources:

<https://www.census.gov/quickfacts/fact/table/US/PST045221>

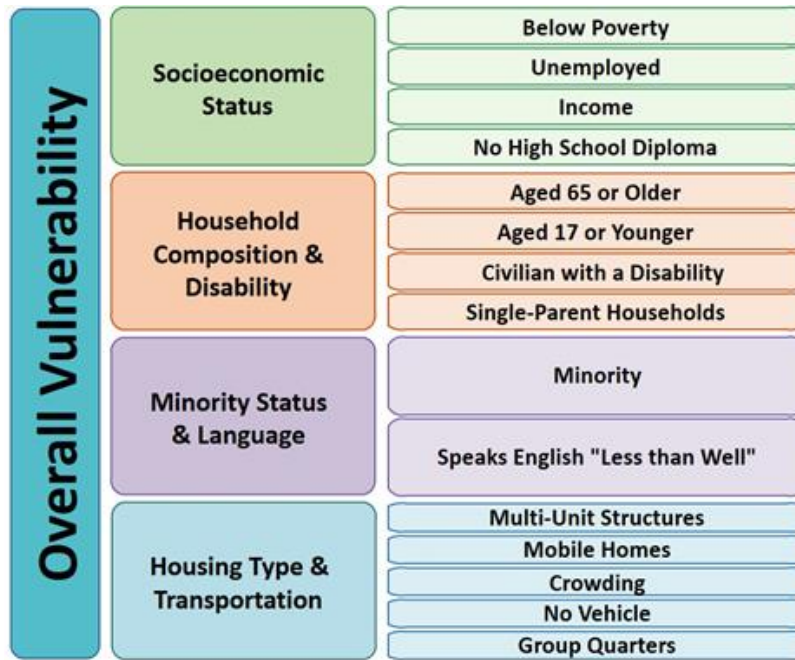
<https://www.countyhealthrankings.org/app/tennessee/2022/overview>

### 1.6.4 Social Vulnerability

Social vulnerability refers to a community’s capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills. Social vulnerability considerations were included in this plan update to identify areas across the planning area that might be more vulnerable to hazard impacts based on several factors. The Williamson County Emergency Operations Plan (EOP) will also incorporate this information to improve response efforts in socially vulnerable neighborhoods.

The Center for Disease Control and Prevention (CDC) has developed a social vulnerability index (SVI) to measure the resilience of communities when confronted by external stresses such as natural or human-caused disasters or disease outbreaks. The SVI is broken down to the census tract level and provides insight into vulnerable populations to assist emergency planners and public health officials in identifying communities more likely to require additional support

before, during, and after a hazardous event. The SVI index combines four main themes of vulnerability, which are, in turn, broken down into subcategories for 16 vulnerability factors. The themes are outlined in the below table.



The specific breakdown for Williamson County and its participating jurisdictions is as follows:

<b>Williamson County Social Vulnerability Factors</b>		
<b>Factor</b>	<b>Number</b>	<b>Percentage</b>
Total Square Miles	582.86	N/a
Total Population (as of 2021)	262,560	N/a
Housing Units Estimated	94,954	N/a
Households	91,435	N/a
Persons below Poverty, Percent	10,502	4.0%
Age 16+ unemployed	2,977	1.13%
Per Capita Income	\$56,545	N/a
Age 25+ w/ no HS Diploma	2.7%	7,254
Aged 65+ & older	37,021	14.1%
Age 17 & younger	68,791	26.2%
Civilian noninstitutionalized population with a disability	12,127	19.87%
Single Parent HH w/ children under 18	1,762	0.67%
Minority (all persons except white, non-Hispanic)	2,973	5.45%
Persons (age 5+) who speak English "less than well"	86	0.12%
Housing in structures with 10 or more units	706	2.32%
Mobile Homes	3,985	16.22%
At Household level (occupied housing units) more people than rooms	323	1.22%

Williamson County Social Vulnerability Factors		
Households w/ no vehicle	1,017	4.96%
Persons in Group Quarters	865	1.3%

**1.6.5 Critical Infrastructure**

Critical Infrastructure are assets in a community that are considered vital to the public’s health and safety. Due to the sensitivity of these assets in Williamson County and the incorporated jurisdictions, these assets are restricted for public viewing. However, the data is viewable to restricted personnel on the State of Tennessee’s Critical2TN Database. The county and incorporated jurisdictions currently have 52 assets identified and continue to invest in this program. As more facilities are identified, they are being registered in this database for viewing by the appropriate parties.

**1.7 Resource Capabilities**

The committee gathered the following resource capabilities to determine what existing staff and resources are being used to support mitigation programs. The Williamson County School District does not have governing authority and therefore is not included in this table. As such, its capabilities are those shared by the county.

**Table 7: Jurisdictional Mitigation Capabilities**

Mitigation Capabilities	Williamson County	City of Brentwood	City of Fairview	City of Franklin	City of Spring Hill	Town of Nolensville	Town of Thompson’s Station
<b>Regulatory Capabilities</b>							
Building Codes	YES	YES	YES	YES	YES	YES	YES
Zoning Codes	YES	YES	YES	YES	YES	YES	YES
Subdivision Ordinance	YES	YES	YES	YES	YES	YES	YES
Stormwater Ordinance	YES	YES	YES	YES	YES	YES	YES
Floodplain Ordinance	YES	YES	YES	YES	YES	YES	YES
Erosion, Sedimentation and Pollution Control Ordinance	YES	YES	NO	YES	YES	YES	YES
Stormwater Management Program	YES	YES	YES	YES	YES	YES	NO
Site Plan Review Requirements	YES	YES	YES	YES	YES	YES	YES
Capital Improvements Plan	YES	YES	YES	YES	YES	YES	YES
Economic Development Plan	YES	YES	NO	YES	YES	YES	NO
Local Emergency Operations Plan	YES	YES	NO	YES	YES	YES	YES
Flood Insurance Study or Other Engineering Study for Streams	YES	YES	YES	YES	YES	YES	YES
Repetitive Loss Plan	YES	YES	NO	YES	NO	NO	NO
Elevation Certificates	YES	YES	YES	YES	YES	YES	YES
<b>Administrative Capabilities</b>							
Grant writer	YES	YES	NO	YES	NO	NO	YES
Public Information Officer	YES	YES	YES	YES	YES	YES	NO
Floodplain Manager	YES	YES	NO	YES	YES	NO	YES
Full Time Fire Service	NO	YES	YES	YES	YES	YES	NO
Law Enforcement	YES	YES	YES	YES	YES	YES	NO
Emergency Manager	YES	YES	NO	YES	YES	YES	NO
GIS Personnel	YES	YES	YES	YES	YES	YES	YES
<b>Fiscal Capabilities</b>							
Capital improvements project funding	YES	YES	YES	YES	YES	YES	YES
Fees for water, sewer, gas, or electric services	NO	YES	NO	YES	YES	NO	YES
Impact fees for new development	YES	YES	NO	YES	YES	YES	YES
General obligation bonds	YES	YES	YES	YES	NO	YES	YES
Withhold spending in hazard-prone areas	NO	YES	NO	NO	NO	NO	NO

## Section Two: Threat and Hazard Identification and Risk Assessment

### 2.1 Risk Assessment Overview

Hazard Mitigation Planning is about developing a strategy to reduce risk in the long term. An essential part of the process is identifying hazards, risks, impacts and vulnerabilities. In mitigation planning, “risk” is the potential for damage or loss when a hazard interacts with an asset. Assets can be people, buildings, infrastructure, the economy, or natural and cultural resources.

The risk assessment helps communicate vulnerabilities, develop priorities, and inform decision making. It is the factual basis for the mitigation strategy. The hazards and associated impacts in the risk assessment should be the hazards and impacts the mitigation strategy seeks to address. If, for example, the risk assessment shows that the state will have hurricane damage in a specific area, the mitigation strategy should include actions to protect state assets and jurisdictions, especially underserved communities, and socially vulnerable populations, in those areas.



The Williamson County HMPC conducted a Threat and Hazard Identification and Risk Assessment (THIRA) to determine the natural hazards as well as human-caused and technological threats that place the county at risk. Existing hazard data from TEMA, FEMA, the National Oceanic and Atmospheric Administration (NOAA), and other sources were examined to assess the significance of these hazards to the planning area. Hazard data from the ETSU Geoinformatics & Disaster Science Lab was also analyzed as related to the changing weather trends and their significance.

Representatives from all municipalities and the county met in-person to discuss the risks assessed in the THIRA. All municipalities agreed upon a universal set of hazards and threats identified and agreed that the results of the risk assessment were applicable to all municipalities and the county universally. As such, the results of the risk assessment are not identified on a per-jurisdiction basis and instead are applicable to all municipalities.

## 2.2 Risk Scoring Description

When conducting this research, the categories that are used to determine risk guided the data collection process. In accordance with the Emergency Management Accreditation Program (EMAP) Standard 4.1.1 (2022) and from the recommendations provided by the Tennessee Emergency Management Agency (TEMA); a set of equations were developed to determine and rank the risk of each hazard. The first requirement is to determine the community’s vulnerability by adding impacts to humans, property, businesses, operations, and the environment together then dividing by five. The formula is as follows:

$$\frac{\text{Human}(H) + \text{Property}(P) + \text{Business}(B) + \text{Operations}(O) + \text{Environment}(E)}{5} = \text{Vulnerability}(V)$$

*Vulnerability Formula*

Once the vulnerability has been calculated, it must be added to the probability which will give the final risk score. This formula is as shown below:

$$\text{Vulnerability}(V) + \text{Probability}(\text{Prob.}) = \text{Risk Score}$$

*Risk Score Formula*

The risk score is categorized into five different categories. These five categories are as follows:

Risk Scoring Chart:	
Low	2-3.6
Moderate	3.7-5.2
Medium	5.3-6.8
High	6.9-8.4
Severe	8.5-10

The risk score is utilized to determine the most significant hazards to the county and establish priorities for future planning processes. Although ranked by score, each hazard has potential to strain at least one of Williamson County’s core capabilities as identified by CPG 201.

## 2.3 Impact Category Descriptions

Each category must have definable values that can be associated with each hazard. These descriptions are important in providing a numerical value to the threats impact in order to calculate risk. The values can be found below:

Impact Category Descriptions:	
Human	Business
Probability of injuries and death from hazard	Amount of business damage

Impact Category Descriptions:			
1	Death very unlikely, injuries are unlikely	1	Less than 3 businesses closed for only one day
2	Death unlikely, injuries are minimal	2	More than 3 businesses closed for a week
3	Death unlikely, injuries may be substantial	3	More than 3 businesses closed for a few months
4	Death possible, injuries may be substantial	4	More than 3 businesses closed indefinitely or relocated
5	Death probable, injuries will likely be substantial	5	A top 10 local employer closed indefinitely <i>(The top ten employers can be found with the Tennessee Department of Economic and Community Development)</i>
Property		Probability	
Amount of residential property damage		Probability of hazard occurring	
1	Less than \$500 in damages	1	Less than once every 10 years
2	\$500 - \$10,000 in damages	2	About once every 5 – 10 years
3	\$10,000 – \$500,00 in damages	3	About once every 2 – 5 years
4	\$500,000 - \$2,000,000 in damages	4	About once a year
5	More than \$2,000,000 in damages	5	More than once a year
Operations		Environment	
Impact on government services		Damage done to the environment	
1	Negative consequences are negligible; experienced as inconveniences for short period of time; public & private sector services are not impacted; impact is limited to a small number of people/small geographical location.	1	There are little to no impacts on the environment which will cause no lasting effects.
2	Negative consequences are minor; not all sectors affected but those that are have reduced capacity for short period of time.	2	There is some damage to the environment that may last less than one year.
3	Negative consequences are significant; not all sectors are affected but those that are lose significant capacity for multiple days/weeks.	3	There is moderate damage to the environment that may last less than five years and longer than one year.
4	Negative consequences are profound; all sectors affected with some losing capacity for periods longer than weeks.	4	There is significant damage to the environment that may last less than ten years and no less than five years.

Impact Category Descriptions:				
5	Negative consequences are catastrophic; experienced as significant loss in variety of sectors and geographical areas.		5	There is catastrophic damage to the environment that may last longer than 10 years.

**2.4 Standardized Impacts**

This assessment also analyzes the impacts and consequences of the threats and hazards identified. This is done by providing context to the hazard through previous events or potential events, then analyzing the impact based on reputable sources. These sources are identified with each hazard and may include but are not limited to real-world events, modeling tools, other After-Action Reports (AAR), subject matter experts, and GIS tools such as the FEMA Resilience Analysis and Planning Tool (RAPT).

To further focus on the list of identified hazards for this plan update, the HMPC researched past events that resulted in a federal and/or state emergency or disaster declaration in Williamson County to identify known hazards. *Table 8* presents a list of all major disaster and emergency declarations that have occurred in Williamson County since 1953, illustrating which hazards pose the greatest risk to the County.

**Table 8: Presidential Disaster Declarations in Williamson County (1953-2024)**

Declaration #	Date	Event Details	Individual Assistance	Public Assistance
DR-424-TN	04/04/1974	Tornados impacted Williamson County	YES	YES
DR-459-TN	03/22/1975	Severe Storms and Flooding	YES	YES
DR-585-TN	05/07/1979	Severe Storms, Tornados, and Flooding	YES	YES
DR-1010-TN	02/09-11/1994	Ice Storm, Severe Winter Storm, and Flash Flooding	NO	YES
DR-1215-TN	04/16-05/18/1988	Severe Storms, Tornados, and Flooding	YES	NO
DR-1275-TN	05/05-19/1999	Severe Storms, Tornados, and Flooding	YES	YES

Declaration #	Date	Event Details	Individual Assistance	Public Assistance
DR-1464-TN	05/04-30/2003	Severe Storms, Tornadoes, and Flooding	YES	YES
EM-3217-TN	08/29-10/01/2005	Hurricane Katrina Evacuation	NO	YES
02/05-06/2008	DR-1745-TN	Severe Storms, Tornadoes, Straight-Line Winds, and Flooding	YES	YES
04/30-05/18/2010	DR-1909-DR	Severe Storms, Tornadoes, Straight-Line Winds, and Flooding	YES	YES
01/20/2020-05/11/2023	EM-3473-TN	COVID-19 Pandemic	NO	YES
01/20/2020-05/11/2023	DR-4514-TN	COVID-19 Pandemic	YES	NO
03/25-04/03/2021	4601-DR-TN	Severe Storms, Tornadoes, and Flooding	YES	YES

Table 9 documents the hazards of interest to Williamson County and the decision to re-evaluate or delete them from this plan update. The hazards of concern were altered as necessary to ensure the Williamson County Hazard Mitigation Plan is in accordance with the Tennessee Mitigation Strategy and with approval by the HMPC. Mitigation and the applicable grants only cover natural hazards. Therefore, human-caused and technological threats are covered in a separate document with the WCEMA.

**Table 9: Overview of Updates to Chapter 2: Risk and Vulnerability Assessment**

Williamson County 2017 HMP	Status
Hazardous Materials Release	Removed
Transportation Accident	Removed
Flood	Existing

Williamson County 2017 HMP	Status
Tornado	Existing
Biological (Including epidemics: disease outbreak)	Existing w/ Name Change
Energy Failure Communications Failure	Removed
Severe Winter Weather	Existing
Terrorism (Cyber, Chemical, Biological, Radiological, Conventional)	Removed
Drought/Extreme Heat	Existing
Financial System Collapse	Removed
Civil Disturbance (Including Riots; Civil Unrest)	Removed
Dam or Levee Failure	Removed
Earthquake/Seismic Activity	Existing
Geologic	Existing
Enemy Attack/War	Removed
Nuclear Accident (Fixed Nuclear Facility; Nuclear Exp Centers)	Removed
Wildfire	New

**2.5 Summary of changes in the 2024 plan update:**

- Hazardous Materials Release was removed in the 2024 HMP plan update. It is not a natural hazard and will be considered for inclusion in a local prevention plan.
- Transportation Incidents were removed in the 2024 HMP plan update. It is not a natural hazard and will be considered for inclusion in a local prevention plan.
- Biological (Including epidemics: disease outbreak) is included in the 2024 HMP plan update though it has been changed to show as Pandemic/Communicable Disease.

- Energy Failure/Communications Failure was removed in the 2024 HMP plan update. It is not a natural hazard and will be considered for inclusion in a local prevention plan.
- Terrorism (Cyber, Chemical, Biological, Radiological, Conventional) was removed in the 2024 HMP plan update. It is not a natural hazard and will be considered for inclusion in a local prevention plan.
- Drought/Extreme Heat is included in the 2024 HMP plan update though it has been changed to show as Drought/Excessive Heat.
- Financial System Collapse was removed in the 2024 HMP plan update. It is not a natural hazard and will be considered for inclusion in a local prevention plan.
- Civil Disturbance (Including Riots; Civil Unrest) was removed in the 2024 HMP plan update. It is not a natural hazard and will be considered for inclusion in a local prevention plan.
- Dam or Levee Failure was removed in the 2024 HMP plan update. Although there are numerous dams throughout Williamson County, none present a great risk and most are privately maintained.
- Geologic is included in the 2024 HMP update though it has been changed to show as Geological Incident.
- Enemy Attack/War was removed in the 2024 HMP plan update. It is not a natural hazard and will be considered for inclusion in a local prevention plan.
- Nuclear Accident (Fixed Nuclear Facility; Nuclear Exp Centers) was removed in the 2024 HMP plan update. It is not a natural hazard and will be considered for inclusion in a local prevention plan.

The complete list of hazards to be addressed in this 2024 plan include:

- Flooding
- Tornadoes
- Wildfire/Brush Fire
- Drought/Excessive Heat
- Severe Winter Weather
- Earthquake/Seismic Activity
- Geological Incident
- Pandemic/Communicable Diseases

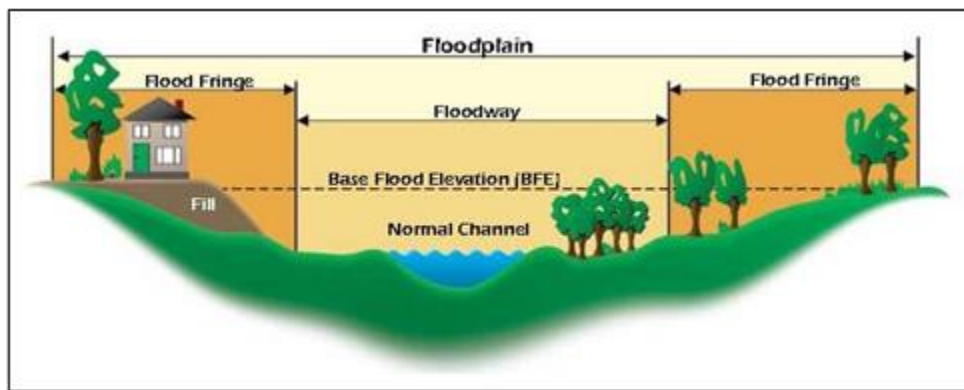
## 2.6 Flood

### 2.6.1 Hazard Overview

Flooding events occur when excess water from rivers and other bodies of water overflow onto riverbanks and adjacent floodplains. In addition, lower-lying regions can collect water from rainfall, and poorly drained land can accumulate rain through ponding on the surface. Floods in Williamson County are usually caused by rain, but may also be caused by snowmelt and man-made incidents.

The area adjacent to a channel is the floodplain, as shown in *Figure 1*. A floodplain is flat or nearly flat land adjacent to a stream or river that experiences occasional or periodic flooding. It includes the floodway, which consists of the stream channel and adjacent areas that carry flood flows, and the flood fringe, which are areas covered by the flood, but do not experience a strong current. Floodplains are made when floodwaters exceed the capacity of the main channel or escape the channel by eroding its banks. When this occurs, sediments (including rocks and debris) are deposited that gradually build up over time to create the floor of the floodplain. Floodplains generally contain unconsolidated sediments, often extending below the stream's bed.

**Figure 1: Characteristics of a Floodplain (Source: FEMA)**



#### Three general health hazards common to flood events:

1. Floodwaters carry anything on the ground that the upstream runoff picked up, including dirt, oil, bacteria, animal waste, lawn, farm, and industrial chemicals. Pastures and areas where farm animals are kept or their wastes are stored can contribute to polluted waters in 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 flood waters dilute it, raw sewage can be a breeding ground for bacteria such as *E. coli* and other disease-causing agents.
2. The second health problem arises after most water has gone. Stagnant pools can become breeding grounds for mosquitoes, and wet building areas that have not been adequately 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 ducts in a forced air system are not adequately 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 county water system

loses pressure, a boil order may be issued to protect people and animals from contaminated water.

3. 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 severely strain people, especially the unprepared and uninsured. There is also a long-term problem for those who know 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.

**2.6.2 County Profile**

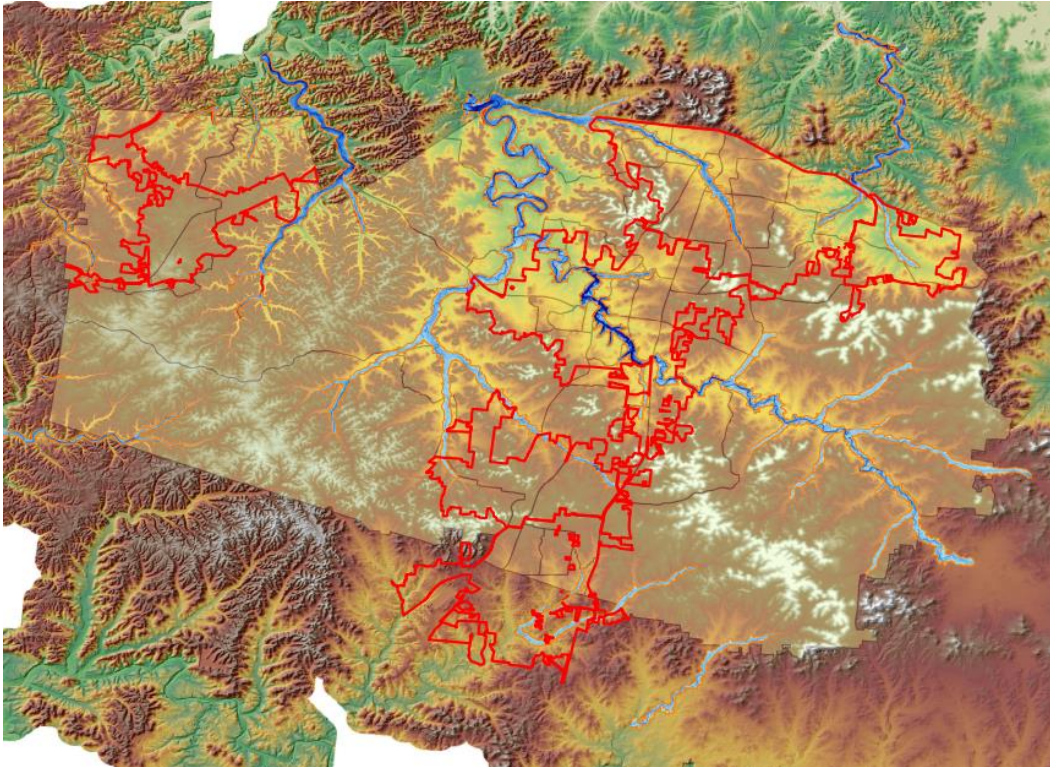
Riverine flooding occurs from inland water bodies such as streams and rivers. In Tennessee, flooding is highly dependent on precipitation amounts and is highly variable within the State.

HAZUS is a regional multi-hazard loss estimation model developed by FEMA and the National Institute of Building Sciences (NIBS). The primary purpose of HAZUS is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates are used primarily by local, state, and regional officials to plan and stimulate efforts to reduce multi-hazard risks to prepare for emergency response and recovery.

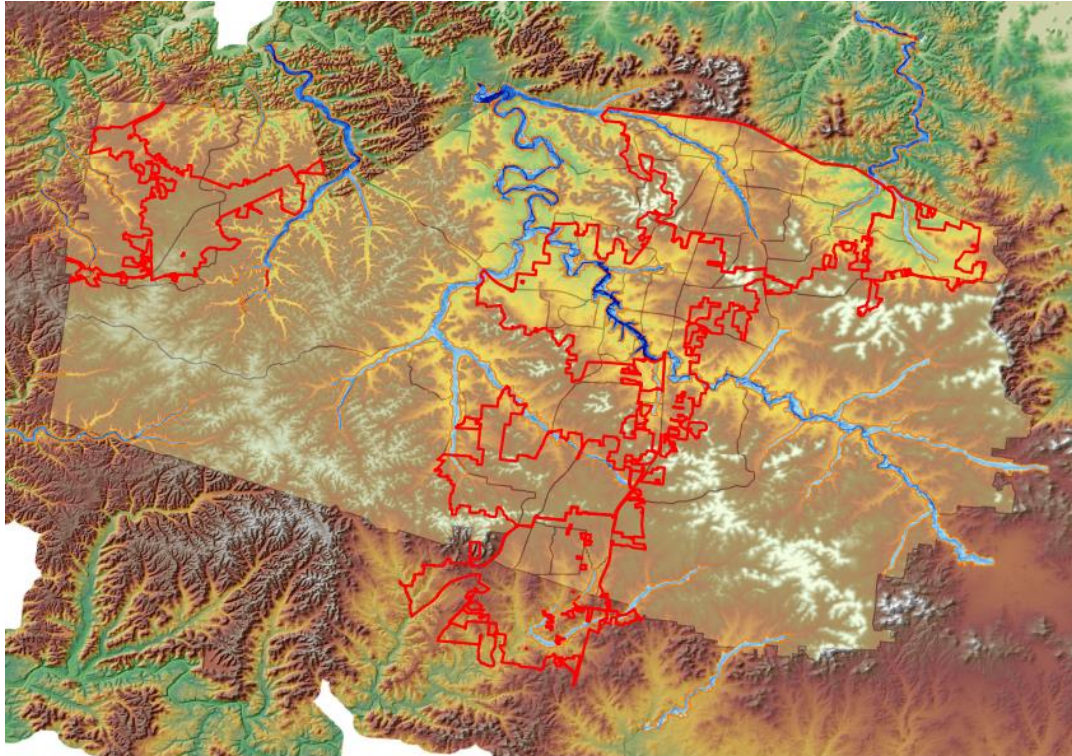
**Table 10: Mapped Flood Insurance Zones**

Flood Hazard Area	Description
<p><b>HAZUS (100-yr)</b></p>	<p>Areas subject to inundation by the 1-percent-annual-chance flood event are generally determined using approximate methodologies. Mandatory flood insurance purchase requirements and floodplain management standards apply.</p>
<p><b>HAZUS (500-yr)</b></p>	<p>A 500-year flood zone is a moderate flood hazard area and is an area between the limits of the base flood and the 0.2- percent-annual-chance (or 500-year) flood. Mandatory flood insurance is not required.</p>
<p><b>Non-highlighted Areas</b></p>	<p>Minimal risk areas outside the 1-percent and .2 percent-annual-chance floodplains.</p>

**Figure 2: HAZUS 100-year Flood Map**



**Figure 3: HAZUS 500-year Flood Map**



**Table 11: NFIP Policy Data**

NFIP Policy Data for Williamson County				
Jurisdiction	CID Number	Policies In-Force	Insurance In-Force Whole \$	Written Premium In-Force
Williamson County	470204D	485	\$152,122,800	\$393,010
City of Brentwood	470205D	357	\$107,865,100	\$355,783
City of Fairview	470242D	11	\$3,033,000	\$6,275
City of Franklin	470206D	444	\$132,578,000	\$369,074
City of Spring Hill	470278#	66	\$18,698,000	\$36,962
Town of Nolensville	470425D	49	\$15,493,000	\$39,416
Town of Thompson Station	470424#	15	\$4,288,000	\$8,974

Policies In-force: number of NFIP flood insurance policies

Insurance In-force whole \$: the value of building and contents insured by the NFIP

Written Premium In-force: total premiums paid for NFIP insurance policies

According to the National Flood Insurance Program (NFIP), repetitive flood loss is a facility or structure that has experienced two or more insurance claims of at least \$1,000 in any given 10-year period since 1978. Severe repetitive loss is defined as a facility or structure that has experienced four or more insurance claims exceeding \$5,000 or two claims exceeding the value of the building. Within the NFIP, flood loss properties are usually considered the most vital structures to mitigate. The chart below provides a summary of repetitive and severe repetitive losses for Williamson County. All recorded losses in Williamson County and its municipalities have been single family occupancies.

**Table 12: NFIP Loss Data**

NFIP Loss Data for Williamson County					
Jurisdiction	Total Losses	Closed Losses	Open Losses	CWOP Losses	Total Payments
Williamson County Unincorporated	RL: 2	2	0	0	\$53,828.27
	SRL: 0	0	0	0	\$0.00
City of Brentwood	RL: 7	7	0	0	\$209,907.65
	SRL: 0	0	0	0	\$0.00

NFIP Loss Data for Williamson County					
Jurisdiction	Total Losses	Closed Losses	Open Losses	CWOP Losses	Total Payments
City of Fairview	RL: 0	0	0	0	\$0.00
	SRL: 0	0	0	0	\$0.00
City of Franklin	RL: 58	55	1	2	\$1,677,451.90
	SRL: 20	20	0	0	\$475,732.94
City of Spring Hill	SRL: 0	0	0	0	\$0.00
	SRL: 0	0	0	0	\$0.00
Town of Nolensville	RL: 13	12	0	1	\$1,769,269.20
	SRL: 0	0	0	0	\$0.00
Town of Thompson's Station	RL: 0	0	0	0	\$0.00
	SRL: 0	0	0	0	\$0.00
Williamson County School Districts	RL: -	-	-	-	-
	SRL: -	-	-	-	-

RL: Repetitive Loss

SRL: Severe Repetitive Loss

Total Losses: number of flood insurance claims filed by policyholders

Closed Losses: number of flood insurance claims paid to policyholders

Open Losses: claims that are still being processed

CWOP Losses: claims that were "closed without payment"

Total Payments: total dollars paid to policyholders

It is important to note that while the impacted areas and extent of flooding is dependent on the storm that causes the flooding, the majority of Williamson County and its municipalities experiences flooding similarly. As such, most flooding tends to occur along existing waterways where property can see a few additional inches to feet of water for a short period of time. This scenario is suggested by subject-matter experts as no recorded narrative of such extent is available. Significant rainfall may increase the extent such as in 2010. However, each municipality experiences this extent of rainfall. The Williamson County School District does not have any recorded history of impacts on their facilities though they maintain a status of at risk in the future. Since 12/16/1996, when the NOAA began recording these events for Williamson County, there have been approximately 87 flooding/flash flooding events in Williamson County. 37 of these flooding events have occurred since the beginning of 2017, the year of the previous HMP. A table of NOAA-reported flooding events is located in Appendix C. The following narratives were obtained via the NOAA Storm Event Database. Only events resulting in injury,

death, or extensive damage (greater than \$200K property/crop damage) were included as expanded narratives.

### **Event Narrative 1: 03/27/2021**

NOAA Episode Narrative: “An historic flash flooding event affected the central third of Middle Tennessee from the early morning hours on March 27 through the day into the early morning hours on March 28. A warm front moved northward into Middle Tennessee early on March 27 before stalling near the I-40 corridor. Between 0300-0400 AM CDT, numerous showers and thunderstorms developed along the warm front, many of which became severe and produced large hail up to half dollar size along with frequent lightning and heavy rainfall. Showers and storms continued off and on the rest of the day across Middle Tennessee, particularly near the stalled warm front. In fact, another round of severe thunderstorms including supercells developed during the afternoon and evening hours near and south of the warm front. These storms dropped large hail up to tennis ball size and caused a few reports of wind damage, but the main impact was additional heavy rainfall which began causing flash flooding south of Nashville. Flooding only worsened as showers and storms redeveloped over the same areas through the evening, with numerous Flash Flood Warnings issued and several reports of flooded roads and water rescues.

After midnight, even more heavy rainfall falling along the already waterlogged I-40 corridor prompted a rare Flash Flood Emergency for the southern and eastern Nashville metro area, including southeastern Davidson County, western Wilson County, and northern Williamson County. These areas received between 7 to 9 inches of rain, causing rapid rises on several Nashville metro creeks and streams, including Sevenmile Creek (which reached its highest level on record), Browns Creek, and Mill Creek, among others. Many of these creeks reached within their 2nd or 3rd highest water levels on record. The rapid water rises flooded hundreds of homes and businesses, with reports of some people trapped in the attics or on the roofs of their houses. Dozens of roadways were flooded and impassable, including both I-24 and I-40, with many cars submerged in the flood waters and people forced to cling onto trees to avoid getting swept away. Although the flood waters receded quickly on Sunday, March 28, many area rivers reached flood stage in the week after the event, including the Cumberland River, Harpeth River, and Duck River.

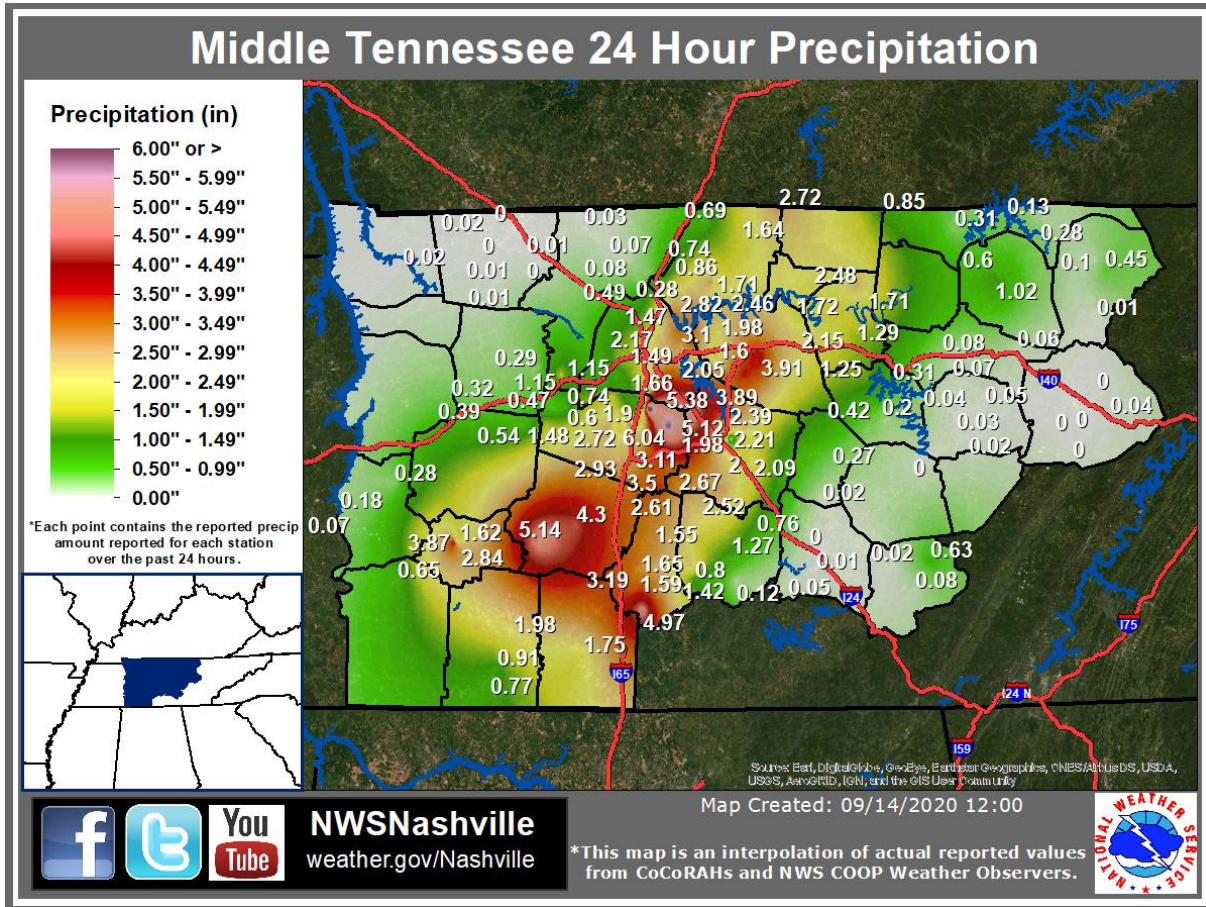
A total of 7 deaths were reported from the flooding across Middle Tennessee, with 5 in Davidson County, 1 in Cheatham County, and 1 in Maury County. Emergency management reports indicate over 500 homes and businesses were flooded, and a Presidential Disaster Proclamation was declared for many counties in May 2021. This flash flood event was the worst seen in Middle Tennessee since the May 1-2, 2010 flood.”



*Aerial Image of May 2010 Flood*

### **Event Narrative 2: 09/13/2020**

NOAA Episode Narrative: “A stationary frontal boundary stalled across the central portions of Middle Tennessee from Saturday, September 12, 2020 into Sunday, September 13, 2020. Persistent southwest flow aloft brought copious amounts of Gulf of Mexico moisture northward and interacted with this boundary, causing a roughly 7-hour period of nearly continuous heavy rain and thunderstorms. Rainfall totals reached 5 to over 8 inches in some locations, resulting in major flash flooding and river flooding along a narrow corridor across Lawrence, Lewis, Maury, Williamson, Davidson, Rutherford, Wilson, Sumner, and Macon Counties. Numerous water rescues were conducted and many homes and businesses were flooded, with some of the worst flooding occurring in the Mill Creek basin across northeast Williamson County and southeast Davidson County. In fact, Mill Creek at Nolensville reached 19.53 feet, which is the second highest crest ever at that location - only surpassed by the record of 22.53 feet in the May 2010 flood.”



**Event Narrative 3: 02/20/2019**

NOAA Episode Narrative: “After an already very wet month, additional heavy rainfall and thunderstorms moved into Middle Tennessee from Tuesday February 19 into Wednesday February 20. With the airmass being initially cold and dry, the rainfall briefly fell as a mix of rain and sleet across southern Middle Tennessee, although no measurable sleet accumulation was reported. Considerable cloud to ground positive lightning also occurred, which caused several fires to structures. By Wednesday February 20, the prolonged heavy rainfall led to flash flooding in many areas.

Numerous roads were flooded and closed across Williamson County, including Brittain Lane at the Mill Creek Bridge, Arno Road, Lewisburg Pike, Peytonsville Road, York Road, North Chapel Road, Blazer Road, Trinity Road, Old Natchez Trace, and many others. Several cars were also flooded in the Brentwood YMCA parking lot on Concord Road.”

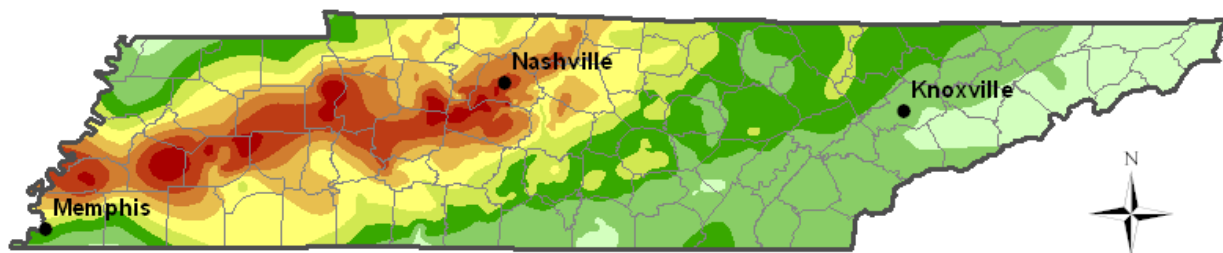
**Event Narrative 4: 05/02/2010**

NOAA Episode Narrative: “A frontal boundary setup across Western and Middle Tennessee late Friday night (April 30), and remained through the weekend. A persistent southerly flow fed moisture into the area and precipitable water values rose to almost 2 inches, based on data from KOHX upper air soundings. As a series of shortwaves moved through, a band of showers and thunderstorms developed and remained nearly stationary for much of the day on Saturday, May 1st and Sunday, May 2nd, resulting in widespread record flooding across much of Middle

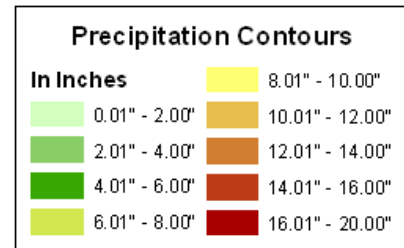
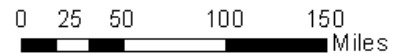
Tennessee. Some of these thunderstorms became severe also, resulting in thunderstorm wind damage and seven confirmed tornadoes across Middle Tennessee.

Nolensville road, south of Nashville, was flooded. Some cars were left abandoned. Details concerning amount of damage to cars abandoned were unknown. Also, numerous homes, numerous businesses, numerous noncommercial buildings, along with several county, state, and federal roads across the county received damage due to the flood.”

## Weekend Rainfall Totals - May 1st & 2nd, 2010 Tennessee



Source: CoCoRaHS



This map is an interpolation of actual reported values, but should be considered an estimation only.

Created by the National Weather Service Forecast Offices Nashville, Tennessee & Louisville, Kentucky

**Table 13: Flooding Extent History**

Location	Extent & Impact	Event Date
Williamson County Unincorporated	According to the National Oceanic and Atmospheric Administration (NOAA), “Scattered thunderstorms developed across several counties in Middle Tennessee during the afternoon hours on Thursday, July 7th. Two of these thunderstorms reached severe thresholds, resulting in thunderstorm wind damage in Sumner County and flash flooding in Williamson County. Several cars were trapped on water-covered roads including Cool Springs Blvd., Bakers Bridge Avenue, and Duke Drive. These roads had an estimated 10” of water on them for roughly	07/07/2011

Location	Extent & Impact	Event Date
	<p>two days. Media also reported that water rescues occurred in this area, along with railroad trains having to be diverted following damage to the railroad tracks near Moores Lane in south Brentwood, where about four feet of floodwaters inundated Empire Beauty School and a BP gas station on either side of these tracks. Specific details on amount of damage and associated damage repair costs to the Empire Beauty School and the BP gas station where unknown.”</p>	
<p>City of Brentwood</p>	<p>The City Manager of the City of Brentwood reported that 75 buildings may have been damaged due to significant flooding and about 1,500 other homes could be without water due to major line breaks caused by the flooding. The local officials reported that they would be in contact with the county emergency management agency in order to get portable water to the residents. To further complicate the flooding concerns, the Murray Lane, Robert E. Lee, and Annadale booster pump stations had been lost due to a power failure. Franklin Road between Holly Tree Gap and Willowick was closed due to a landslide that had occurred at the top of the hill. A section of Holly Tree Gap Rd. between Manley Lane and Holly Tree Farms (in the County) collapsed making only one lane passable but unsafe to travel. Water that was rising on the Little Harpeth at Granny White Pike near Belle River flowed over the road making it impassable. There was an estimated 7” of water that flowed over the roads.</p> <p>Flood related expenses number in the \$100,000’s for the City of Brentwood. This includes \$33,550 for bike trails repairs, \$40,286 for flood debris clean-up, \$44,925 for emergency drainage stabilization, \$19,895 for remediation of mudslide and stabilization of bank, \$15,625 for additional mud and debris removal, \$25,665 for emergency mudslide removal and bank repair with sheet rock, \$26,873 for repair of the River Park restroom facility, and \$41,164 for repair of the Tower Park restroom facility. These costs total \$247,983 due to a single flooding incident.</p>	<p>05/20/2010</p>
<p>City of Fairview</p>	<p>According to the National Oceanic and Atmospheric Administration (NOAA), A stalled warm front and plentiful amounts of atmospheric moisture helped to set the stage for a persistent wet pattern that lasted several days in early December across Middle Tennessee. By</p>	<p>12/07/2022</p>

Location	Extent & Impact	Event Date
	<p>December 7, 2022, an estimated 2 to 4 inches of rain over the course of this event had begun to cause creeks to overflow their banks. Minor flooding was reported across areas mainly south of Interstate 40, particularly in the Spring Hill area where several flooding reports were received along with road closures. Persistent rainfall, which was heavy at times, forced the closure of Hill Hughes Road near Fairview due to flooding. The road had approximately 17” of water over it during the peak flood stage.</p>	
<p>City of Franklin</p>	<p>The City of Franklin is often challenged by rising waters along the Harpeth River. This time, the water surrounded individuals’ homes and the surrounding roads. Drone footage shows trouble spots along Del Rio Pike where flooding is still problematic. The Franklin Police Department reported a rescue of a homeowner in this area, in addition to about 18 other individuals that live along the Harpeth River. In this event, the Harpeth River grew to 30.5 feet where the record is 35 feet and three inches which resulted in significant flooding in the local residential areas.</p>	<p>03/28/2020</p>
<p>City of Spring Hill</p>	<p>Old Kedron Road, among a few others in the City of Spring Hill, were closed due to flash flooding. Photos and video reported to the local news station, WKRN, and their own footage show high levels of water crossing over the road, roughly 2’ deep, and bringing debris across it. On Port Royal road, a tree was seen blocking the water way and therefore spilling more water onto the road creating hazardous conditions. The Spring Hill Police Department removed the tree from blocking the water flow which helped with the roads flooded condition.</p>	<p>05/03/2021</p>
<p>Town of Nolensville</p>	<p>According to the National Oceanic and Atmospheric Administration (NOAA), “A stationary frontal boundary stalled across the central portions of Middle Tennessee from Saturday, September 12, 2020 into Sunday, September 13, 2020. Persistent southwest flow aloft brought copious amounts of Gulf of Mexico moisture northward and interacted with this boundary, causing a roughly 7-hour period of nearly continuous heavy rain and thunderstorms. Rainfall totals reached 5 to over 8 inches in some locations, resulting in major flash flooding and river flooding along a narrow corridor across Lawrence, Lewis, Maury, Williamson, Davidson,</p>	<p>09/13/2020</p>

Location	Extent & Impact	Event Date
	<p>Rutherford, Wilson, Sumner, and Macon Counties. Numerous water rescues were conducted and many homes and businesses were flooded with 5”-7” of standing water, with some of the worst flooding occurring in the Mill Creek basin across northeast Williamson County and southeast Davidson County. In fact, Mill Creek at Nolensville reached 19.53 feet, which is the second highest crest ever at that location - only surpassed by the record of 22.53 feet in the May 2010 flood.”</p>	
<p>Town of Thompson’s Station</p>	<p>According to the National Oceanic and Atmospheric Administration (NOAA), “after an unusually wet January, another strong storm system brought more heavy rainfall, flooding, and severe storms to parts of Middle Tennessee on February 5th. A line of strong to severe thunderstorms known as a QLCS (Quasi-linear Convective System) developed in northern Mississippi and moved across southern and eastern Middle Tennessee during the afternoon and evening hours. These storms spawned 6 weak tornadoes and widespread straight-line wind damage. In addition, heavy rainfall affected much of Middle Tennessee throughout the day, causing significant flooding in many areas.”</p> <p>The National Weather Service has not reported any flooding incident with particular details on flood extents or damage due to flooding in the Town of Thompson’s Station.</p>	<p>02/05/2020</p>
<p>Williamson County School District</p>	<p>According to Austin Thompson with the Williamson Herald, “Due to heavy rains causing flooding and more expected, both Williamson County Schools and Franklin Special School District closed Friday. WCS also dismissed two hours early on Wednesday for heavy rains. According to WCS Communications Director Carol Birdsong, the "high-risk and life-threatening flooding," was the cause for closure. "We have been working with the National Weather Service and the Williamson County Emergency Management Agency throughout the day [Thursday]," she wrote in an email to parents. "Based on the forecast by the National Weather Service of high-risk and life-threatening flooding, Williamson County Schools will be closed tomorrow, Friday, Feb. 22, 2019." The WCS School Age Child Care program is operating at inclement weather sites on the inclement weather</p>	<p>02/21/2019</p>

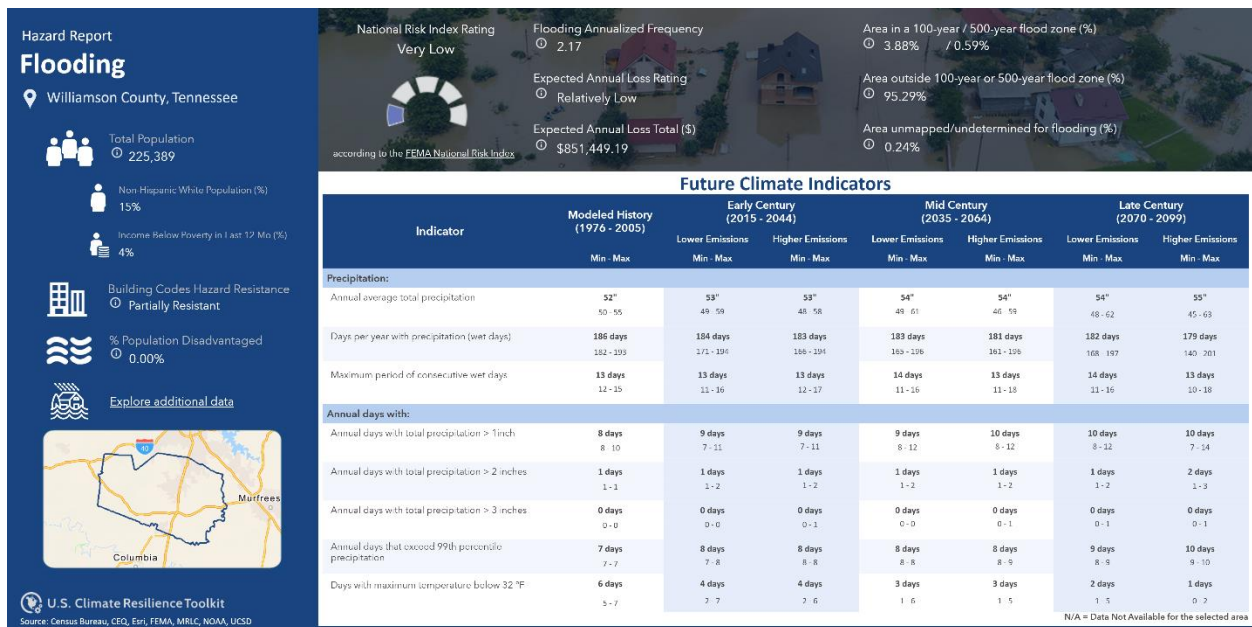
Location	Extent & Impact	Event Date
	<p>schedule, and 12-month employees should follow the inclement weather protocol, Birdsong also wrote. Likewise, FSSD announced Thursday that hazardous driving conditions caused its closure Friday. While there is no school for FSSD students, MAC will be open at the district site, 1406 Cannon Street in Franklin, from 7 a.m. until 5 p.m. MAC students need to bring a lunch.”</p> <p>Although this article reports that flooding had impacted operations of the school, no flooding has been reported to have occurred on any school site.</p>	

**Probability of Future Events - Likely**

The impact of extreme weather events may increase the frequency and intensity of flash flooding within Tennessee, particularly in highly urbanized regions such as Memphis, Nashville, Knoxville, and Chattanooga. Any area with extreme changes in deep terrain, predominately in East Tennessee, will experience significant flooding impacts.

Based on a historical record of 87 flood events over 74 years (1950 - 2022), there is a likelihood for a flood event to occur annually or semiannually. In conjunction with the future weather projections developed by ETSU Geoinformatics & Disaster Science Lab, it can be assumed that a flooding event could occur in Williamson County multiple times a year. *Figure 4* illustrates the projections developed by the ETSU Geoinformatics & Disaster Science Lab.

**Figure 4: Climate Mapping Risk Assessment Report for Flooding in Williamson County.**  
(Source: US Climate Resilience Toolkit)



### 2.6.3 Risk Assessment

The HMPC meeting cited flooding as a repetitive hazard in the county and jurisdictions. Discussion of commonly flood-prone areas took place, as did mention of improvements that have already been made to mitigate risks, such as the currently active project to help restore Trace Creek to its natural state. Over past years, Trace Creek has been inundated with invasive species and its banks have significantly eroded. Through the Cumberland River Compact, the creek is being restored to assist generations to come, repair the environment and its natural inhabitants, and ensure that the Harpeth River is not damaged as the creek runs directly into it. Through active participation in the HMPC and through various public meetings, emergency management officials were able to identify projects that may help in other areas throughout Williamson County that solves similar concerns.

The [National Risk Index](#) is a dataset and online tool to help illustrate the United States communities most at risk for natural hazards. It was built and designed by FEMA in close collaboration with various stakeholders and partners in academia; local, state and federal government. The Risk Index leverages available source data for natural hazards and community risk factors to develop a baseline relative risk assessment for each county and census tract. Some of these community risk factors include social vulnerability which is determined by the data pulled from the Census performed every ten years. A higher social vulnerability score is proportional to a higher risk score.

#### **National Risk Index Score for Flooding = Very Low**

Although the National Risk Index is a well-valued tool it fails to properly show the feedback from the participating jurisdictions. Therefore, all identified hazards were evaluated in regard to risk by an established risk-scoring system provided by the Williamson County Emergency Management Agency and approved by the HMPC. Local jurisdictions evaluated the conditions using a mid-level impact scenario of the identified hazard. All Williamson County municipal representatives in the HMPC agreed and approved of the risk score for their unique municipality. The results are below:

#### **Flooding Risk as Determined by the HMPC THIRA**

To determine the overall risk of a flood in Williamson County, data was also requested and received from the National Weather Service (NWS), the National Centers for Environmental Information (NCEI) by the National Oceanic and Atmospheric Administration (NOAA), WebEOC, the Williamson County Computer Aided Dispatch (CAD) system and from local news reports.

When identifying flood data in Williamson County, consideration was also given to events that the NWS or NOAA did not label as a flood, but impacted the people in our county to a significant degree. For example, a strong thunderstorm may produce a large quantity of rain water that causes a road closure but the NWS does not report as a flood. These incidents are also accounted for in the data collection process. A review of the dam inventory took place and it was decided not to include dam failure as a single hazard, but further information regarding this inventory is included in Appendix E.

The impact and probability numbers assigned to this hazard are as follows:

Human Impact	Property Impact	Business Impact	Operational Impact	Environmental Impact	Probability	Risk Score
3	4	1	2	2	5	7.4

## HAZUS Data

### HAZUS Methodology

A Level I HAZUS analysis was completed using a probabilistic risk assessment for the 100-year and 500-year return periods. The Level I vulnerability assessment is presented below by return period.

### Building Inventory (General Building Stock)

HAZUS estimates that 63,263 buildings in the region have an aggregate total replacement value of \$54,685 million. The tables below present the relative distribution of the value concerning the general occupancies by Study Region and Scenario, respectively.

**Table 14: Building Exposure by Occupancy Type (HAZUS)**

Williamson County (Study Region)		
Occupancy Type	Exposure (\$1000)	Percent Total
Agricultural	163,401	0.3%
Commercial	10,443,597	19.1%
Education	1,949,883	3.6%
Government	231,344	0.4%
Industrial	1,899,509	3.5%
Religion	1,009,276	1.8%
Residential	38,988,257	71.3%
<b>Total</b>	<b>54,685,267</b>	<b>100%</b>

**Table 15: Building Exposure by Occupancy Type for 100-yr Flood Scenario (HAZUS)**

100-year River Flood Scenario		
Occupancy Type	Exposure (\$1000)	Percent Total
Agricultural	35,313	0.5%
Commercial	1,258,420	16.3%
Education	511,506	6.6%
Government	29,333	0.4%
Industrial	245,961	3.2%
Religion	148,849	1.9%

100-year River Flood Scenario		
Occupancy Type	Exposure (\$1000)	Percent Total
Residential	5,508,716	71.2%
<b>Total</b>	7,738,098	100%

**Table 16: Building Exposure by Occupancy Type for 500-yr Flood Scenario (HAZUS)**

500-yr River Flood Scenario		
Occupancy Type	Exposure (\$1000)	Percent Total
Agricultural	35,756	0.5%
Commercial	1,097,519	14.0%
Education	430,332	5.5%
Government	26,842	0.3%
Industrial	213,203	2.7%
Religion	145,817	1.9%
Residential	5,878,291	75.1%
<b>Total</b>	7,827,760	100%

*Essential Facility Inventory*

HAZUS indicates that there are 2 hospitals in the region with a total capacity of 225 beds. There are 77 schools, 21 fire stations, 5 police stations, and 1 emergency operation centers.

*General Building Stock Damage*

For the 100-year flood scenario, HAZUS estimates that about 314 buildings will be at least moderately damaged. This is over 47% of the total number of buildings in the scenario. There are an estimated 56 buildings that will be destroyed completely. *Table 17* below summarizes the expected damage by general occupancy type for the buildings in the County during a 100-year flood scenario.

**Table 17: Expected Building Damage by Occupancy for 100-yr Flood Scenario (HAZUS)**

% Damaged	1-10		11-20		21-30		31-40		41-50		>50%	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Agricultural	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	7	23	6	19	4	13	5	16	7	23	2	6
Education	0	0	0	0	0	0	0	0	0	0	0	0
Government	0	0	0	0	0	0	0	0	0	0	0	0
Industrial	0	0	0	0	0	0	0	0	0	0	0	0

% Damaged	1-10		11-20		21-30		31-40		41-50		>50%	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Religion	0	0	1	100	0	0	0	0	0	0	0	0
Residential	35	11	77	24	60	19	52	16	46	14	54	17
<b>Total</b>	<b>42</b>		<b>84</b>		<b>64</b>		<b>57</b>		<b>53</b>		<b>56</b>	

For the 500-year flood scenario, HAZUS estimates that about 292 buildings will be at least moderately damaged. This is over 50% of the total number of buildings in the scenario. There are estimated 50 buildings that will be destroyed completely. *Table 18* below summarizes the expected damage by general occupancy type for the buildings in the County during a 500-year flood scenario.

**Table 18: Expected Building Damage by Occupancy for 500-yr Flood Scenario (HAZUS)**

% Damaged	1-10		11-20		21-30		31-40		41-50		>50%	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Commercial	6	18	9	27	3	9	5	15	5	15	5	15
Education	0	0	0	0	0	0	0	0	0	0	0	0
Government	0	0	0	0	0	0	0	0	0	0	0	0
Industrial	0	0	0	0	0	0	0	0	0	0	0	0
Religion	0	0	3	100	0	0	0	0	0	0	0	0
Residential	36	12	79	27	51	17	51	17	36	12	45	15
<b>Total</b>	<b>42</b>		<b>91</b>		<b>54</b>		<b>56</b>		<b>41</b>		<b>50</b>	

#### *Essential Facility Damage*

*Table 19* and *Table 20* summarize the expected damage to essential facilities following a 100-year and 500-year flood, respectively. Both scenarios analyzed have determined that on the day of the event, all 225 beds in the local hospital would be available for use.

**Table 19: Expected Damage to Essential Facilities 100-yr Flood Scenario (HAZUS)**

Classification	Total	Number of Facilities		
		At Least Moderate	At Least Substantial	Loss of Use
EOC	6	0	0	0
Fire Stations	21	0	0	0
Hospitals	2	0	0	0
Police Stations	6	0	0	0
Schools	77	0	0	0

**Table 20: Expected Damage to Essential Facilities 500-yr Flood Scenario (HAZUS)**

Classification	Total	Number of Facilities		
		At Least Moderate	At Least Substantial	Loss of Use
EOC	6	0	0	0
Fire Stations	21	0	0	0
Hospitals	2	0	0	0
Police Stations	6	0	0	0
Schools	77	0	0	0

*Debris Generation*100-year Scenario

The model estimates that a total of 3,269 tons of debris will be generated. Of the total amount, Finishes comprises 47% of the total, Structure comprises 28% of the total, and Foundation comprises 25%. If the debris tonnage is converted into an estimated number of truckloads, it will require 131 truckloads (@25 tons/truck) to remove the debris generated by the flood.

500-year Scenario

The model estimates that a total of 3,403 tons of debris will be generated. Of the total amount, Finishes comprises 51% of the total, Structure comprises 27% of the total, and Foundation comprises 23%. If the debris tonnage is converted into an estimated number of truckloads, it will require 137 truckloads (@25tons/truck) to remove the debris generated by the flood.

*Shelter Requirements*

HAZUS estimates the number of households expected to be displaced due to the flood and the associated potential evacuation. HAZUS also estimates those displaced people who will require accommodations in temporary public shelters.

100-year Scenario

The model estimates 1,006 households (or 3,017 people) will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 378 people (out of a total population of 247,523) will seek temporary shelter in public shelters.

500-year Scenario

The model estimates 1,098 households (or 3,293 people) will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 394 people (out of a total population of 247,523) will seek temporary shelter in public shelters.

*Building Related Losses*

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the

damage caused to the building and its contents. Business interruption losses are the losses associated with the inability to operate a business because of the damage sustained during the flood. Business interruption losses also include the temporary living expenses for those displaced from their homes because of the flood. Total building-related losses were \$503.78 million in the 100-year flood scenario and \$544.77 million in the 500-year flood scenario. *Table 21* and *Table 22* summarize the losses associated with the building damage in each scenario.

**Table 21: Building Related Economic Loss Estimates for the 100-yr Flood Scenario (\$ Millions) (HAZUS)**

Category	Area	Residential	Commercial	Industrial	Other	Total
Building Loss	Building	189.84	38.06	3.57	7.34	238.81
	Content	97.02	106.56	8.67	32.35	244.59
	Inventory	0.00	15.39	1.54	3.45	20.38
	Subtotal	286.86	160.00	13.77	43.15	503.78
Business Interruption	Income	1.41	73.75	0.23	12.16	87.54
	Relocation	38.81	19.78	0.21	6.62	65.43
	Rental Income	14.36	13.76	0.04	0.51	28.68
	Wage	3.33	81.58	0.38	58.11	143.40
	Subtotal	57.91	188.88	0.86	77.40	325.05
<b>Total</b>		<b>344.77</b>	<b>348.88</b>	<b>14.63</b>	<b>120.54</b>	<b>828.83</b>

**Table 21: Building Related Economic Loss Estimates for the 500-yr Flood Scenario (\$ Millions) (HAZUS)**

Category	Area	Residential	Commercial	Industrial	Other	Total
Building Loss	Building	192.82	42.62	4.22	8.51	248.17
	Content	98.88	125.39	10.79	40.20	275.26
	Inventory	0.00	16.19	2.02	3.13	21.34
	Subtotal	291.69	184.20	17.03	51.84	544.77
Business Interruption	Income	2.08	81.40	0.35	13.99	97.82
	Relocation	38.63	21.96	0.37	7.51	68.48
	Rental Income	14.82	14.88	0.09	0.61	30.39
	Wage	4.90	86.86	0.58	48.06	139.40
	Subtotal	60.43	204.09	1.39	70.18	336.09
<b>Total</b>		<b>352.12</b>	<b>388.29</b>	<b>18.43</b>	<b>122.02</b>	<b>880.86</b>

### **2.6.4 Land Use and Development**

All future development within the floodplain may be considered at risk. An increase in population will likely increase the number of buildings and infrastructure. New development in unincorporated areas could potentially occur in areas prone to flooding and increase vulnerabilities and potential losses; however, most land use regulations require the consideration of flooding during the development process.

### **2.6.5 Multi-Jurisdictional Differences**

Flooding affects all jurisdictions differently; that is why it is essential to document the depth, duration, and time that flooding occurred. These differences are noted in past occurrences to demonstrate the toll that flooding can take on the county's rural and urban areas. Due to the topography of Williamson County with its rolling hills and occasional "bowl-shaped" topography, flood events are prone to occur near streams within the county. FIRM Panels are located within Appendix D to help illustrate a few of the areas at risk and depth of flooding within the county and its incorporated jurisdictions. These firms are samples of some areas and additional needs regarding FIRM panels require a visit to the FEMA website.

#### **Intersections & Roads that consistently flood in Williamson County:**

- 1532 Lewisburg Pike
- Del Rio Pike @ White Hall Road
- Beechcroft Road @ Meadows of Spring Hill
- Del Rio Pike btw Cotton Lane and Old Hillsboro Road
- Temple Road @ Old Natchez Road
- Moran Road @ River Rest Subdivision
- Patton Road @ Horton Highway
- Johnson Hollow Road
- Southall Road near Old Hillsboro Road
- Floyd Road near Old Hillsboro Road
- Blazer Road near Boyd Mill
- Concord Road near Bluff Road
- Duplex Road @ Buckner Lane (west side of road)
- Eddy Lane (near the Co-Op) btw Liberty Pike and Murfreesboro Road
- 821 Lewisburg Pike @ Carriage Park Drive
- Miles Johnson (Old Kedron Road) btw Kedron Road and Duplex Road
- Main Street (Spring Hill) @ Chapman's Crossing
- Arno Road @ Trinity Road
- 4500 Peytonsville Road
- 3rd Avenue (Franklin) btw Hillsboro Road and Margin
- Patton Road near Cox Road (near Arrington Vineyard)
- Old Horton Highway @ bridge near McCandless

#### **Waterways that are prone to flooding in Williamson County:**

- Mill Creek along Nolensville Road
- Snake Creek

- Areas near the Harpeth River

### **2.6.6 Summary**

Severe flooding has the potential to inflict significant damage in Williamson County. The total economic loss estimated for the 100-year riverine flood is \$828.83 million. The total economic loss estimated for the 500-year riverine flood is \$880.86 million. Residential, commercial, and public buildings and critical infrastructures such as transportation, water, energy, and communication systems may be damaged or destroyed by flood waters. During a flood event, chemicals and other hazardous substances may contaminate local water bodies. Flooding kills animals and, in general, disrupts the ecosystem. Snakes and insects may also make their way to the flooded areas increasing potential health risks. In Williamson County, flooding has cost millions of dollars and has caused significant danger to the well-being of the citizenry.

## 2.7 Tornadoes/Severe Winds

### 2.7.1 Hazard Overview

Tornadoes have the potential to produce winds over 200 mph (EF5 on the Enhanced Fujita Scale) and can be very expansive. Before February 1, 2007, tornado intensity was measured by the Fujita (F) scale. This scale was revised and is now the Enhanced Fujita scale. Both scales are wind estimates (not measurements) based on damage. The new scale provides more damage indicators (28) and associated degrees of damage. *Table 22* shows the wind speeds associated with the enhanced Fujita scale ratings and the damage that could result at different intensity levels.

**Table 22: Enhanced Fujita Scale**

EF Rating	3 Second Wind Gust (mph)	Estimated Damage
0	65-85	<b>Light Damage.</b> Slight damage to roofs, gutters, siding, tree branches broken, shallow-rooted trees overturned
1	86-110	<b>Moderate Damage.</b> Mobile homes damaged, exterior portions of homes damaged or lost (i.e., roofs, doors, windows)
2	111-135	<b>Considerable Damage.</b> Mobile homes destroyed, cars lifted, well-constructed home frames shifted, roofs torn off, light-object missiles generated, large trees uprooted or snapped.
3	136-165	<b>Severe Damage.</b> Severe damage to large buildings, entire home stories destroyed, trees debarked, trains overturned, heavy vehicles lifted and thrown, structures with weaker foundations thrown
4	166-200	<b>Devastating Damage.</b> Well-constructed houses and whole frame houses leveled, cars thrown, small missiles generated
5	200+	<b>Incredible Damage.</b> Substantial frame houses leveled off foundations and the automobile-sized missiles generated, and high rises experience considerable damage and deformation

According to the Glossary of Meteorology (AMS 2000), a tornado is "a violently rotating column of air, pendant from a cumuliform cloud or underneath a cumuliform cloud, and often (but not always) visible as a funnel cloud." Most tornadoes move from southwest to northeast or west to east.

Although tornadoes can occur in any location, most of the tornado activity in the United States exists in the Mid-West and Southeast. An exact season does not exist for tornadoes; however, most occur between early spring and mid-summer (February – June). The 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. A tornado can reach wind speeds of 40 mph to 250 mph and higher. The following map illustrates the frequency of tornadoes in Tennessee.

2.7.2 County Profile

Figure 5: Tornadoes by County (NWS/NOAA)

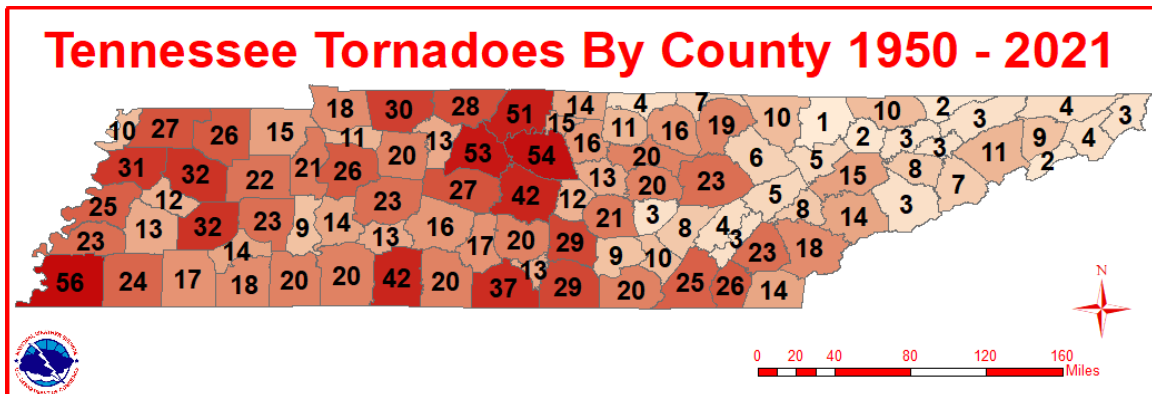
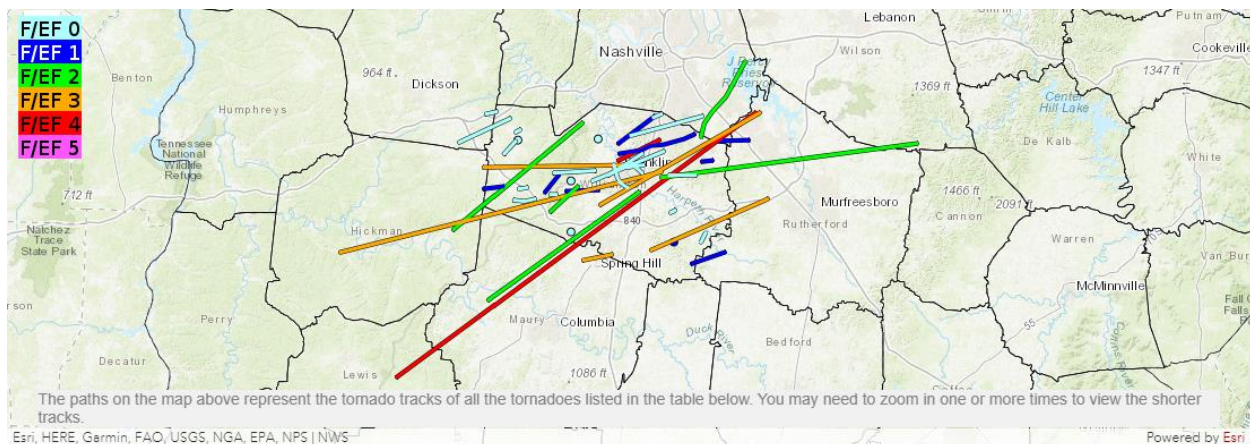


Figure 6 illustrates the track of tornadoes through Williamson County as recorded by the National Weather Service Nashville and the National Climatic Data Center and compiled into a visual database by Mississippi State University. Tornadoes commonly hit between 3:00pm and 8:00pm.

Figure 6: NWS Nashville Tornado Database (Mississippi State University)



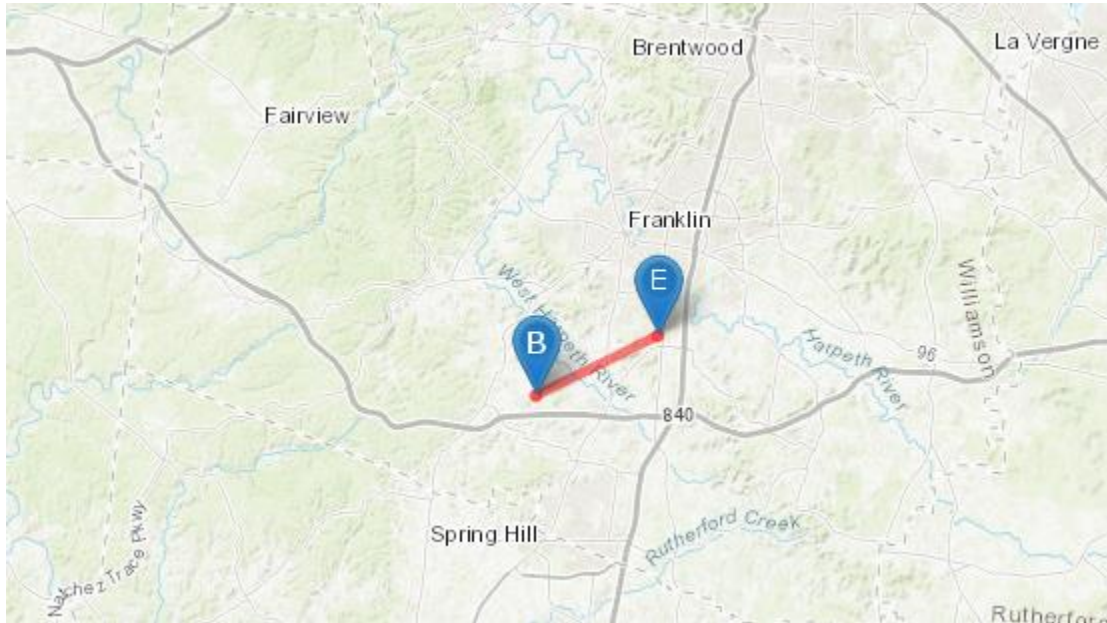
The following narratives were obtained via the NOAA Storm Event Database. Only events resulting in injury, death, or extensive damage (greater than \$200K property/crop damage) were included as expanded narratives. A table containing all NOAA-recorded tornadoes between 1950- 2024 for Williamson County is contained in Appendix C.

**Event Narrative 1: 12/24/1988**

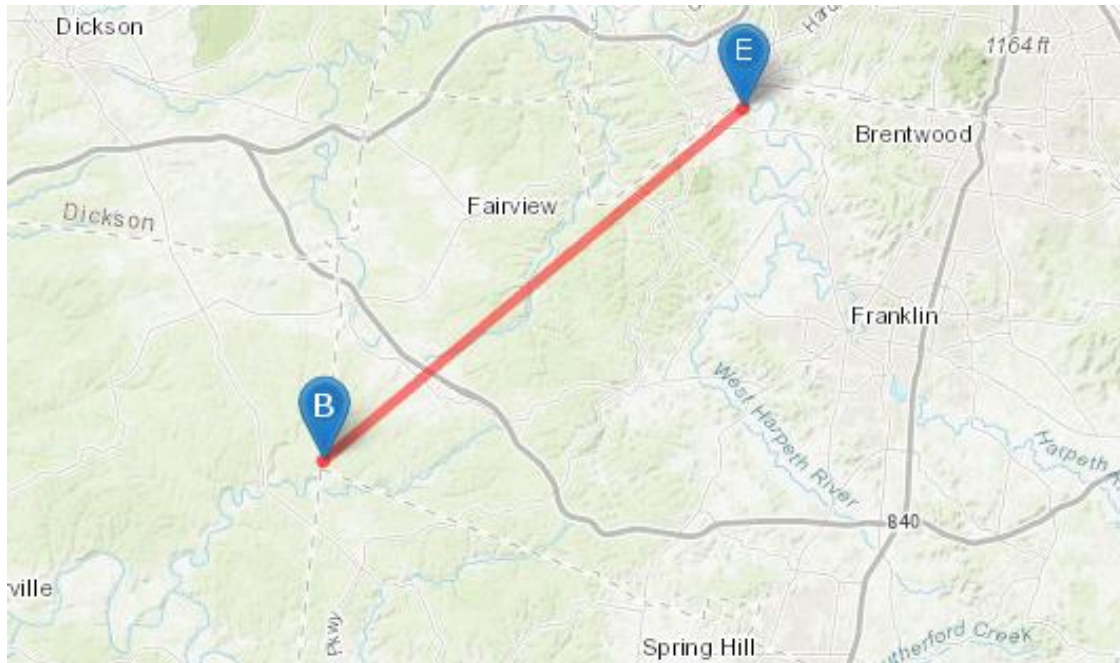
A tornado touched down shortly after 0600 in the Rebel Meadows area of northwest Franklin. The tornado moved northeast at around 45mph, leaving a spotty path of damage. The damage was severe in the places that it touched down. It lifted up for good in the Brenthaven area of the eastern part of Brentwood. Property damage was estimated at around \$8 million. Approximately 54 homes, 13 apartment units, 31 businesses, and six parked airplanes were damaged or destroyed. There were seven reported injuries. One man was killed when the roof of his house fell in on him. The tornado had a length of six miles and a width of 150 yards. It cost approximately \$25 million in total and ranked as an F4.

**Event Narrative 2: 05/05/2003**

A tornado event began at 0038 on May 5<sup>th</sup> and resulted in approximately \$3 million in property damage. 85 homes were damaged, 2 barns were destroyed, and five businesses were damaged. The Tornado had a length of four miles and a width of 100 yards. It was determined to be an F1. In the City of Fairview, a well-built home was 75% destroyed by strong winds. A home on Shady Glen Court near Franklin burned completely down after being struck by lightning.

**Event Narrative 3: 02/05/2008**

The Super Severe Weather Outbreak on Feb. 5, 2008 produced supercellular thunderstorms, well in advance of a multicell line of thunderstorms. The whole episode lasted about 6 hours. This occurred ironically while many states, including Tennessee, were participating in the Super Tuesday Primary Election. Fortunately, polls had already closed in the mid-state when these tornadoes struck. Numerous homes were damaged in the Liepers Fork area. One house collapsed and hit another on Cold Water Road. The tornado had a length of 19.98 miles and a width of 300 yards. It ranked as an EF2 and cost about \$250 thousand in property damage.

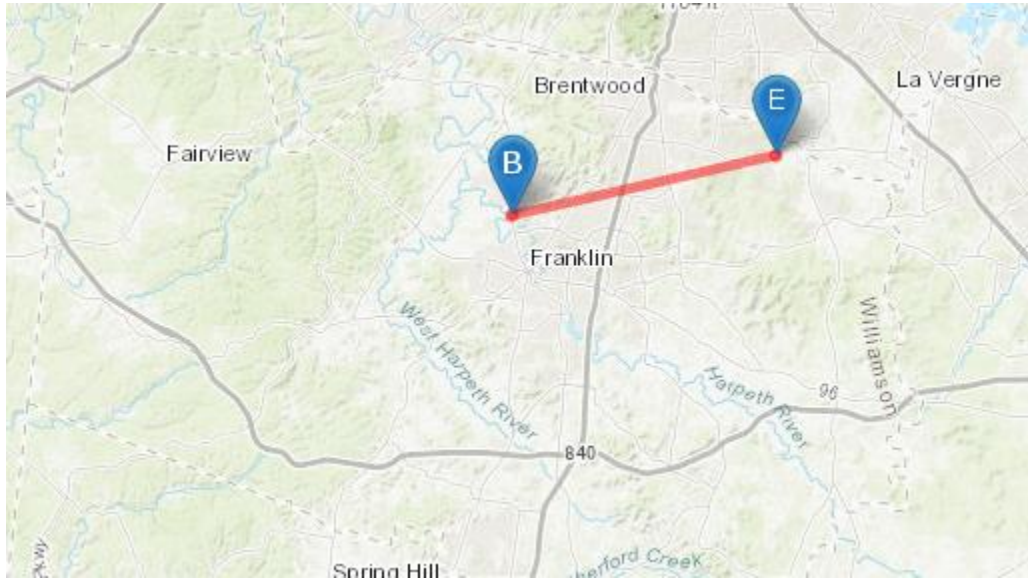


#### Event Narrative 4: 12/23/15

The most damaging severe weather outbreak in Middle Tennessee since the December 23, 2015 Tornado Outbreak struck during the morning hours on March 1, 2017. A line of strong to severe thunderstorms with embedded circulations, known as a Quasi-Linear Convective System (or QLCS), moved rapidly across Middle Tennessee at 60-70 mph from west to east between 0600 and 1000 CST. Additional severe thunderstorms developed later in the morning and affected areas of southern Middle Tennessee from the late morning into the early afternoon hours. Widespread damaging winds were reported in nearly every county along and north of I-40 across Middle Tennessee, with winds estimated up to 90 mph in some areas. These intense downburst winds caused 3 injuries - two in Clarksville when a tree fell on a mobile home, and one in Lavergne when a tractor-trailer flipped over. In addition to the damaging winds, 7 confirmed tornadoes also touched down from the Nashville metro area eastward to the Upper Cumberland, damaging hundreds of homes and businesses. Several reports of large hail were also received in parts of southern Middle Tennessee.

An EF-1 tornado touched down along Hillsboro Road just northwest of the city of Franklin, then moved rapidly east-northeast across the Cool Springs and Brentwood areas of northern Williamson County before lifting just west of the Davidson County line. The first evidence of damage was several trees blown down in the Monticello neighborhood on Poteat Place and Spencer Creek Road near Hillsboro Road. Two sheds were destroyed and more trees snapped and uprooted along South Berrys Chapel Road. Several more trees were blown down and an outbuilding damaged along Mallory Station Road and Jackson Lake Drive, and numerous homes suffered minor to moderate roof, siding, and chimney damage along Sunrise Circle and Brentwood Pointe. Several businesses suffered damage along Mallory Lane and Galleria Boulevard including blown out garage doors and roof damage, and a video of the tornado was taken from a car dashcam on Commerce Way. The tornado then weakened as it crossed Interstate 65, but still blew down seven interstate highway signs along the roadway. As the tornado moved through Brentwood, it continued to blow down trees and cause minor damage to homes and

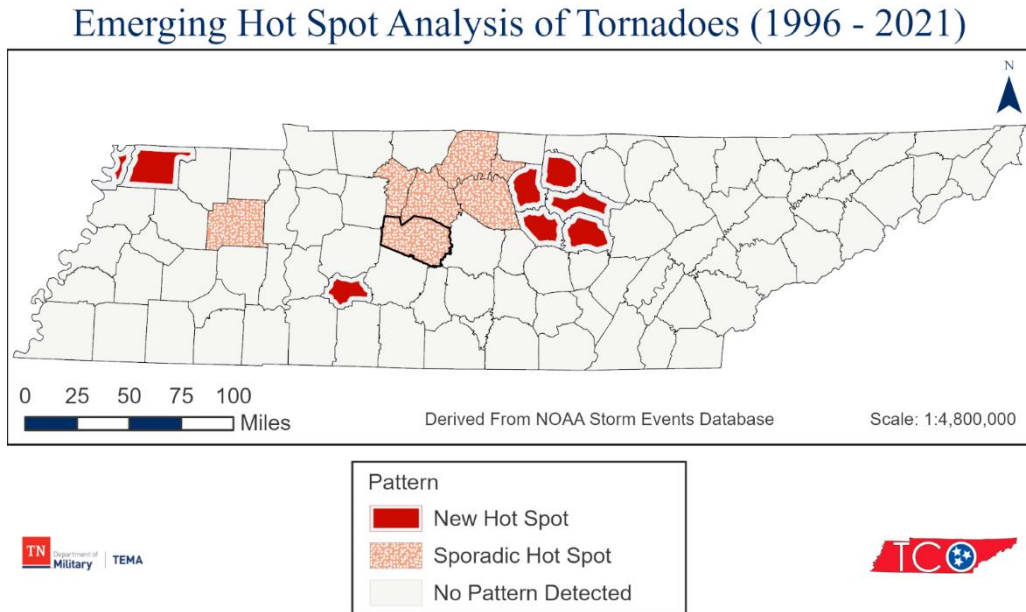
businesses on Westgate Circle, Gordon Petty Drive, Wilson Pike, Demery Court, Crockett Road, and in the Governor's Club neighborhood. The tornado then intensified as it traveled down Concord Road, with dozens of trees snapped and uprooted and numerous homes suffering roof and exterior damage. The tornado then lifted near Owl Creek Park along Chestnut Springs Road just before reaching the Davidson County line. Preliminary estimates from Williamson County Emergency Management indicated that 472 homes and businesses received minor damage, 49 sustained moderate damage, and one home on Sunrise Circle suffered major damage for a total of 522 damaged structures. Damage totals are estimated at \$7.27 million.



### Probability of Future Events - Likely

Historical data and weather patterns were analyzed to determine the likelihood of future tornado occurrence in Williamson County. Since 1950, 28 tornadoes have occurred within the county. In conjunction with the future weather projections developed by ETSU Geoinformatics & Disaster Science Lab, it can be assumed that a tornado could occur in Williamson County on a yearly basis. *Figure 7* illustrates the Emerging Hot Spot Analysis based on the Number of Tornadoes per year recorded in the NCEI Storm Events Database from 1996 to 2021

**Figure 7: Emerging Hot Spot Analysis based on the Number of Tornadoes per Year Recorded in the NCEI Storm Events Database from 1996 to 2021, Williamson County Outlined in Bold.**



### 2.7.3 Risk Assessment

The entirety of Williamson County can be considered at risk for a tornado. This includes the entire County population, all critical facilities, buildings (commercial and residential), and infrastructure. Tornadoes tracked in Tennessee predominantly travel in a northeasterly direction in the state. While all assets are considered at risk from this hazard, a particular tornado would only cause damages along its specific track.

The [National Risk Index](#) is a dataset and online tool to help illustrate the United States communities most at risk for natural hazards. It was built and designed by FEMA in close collaboration with various stakeholders and partners in academia; local, state and federal government. The Risk Index leverages available source data for natural hazards and community risk factors to develop a baseline relative risk assessment for each county and census tract. Some of these community risk factors include social vulnerability which is determined by the data pulled from the Census performed every ten years. A higher social vulnerability score is proportional to a higher risk score.

#### National Risk Index Score for Tornado = Relatively Moderate

Although the National Risk Index is a well-valued tool, it fails to properly show the feedback from the participating jurisdictions. Therefore, all identified hazards were evaluated in regard to risk by an established risk-scoring system provided by the Williamson County Emergency Management Agency and approved by the HMPC. Local jurisdictions evaluated the conditions using a mid-level impact scenario of the identified hazard. The results are below:

**Tornado Risk as Determined by the HMPC THIRA**

When identifying tornado data in Williamson County, only data provided by the NWS was used. Although other sources confirmed that these events occurred, the data provided from the NWS was the primary data, due to the confusion between strong winds produced in thunderstorms and the winds from tornados.

The impact and probability numbers assigned to this hazard are as follows:

Human Impact	Property Impact	Business Impact	Operational Impact	Environmental Impact	Probability	Risk Score
4	5	2	3	3	4	7.4

Given the information above it becomes vital that all participating jurisdictions are able to prioritize the necessity of mitigation actions in the following lifeline categories so that they can become more resilient in the whole community that they serve.

**2.7.4 Land Use and Development Trends**

Williamson County codes include proper wind strength and safety regulations consistent with state and federal regulations. While the adopted code provides adequate protection, older and mobile homes are highly susceptible to tornado events. There are multiple mobile home areas in the county that fall into this additional risk category.

**2.7.5 Multi-Jurisdictional Differences**

The entirety of Williamson County and its incorporated jurisdictions are at risk for a tornado event; however, it is often difficult to fully understand the damage done by disasters in some of the rural parts of the county compared to some of its more urban counterparts. It is also worth noting that given the county’s sizeable rural component, some tornadic events may have gone unreported.

**2.7.6 Summary**

The entirety of Williamson County can be considered at risk for a tornado. This includes the entire county population, all critical facilities, buildings (commercial and residential), and infrastructure. While all assets are considered at risk from this hazard, a tornado would only cause damages along its specific track. The weakest tornadoes, EF0, can cause minor roof damage, and stronger tornadoes can destroy frame buildings and badly damage steel-reinforced concrete structures. Given the strength of the wind impact and construction techniques, buildings are vulnerable to direct impact, including potential destruction, from tornadoes and wind debris that tornadoes turn into missiles. Structures constructed of light materials like mobile homes are most susceptible to damage.

## 2.8 Wildfire

### 2.8.1 Hazard Overview

According to the Tennessee Division of Forestry, debris burning, and arson are the two leading causes of wildfires. Generally, three significant factors sustain wildfires and allow predictions of a given area's potential to burn. These factors include, fuel, topography; and weather.

Fuel is the material that feeds the fire and is a critical factor in wildfire behavior. Fuel is generally classified by type and by volume. Fuel sources are diverse and include everything from dead tree needles, twigs, and branches to dead standing trees, live trees, brush, and cured grasses. Artificial structures and other associated combustibles are also considered a fuel source. The type of prevalent fuel directly influences the behavior of wildfire. Light fuels such as grasses burn quickly and catalyze spreading wildfires.

An area's topography (terrain and land slopes) affects its susceptibility to wildfire spread. Fire intensities and rates of spread increase as the slope increases due to the tendency of heat from a fire to rise via convection and radiation. The natural arrangement of vegetation throughout a hillside can also contribute to increased fire activity on slopes.

Weather components such as temperature, relative humidity, wind, and lightning also affect the potential for wildfire. High temperatures and low relative humidity dry out the fuels that feed the wildfire, creating a situation where fuel will more readily ignite and burn more intensely. The wind is the most treacherous weather factor. The issue of drought conditions contributes to concerns about wildfire vulnerability.

### 2.8.2 County Profile

Williamson County is a healthy mix of both suburban and rural areas. As such, there are vast amounts of land susceptible to wildfires. Information recorded by the Tennessee Division of Forestry and other agencies often fails to record the full scope of fires that pose risks to the health and safety of Williamson County Citizens. As such, information regarding fires in Williamson County was pulled from the Computer Aided Dispatch (CAD) system, which maintains a record of all fires in Williamson County that emergency services were called to. In using this source, fires of a smaller scale that threatened property or the safety of the Williamson County citizenry are also guaranteed to be included. For an additional record of wildfire and brush fire events, please view the spreadsheet located in Appendix C.

#### Event Narrative 1: 11/19/2023

At approximately 1700 on 11/19/2023, firefighters were dispatched to a possible 10-acre brush fire near Zebe Lane in Fairview. The steep terrain in the area made it difficult for firefighters to fully extinguish or approach the fire. Additionally, rapidly changing weather conditions allowed the fire to grow more rapidly. The fire was mostly extinguished by firefighters walking the perimeter using hand tools. The Tennessee Division of Forestry paired with fire crews were able to utilize bulldozers to help contain the fire. Initially, about 35 firefighters worked the fire until approximately 2100 when the fire was extinguished. The Williamson County Emergency Management Agency provided a drone for aerial views of the fire and related hot spots.

The following Monday, at approximately 5:00 am, firefighters returned to the scene after the fire had rekindled. The fire was investigated and likely caused due to hunters who had built a small

warming fire that grew out of control. The fire was started during an active burn ban across the county.



### **Event Narrative 2: 11/07/2023**

On the Tuesday morning of November 7<sup>th</sup>, half a dozen agencies responded to a large brush fire that spread to consume more than 150 acres of land. The fire was started after a logging company lit the log pile as people were clearing the property. Before everyone left, the pile was buried but reignited later on.

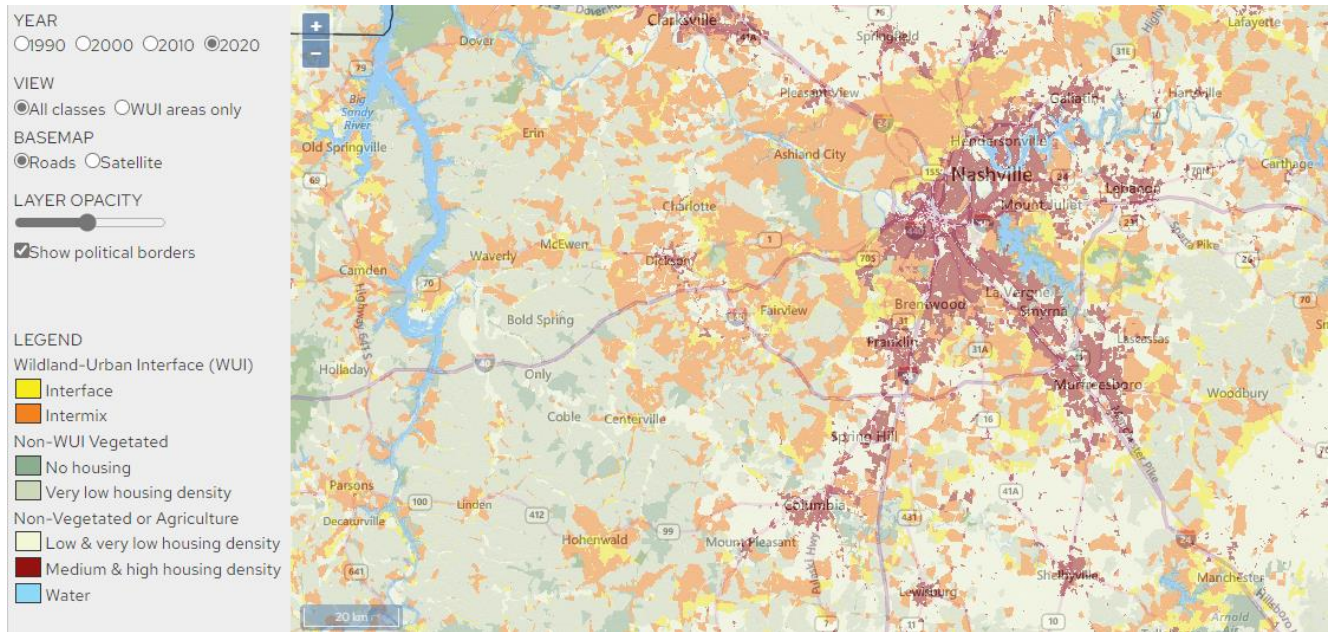
Crews from Franklin Fire, Fairview Fire, Williamson County Emergency Management, Williamson County Sheriff's Office Air 1, Tennessee State Forestry, and Williamson County Fire and Rescue responded. They contained the fire within two hours. Units stayed on the scene throughout the day to deal with hot spots.

This fire marked the 18th brush fire reported in the first week of November, according to Jill Burgin, the external affairs officer for the Williamson County Emergency Management Agency. Williamson County experienced a 155% increase in brush fires from September to November during prolonged drought conditions. The majority were caused by open burning, she said.



*Event Summary:*

Unincorporated Williamson County is served by all volunteer fire personnel. As such, manpower can be limited during normal weekday business hours. Due to the terrain and rural nature of the county, wildfire poses a significant risk to the region's agricultural resources and residential structures. As seen by the Wildland Urban Interface map below, most of the unincorporated county is either low housing density or intermix. The sparse population and the availability of fuel create an environment where fires could develop and spread rapidly and have a delayed ability to be noticed and summon a response.

**Figure 8: Wildland-Urban Interface (SILVIS LAB)**

### Probability of Future Events – Likely

It is hard to predict the likelihood of wildfires as many factors contribute to the ignition of a wildfire. Wildfires can be part of a natural and healthy forest disturbance process, but they have become increasingly frequent and severe in recent years. Higher spring and summer temperatures cause soils to be drier for longer, increasing the likelihood of drought and a more extended wildfire season. These hot, dry conditions also increase the chance that wildfires will be more intense and long-burning once they are started by lightning strikes or human carelessness. With the current growth being experienced in the County, human caused wildfires will continue to occur more often from land clearing and construction activities.

Due to changing precipitation patterns, future conditions make forests more susceptible to severe fires. Wildfires emit carbon dioxide, greenhouse gases, and air pollutants such as methane and nitrous oxide, up to 3% of annual U.S. greenhouse gas emissions. Wildfires release carbon that has been sequestered by the burned trees. However, these effects are not uniform across all forests.

Additionally, the Climate Risk and Resilience Portal states that conditions prone to increase wildfires and brush fires are likely to increase. The maximum average temperature annually was historically 65.49 degrees. However, the mid-century numbers are suggesting 68.21 degrees (RCP 4.5) and 67.7 degrees (8.5 RCP). By the end of the century, temperatures are expected to increase to 69.79 degrees (RCP 4.5) and 73.38 (RCP 8.5). Drought can be intensified by unusually warm temperatures. When combined with very low precipitation and snowpack, extreme heat can lead to decreased streamflow, dry soils, and large-scale tree deaths. These conditions create increased potential for extreme wildfires that spread rapidly, burn with more severity, and are costly to suppress. With increasing temperatures, it is expected that these conditions will become more frequent and wildfire/brush fire risk will increase.

The Fire Weather Index (FWI) estimates weather-related wildfire danger using daily readings of temperature, relative humidity, wind speed, and precipitation. It considers conditions that influence the spread of wildfires, including the dryness of fuel sources and high winds. Higher FWI values represent greater danger of wildfires due to weather conditions, though FWI values signal different levels of relative fire danger across regions. Values above 25 typically represent a high level of danger in the northern regions, whereas values above 40-45 often represent a high level of danger in the Southwest. Williamson County is estimated to have an FWI of 38.65 recorded for Summer as the percent change between end of century estimates and the historical number data. This suggests that climate change is likely to contribute to this risk becoming greater in the future for all of Williamson County.

This assessment has been well supported by the increase in brush fires and wildfires that have occurred in Williamson County. In the fall of 2023, a burn ban was placed into effect to help limit the occurrences of these incidents that required a response from the county emergency management agency and county/municipal fire departments. Pre-existing strategies such as the implementation of burn bans are increasingly more necessary as the risk remains high for these types of events.

### **2.8.3 Risk Assessment**

Wildfires are more likely to occur during drought periods due to dryer foliage being quicker to ignite and spread.

The [National Risk Index](#) is a dataset and online tool to help illustrate the United States communities most at risk for natural hazards. FEMA built and designed it in close collaboration with various stakeholders and partners in academia; local, state and federal government. The Risk Index leverages available source data for natural hazards and community risk factors to develop a baseline relative risk assessment for each county and census tract. Some of these community risk factors include social vulnerability which is determined by the data pulled from the Census performed every ten years. A higher social vulnerability score is proportional to a higher risk score.

#### **National Risk Index Score for Wildfire = Very Low**

Although the National Risk Index is a well-valued tool, it fails to show the feedback from the participating jurisdictions properly. Therefore, all identified hazards were evaluated regarding risk by an established risk-scoring system provided by the Williamson County Emergency Management Agency and approved by the HMPC. Local jurisdictions evaluated the conditions using a mid-level impact scenario of the identified hazard. .

#### **Wildfire/Brush Fire Risk as Determined by HMPC THIRA**

To determine the overall risk of a Wildfire/Brush Fire in Williamson County, data was taken from the National Centers for Environmental Information (NCEI) by the National Oceanic and Atmospheric Administration (NOAA) as well as the Williamson County Computer Aided Dispatch (CAD) system. Additionally, the risk assessment from the Southern Group of State Foresters (SGSF) and the Tennessee Wildfire Risk Assessment is also included. This risk assessment states Williamson County is at a low risk of experiencing a wildfire.

According to the National Wildfire Coordinating Group (NWCG), a wildfire exists in one of seven classes. These are:

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

Any fire within Williamson County that falls into any of these classes will be included. A history of fires that have been recorded across Williamson County since 2005 is included in the local threat and hazard data as provided in Appendix C.

The impact and probability numbers assigned to this hazard are as follows:

Human Impact	Property Impact	Business Impact	Operational Impact	Environmental Impact	Probability	Risk Score
2	3	1	2	3	5	7.2

Given the information above it becomes vital that all participating jurisdictions are able to prioritize the necessity of mitigation actions in the following lifeline categories so that they can become more resilient in the whole community that they serve.

**2.8.4 Land Use and Development Trends**

Many residential and commercial buildings and most infrastructure networks throughout the county may be vulnerable to wildfire impacts. Many of these structures are at risk for direct and indirect impacts; such as downed electrical lines, decreased water quality, decreased air quality, devastated agriculture crops, and restricted travel routes.

**2.8.5 Multi-Jurisdictional Differences**

Due to the nature of wildfires, Williamson County and all incorporated jurisdictions are equally susceptible to them. Due to the rapidly growing population, residential density is adding increased chances of loss of life or injury if a wildfire were to occur. Due to a high amount of rural farmland, there is an increased crop or farm animal loss potential. Fire response by emergency personnel in municipal areas of the county occurs more rapidly than in unincorporated Williamson County.

**2.8.6 Summary**

Williamson County and the incorporated jurisdictions are equally vulnerable to wildfire. Fires, smoke, and air quality can affect people’s health and safety. Therefore, it is essential to have proper measures in place to prevent critical structures, homes, and businesses from being vulnerable to fire and smoke damage.

## 2.9 Drought/Excessive Heat

### 2.9.1 Hazard Overview

Drought is a deficiency in precipitation over an extended period. It is a standard, recurrent feature of climate that occurs in virtually all climate zones. The duration of droughts varies widely. In some cases, drought develops relatively quickly and lasts a very short time, exacerbated by extreme heat and/or wind. There are other cases when drought spans multiple years or even decades. Studying the paleoclimate record is often helpful in identifying when long-lasting droughts have occurred. Common types of droughts are detailed below.

**Table 23: Drought Classifications**

Type	Details
<b>Meteorological Drought</b>	Meteorological Drought is based on the degree of dryness (rainfall deficit) and the length of the dry period.
<b>Agricultural Drought</b>	Agricultural Drought is based on the impacts on agriculture by factors such as rainfall deficits, soil water deficits, reduced groundwater, or reservoir levels needed for irrigation.
<b>Hydrological Drought</b>	Hydrological Drought is based on the impact of rainfall deficits on the water supply, such as stream flow, reservoir and lake levels, and groundwater table decline.
<b>Socioeconomic Drought</b>	Socioeconomic drought is based on the impact of conditions (meteorological, agricultural, or hydrological drought) on the supply and demand of some economic goods. Socioeconomic deficiency occurs when the demand for an economic good exceeds the supply due to a weather-related deficit in the water supply.

The wide variety of disciplines affected by drought, its diverse geographical and temporal distribution, and the many scales drought operates on make it difficult to develop a definition to describe drought and an index to measure it. Many quantitative measures of droughts have been developed in the United States, depending on the discipline affected, the region being considered, and the particular application. Several indices developed by Wayne Palmer and the Standardized Precipitation Index help describe the many scales of drought.

The U.S. Drought Monitor summarizes drought conditions across the United States and Puerto Rico. Often described as a blend of art and science, the map is updated weekly by combining a variety of data-based drought indices and indicators and local expert input into a single composite drought indicator.

The Standardized Precipitation Index (SPI) measures drought, which differs from the Palmer Drought Index (PDI). Like the PDI, this index is negative for lack and positive for wet conditions. But the SPI is a probability index that considers only precipitation, while Palmer's indices are water balance indices that consider water supply (rain), demand (evapotranspiration), and loss (runoff).

The Palmer Drought Severity Index (PDSI), devised in 1965, was the first drought indicator to assess moisture status comprehensively. It uses temperature and precipitation data to calculate

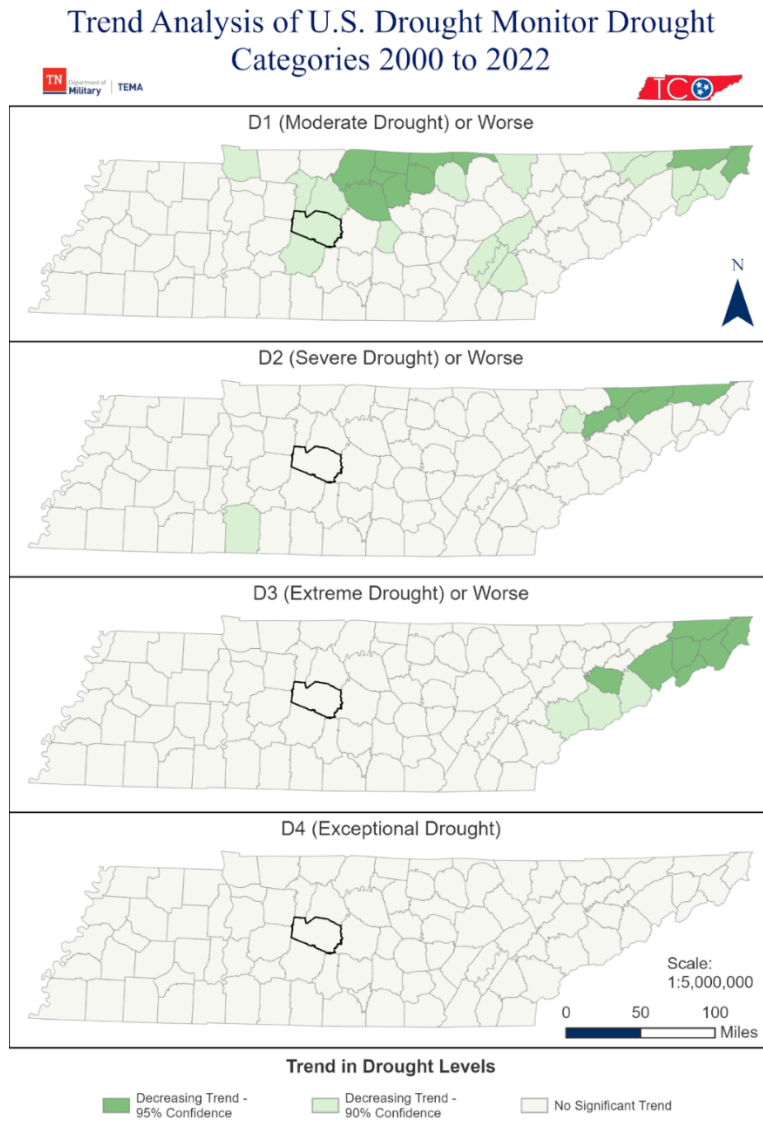
water supply and demand, incorporates soil moisture, and is considered the most effective for unirrigated cropland. It primarily reflects the Perry-term drought and has been used extensively to initiate drought relief. It is more complex than the SPI and the Drought Monitor.

## **2.9.2 County Profile**

### **Drought**

According to the trend analysis map shown in *Figure 9*, Middle Tennessee has a relatively low risk of drought hazards. However, drought cannot be confined to geographic or political boundaries, and some areas may experience more severe drought events than what is shown on the map.

**Figure 9: Trend Analysis of U.S. Drought Monitor from 2000 – 2021, Williamson County Outlined in Bold.**



**Figure 10: Drought Monitor Time Series (Source: National Drought Mitigation Center)**

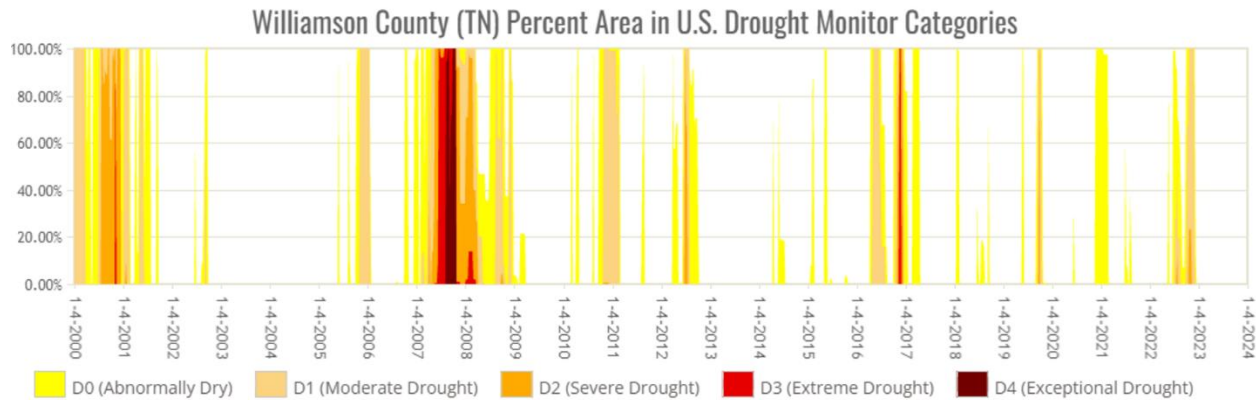


Figure 10 above illustrates drought conditions within Williamson County between 2000 and 2024. According to the National Drought Mitigation Center, the last Exceptional Drought (D4) period occurred in 2007. D4 (exceptional drought) is categorized by browning grass, low lake levels, municipality water restrictions, and increased water prices. D0 (abnormally dry) conditions consist of hard ground and declining agriculture ponds and creeks. A table containing all NOAA-recorded drought events between 2000 - 2023 for Williamson County is included in Appendix C.

*Event Narrative 1: 05/01/2007*

Drought conditions started in March 2007, but farmers felt its effects in May. The hay quality was poorer, and yield was down by as much as 60 to 70 percent. There were 14 consecutive days in May, specifically from May 17-30, when no rain fell in Nashville. There was a trace of rain on May 31. May had 3.30 inches of rain, which was 1.77 inches below normal.

The longest period on record for no rain was 36 consecutive days from September 11, 1923 through October 16, 1923. This drought affected much Middle Tennessee, including surrounding counties: Humphreys, Hickman, Lewis, Wayne, and Benton. Many reports of poor/low-quality crops were made: dairy cows were producing 20% less milk, fish were dying by the thousands, and numerous ponds, creeks, streams, and some wells were drying up. Tennessee crop losses in 2007 approximated around \$750 million. Some counties/cities had to implement water restrictions throughout the drought.

*Event Narrative 2: 07/03/2012*

After several weeks of below-normal rainfall, drought conditions across several Middle Tennessee counties reached the D2 Severe Drought Classification Criteria as stated in the U.S. Drought Monitor on Tuesday, July 3rd. As the month progressed, the drought conditions across these counties ended as ground moisture levels approached average levels for this time of year.

*Event Narrative 3: 11/01/2022*

With much of November 2022 remaining abnormally dry, drought conditions across Middle Tennessee worsened. By the end of November, 100 percent of Middle Tennessee was in at least moderate drought with about 34 percent in severe drought. Drought conditions worsened the most for counties near the Tennessee River and those along and near the Cumberland Plateau. For much of the month, precipitation totals were well below normal, generally ranging from 1 to

3 inches. A beneficial storm system brought widespread rainfall during the last couple days of November helped improve drought conditions in the update released in December. Severe drought conditions from October 2022 improved to moderate drought in November.

*Event Narrative 4: 10/17/2023*

With an abnormally dry fall for Middle Tennessee, drought conditions quickly worsened throughout the area. At the beginning of October, only abnormally dry conditions were observed across portions of Middle Tennessee. However, by the end of the month, about 70 percent of the area was in at least a severe drought, with about 42 percent of that area in the extreme drought category. Areas across the northwest were still only in the abnormally dry category due in part to this area receiving about 1.5 to 3 inches of rain during the month. With this abnormally dry fall, Nashville's rainfall deficit for the year continued to worsen at 7.71 inches below normal for the year. Drought conditions across Williamson County quickly deteriorated through October with severe to extreme drought conditions observed across the entire county by the end of the month.

### **Heat Waves**

Excessive Heat is when the heat index reaches at least 105°F for at least three hours on two consecutive days, and the nighttime air temperature does not drop below 75°F. The definition of Excessive Heat is a “rule of thumb” because the detrimental effects of high temperatures and humidity vary among segments of the population (old, young, etc.) and whether the population in general has built up a heat tolerance (residents in desert communities fair better than visitors). While some may better cope with excessive heat as defined, others may still be adversely affected by a lower heat index. A “rule of thumb” works for mitigation planning because the benefits of specific mitigation actions start accruing before conditions reach excessive heat levels. Exposure to extreme heat can pose health risks, including sunburn, dehydration, heat cramps, and heat stroke.

[The National Weather Service Heat Index](#) calculates how hot it feels when relative humidity is factored in with the actual air temperature using a 4-factor scale: caution, extreme caution, danger, extreme danger. The National Weather Service (NWS) also issues Heat Alerts.

- A Heat Advisory is issued 12-24 hours before the onset, at least 100°F but less than 105°F for at least 2 hours.
- An Excessive Heat Watch is issued when temperatures of 105°F or greater are forecasted for the next 24 to 72 hours.
- An Excessive Heat Warning is issued when temperatures of 105°F last for more than 3 hours per day for two consecutive days or temperatures exceed 115°F for any period.

The following narratives were obtained via the NOAA Storm Event Database for Excessive Heat. A table containing all NOAA-recorded events between 2000-2024 for Williamson County is included in Appendix D.

*Event Narrative 1: 08/04/2010*

Afternoon heat index readings ranged from 110 to 115 degrees over much of Middle Tennessee on August 4th. Around the Nashville Metropolitan area, a couple dozen people were hospitalized suffering from heat exhaustion along with several others being hospitalized suffering from burnt feet. There were no known fatalities. There were also numerous reports of damage from the heat,

including exploding tires on automobiles. Afternoon temperatures around 100 degrees and unusually high humidity led to heat index values between 110 and 115 degrees on August 4th.

#### *Event Narrative 2: 6/30/23*

The first part of the day on June 30, 2023, was characterized by dangerous hot and humid conditions across most of Middle Tennessee as heat index values soared to 115 to 125 degrees. With these hot temperatures, an abundant amount of instability was in place across the area. With a mesoscale convective system (MCS) developing over Illinois and Indiana and diving southward, it moved into an environment that was favorable for severe thunderstorms. Damaging winds were the main hazards with this line of thunderstorms with several wind damage reports received through the evening hours. A weather station near Brentwood measured a maximum heat index value of 121 degrees.

#### **Probability Future Events – Likely**

The probability of Williamson County and its municipalities experiencing a drought/excessive heat event can easily be determined based on the historical record of 38 droughts per the NOAA since 2019. It can reasonably be assumed that these types of events have occurred consistently and will continue to occur each year.

#### **2.9.3 Risk Assessment**

Williamson County is vulnerable to drought; however, estimated potential losses are inherently difficult to calculate because drought tends to cause minor damage to the built environment. Therefore, it is assumed that all buildings and facilities in the planning area would technically be exposed to the drought hazard; however, there is no significant vulnerability to these buildings on a structural level.

Potential drought losses can be calculated in terms of the value of agriculture in the County, which is perhaps most vulnerable to drought. According to the USDA, the net income for agriculture is around \$2.6 million. Population growth could contribute directly to this hazard, as more users pull from the available water supply within the region. Drought can also increase the County's vulnerability to wildfires. Dry, hot, and windy weather combined with dry vegetation and a spark through human intent, accident, or lightning can start a wildfire.

The [National Risk Index](#) is a dataset and online tool to help illustrate the United States communities most at risk for natural hazards. It was built and designed by FEMA in close collaboration with various stakeholders and partners in academia; local, state and federal government. The Risk Index leverages available source data for natural hazards and community risk factors to develop a baseline relative risk assessment for each county and census tract. Some of these community risk factors include social vulnerability which is determined by the data pulled from the Census performed every ten years. A higher social vulnerability score is proportional to a higher risk score.

#### **National Risk Index Score for Drought = Very Low**

Although the National Risk Index is a well-valued tool it fails to properly show the feedback from the participating jurisdictions. Therefore, all identified hazards were evaluated in regard to risk by an established risk-scoring system provided by the Williamson County Emergency Management Agency and approved by the HMPC. Local jurisdictions evaluated the conditions using a mid-level impact scenario of the identified hazard. The results are below:

**Drought/Excessive Heat Risk as Determined by the HMPC THIRA**

To determine the overall risk of Drought/Excessive Heat in Williamson County, data was taken from the National Weather Service (NWS) as well as the National Centers for Environmental Information (NCEI) by the National Oceanic and Atmospheric Administration (NOAA).

Similar to the other natural hazards, data from these two sources were the primary resources used to determine how many days of drought and excessive heat were experienced in Williamson County.

The impact and probability numbers assigned to this hazard are as follows:

Human Impact	Property Impact	Business Impact	Operational Impact	Environmental Impact	Probability	Risk Score
1	3	1	1	2	5	6.6

Given the information above, it becomes vital that all participating jurisdictions are able to prioritize the necessity of mitigation actions so that they can become more resilient in the whole community that they serve.

**2.9.4 Land Use and Development**

According to the National Drought Mitigation Center, how we use land affects our vulnerability to drought. In general, land use patterns that maintain the integrity of watersheds and that have a smaller paved footprint result in greater resilience in the face of drought. The projected increase in population will possibly result in an increase in buildings and infrastructure, leading to increased impervious areas. An increase in population may also put increasing pressure on water and other natural resources, particularly during periods of drought. Therefore, future development could impact drought vulnerability in Williamson County.

**2.9.5 Multi-Jurisdictional Differences**

Due to the nature of drought, Williamson County and the incorporated jurisdictions are equally susceptible to drought conditions.

**2.9.6 Summary**

Williamson County and all incorporated jurisdictions are equally vulnerable to drought/excessive heat. With historical frequency considered, there is a significant chance of these events occurring each year. Drought/excessive heat can affect people’s health and safety. 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. Drought/excessive heat conditions can also provide a substantial increase in wildfire risk. As plants and trees wither and die from a lack of precipitation, increased insect infestations, and diseases—all associated with drought—they become fuel for wildfires. Williamson County 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.

## 2.10 Severe Winter Weather

### 2.10.1 Hazard Overview

A freeze occurs when temperatures are below 32 degrees Fahrenheit for a period. These temperatures can damage crops, burst water pipes, and create layers of “black ice.” Winter storms are events that can range from a few hours of moderate snow to blizzard-like circumstances that can affect driving conditions and impact communications, electricity, and other services. In Williamson County, all jurisdictions are vulnerable to freezes and moderate winter storms, but not to the severity level seen in much of the northern U.S. Based on previous occurrences, Williamson County can experience multiple winter weather events in one year affecting all jurisdictions equally. The severity of winter storms is commonly measured by inches of snowfall. It is possible for snowfall to accumulate up to 1 foot in Williamson County and/or ice accumulations to cause hazardous conditions. Much of these conditions are impacted by the numerous waterways present in middle Tennessee.

### 2.10.2 County Profile

The entirety of Williamson County is at risk of severe winter weather. Severe winter weather events can include large snow storms and ice storms. The NWS chose these severity measures as parameters more capable of producing considerable damage.

Event narratives were obtained via the NOAA Storm Event Database and are included below for each severe weather category. Tables containing all NOAA-recorded severe weather events between 1950- 2024 for Williamson County are contained in Appendix C.

#### Event Narrative 1: 02/16/2015

A major winter storm affected Middle Tennessee through much of the day on February 16, with a wintry mix of freezing rain, sleet, and snow. Freezing rain and sleet predominated along and south of I-40, with a mix of sleet and snow north of I-40. Combined ice and sleet accumulations ranged from 0.1” to 3” south of I-40, while combined sleet and snow accumulations north of I-40 ranged from 1” to over 7” near the Kentucky border. With temperatures well below freezing, widespread ice and snow covered all surfaces, resulting in numerous trees and power lines being knocked down and lengthy power outages lasting for a few days in some cases. Many roadways were impassable or closed, resulting in nearly all Middle Tennessee school systems shutting down for the entire week. Precipitation totals across Williamson County ranged from 0.5” to 2” of combined ice and sleet. A CoCoRaHS observer 3.8 miles SW of Fairview measured 2.0 of combined ice and sleet, while another CoCoRaHS observer 3.9 miles WSW of Eagleville measured 0.5” of combined ice and sleet. A photo from X showed 2” of ice and sleet in Franklin. Numerous trees and power lines were knocked down across the county, and many roads and schools were closed.

#### Event Narrative 2: 02/15/2021

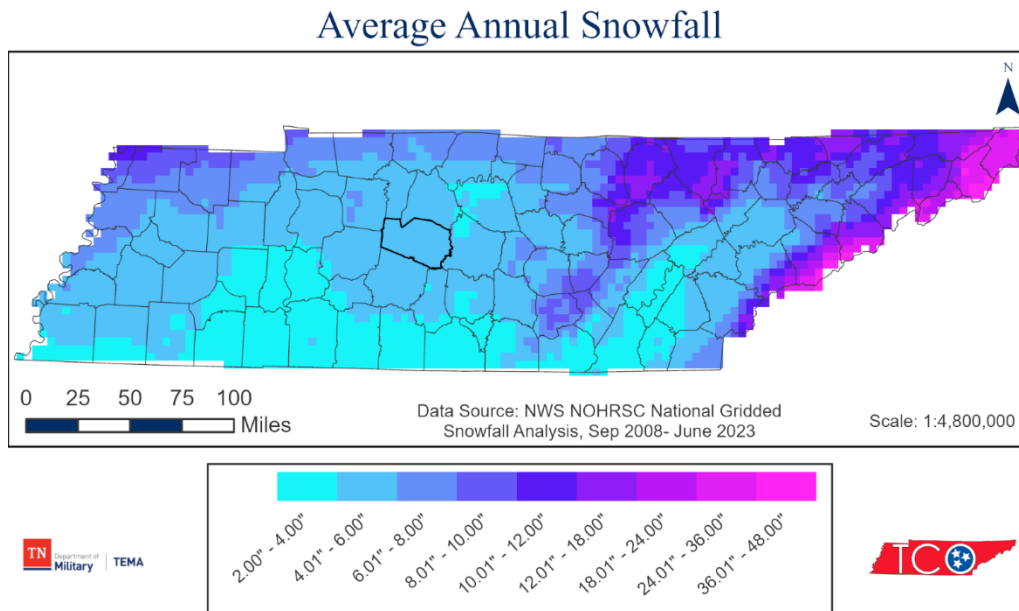
An Arctic airmass spread across Middle Tennessee from Thursday, February 11 through Sunday, February 14, 2021, bringing very cold temperatures in the teens and 20s along with lengthy periods of freezing drizzle. This led to ice forming on elevated surfaces such as trees and power lines, as well as bridges, overpasses, and some roadways. As a major winter storm brought additional freezing rain, sleet, and snow to the area from Sunday evening February 14 into Monday, February 15, 2021, the previous ice combined with the new ice, sleet, and snow to

cause significant ice storm damage across parts of east-central Middle Tennessee, as well as create massive travel disruptions area wide. Locations from Giles and Lincoln Counties northeastward to Pickett and northern Fentress Counties received anywhere from 0.5” to over 1” of ice accretion from the combination of the weekend freezing drizzle plus new freezing rain. Numerous trees and power lines were downed in many counties, resulting in tens of thousands of power outages, with the worst damage affecting Lincoln, Bedford, Coffee, Cannon, Putnam, Overton, and northern Fentress Counties. Elsewhere, 2 to 3 inches of combined sleet and snow along with the frigid temperatures caked most surfaces in a thick layer of ice, with travel coming to a standstill across the northwestern half of Middle Tennessee - including the Nashville metro area. A wintry mix of snow and sleet brought snow accumulations up to 1/2 inch and sleet accumulations up to 2.5 inches across the county. Roads were ice covered and impassable, with most businesses and schools closed for the entire week.

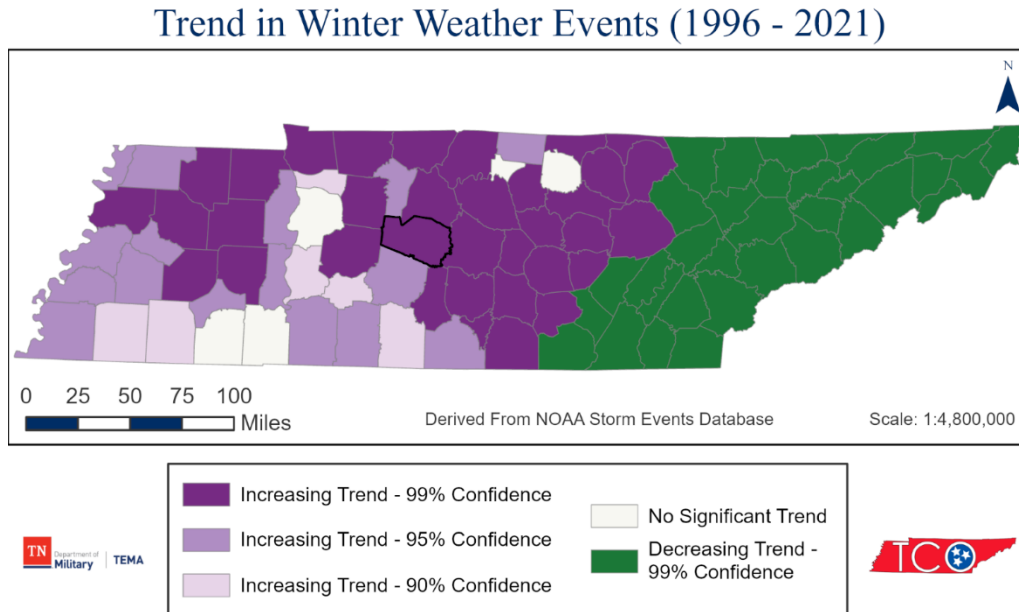
**Probability of Future Events - Likely**

Data from the National Weather Service NOHRSC National Gridded Snowfall Analysis webpage covering the winters of 2008-2009 to 2022-2023 (the last 15-years) indicates that the average annual snowfall for Williamson County ranges from 4 to 6-inches per year. Using data from the NOAA Storm Events Database, trend analysis was performed on winter weather-related storms from 1996 to 2021 across the state of Tennessee. In this time period there was an increasing trend in the number of winter storms impacting Williamson County, this trend was significant to the 99% confidence level.

**Figure 11: Average Annual Snowfall from the Winter of 2008/2009 to the Winter of 2022/2023, Williamson County Outlined in Bold.**



**Figure 12: Trends in the Number of Winter Weather-Related Events Recorded in the NCEI Storm Events Database from 1996 to 2021, Williamson County Outlined in Bold.**



Climate trends and variability will impact the future likelihood of winter weather events or severe winter storms in Tennessee, likely decreasing but not eliminating the overall risk. Average annual temperatures are expected to increase across the Southeast US, including temperatures during the winter season. Williamson County has an observed warming trend of +0.1°F per decade from 1896 to 2023 throughout the meteorological/climatological winter season (December – February). In the medium-term (1961 - 2023) the winter temperature trend shows greater warming at +0.8°F per decade, however, the short-term (1991 - 2023) trend shows slightly moderated warming of +0.6°F per decade during the winter season. The moderation was caused by the exclusion of the very cold winters of 1963 and 1977-1979.

**2.10.3 Risk Assessment**

Severe weather is not as spatially defined in any location in Williamson County; therefore, the entire County is equally at risk of severe weather. This includes the entire County population, all critical facilities, buildings (commercial and residential), and infrastructure. The National Risk Index is a dataset and online tool to help illustrate the United States communities most at risk for natural hazards. It was built and designed by FEMA in close collaboration with various stakeholders and partners in academia; local, state and federal government. The Risk Index leverages available source data for natural hazards and community risk factors to develop a baseline relative risk assessment for each county and census tract. Some of these community risk factors include social vulnerability which is determined by the data pulled from the Census performed every ten years. A higher social vulnerability score is proportional to a higher risk score.

**National Risk Index Score for Ice Storm = Relatively Low****National Risk Index Score for Winter Weather = Relatively Low**

Although the National Risk Index is a well-valued tool it fails to properly show the feedback from the participating jurisdictions. Therefore, all identified hazards were evaluated in regard to risk by an established risk-scoring system provided by the Williamson County Emergency Management Agency and approved by the HMPC. Local jurisdictions evaluated the conditions using a mid-level impact scenario of the identified hazard.

To determine the overall risk of a severe Winter Weather/Snow and Ice event in Williamson County, data was pulled from the National Weather Service (NWS), the National Centers for Environmental Information (NCEI) by the National Oceanic and Atmospheric Administration (NOAA), WebEOC, and the Williamson County Computer Aided Dispatch (CAD) system.

When identifying Winter Weather/Snow and Ice event data, incidents that have an impact on life safety or pose a risk of damage to property and or the environment are included. Additionally, considerations must be given to transportation as it will be significantly impacted by the hazards associated with this type of event.

The impact and probability numbers assigned to this hazard are as follows:

Human Impact	Property Impact	Business Impact	Operational Impact	Environmental Impact	Probability	Risk Score
2	2	1	1	1	4	5.4

Given the information above it becomes vital that all participating jurisdictions are able to prioritize the necessity of mitigation actions so that they can become more resilient in the whole community that they serve.

**2.10.4 Land Use & Development**

Increased development and population growth can reasonably translate to increased damages resulting from severe winter weather events. The population in Williamson County is expected to rise similarly to its surrounding counties and Tennessee. An increase in population will lead to an increase in the number of residential and commercial structures, as well as new and improved infrastructure, which in turn means an increase in the number and value of assets at risk of damage caused by severe winter weather.

**2.10.5 Multi-Jurisdictional Differences**

The entirety of Williamson County and the incorporated jurisdictions, including all assets, can be considered equally at risk of severe winter weather events. This includes the entire population, all critical facilities, buildings (commercial and residential), and infrastructure.

**2.10.6 Summary**

Williamson County is subject to severe winter weather hazards. Associated damages include impacts to utilities, residential and commercial buildings/property, and agricultural losses. Large snowfalls or even the immediate start to snowfall may cause traffic collisions or lead to health concerns in the home as heating becomes more difficult and residents look to alternatives such as

generators and fireplaces. As such, severe winter weather poses a legitimate risk to Williamson County.

## 2.11 Earthquake/Seismic Activity

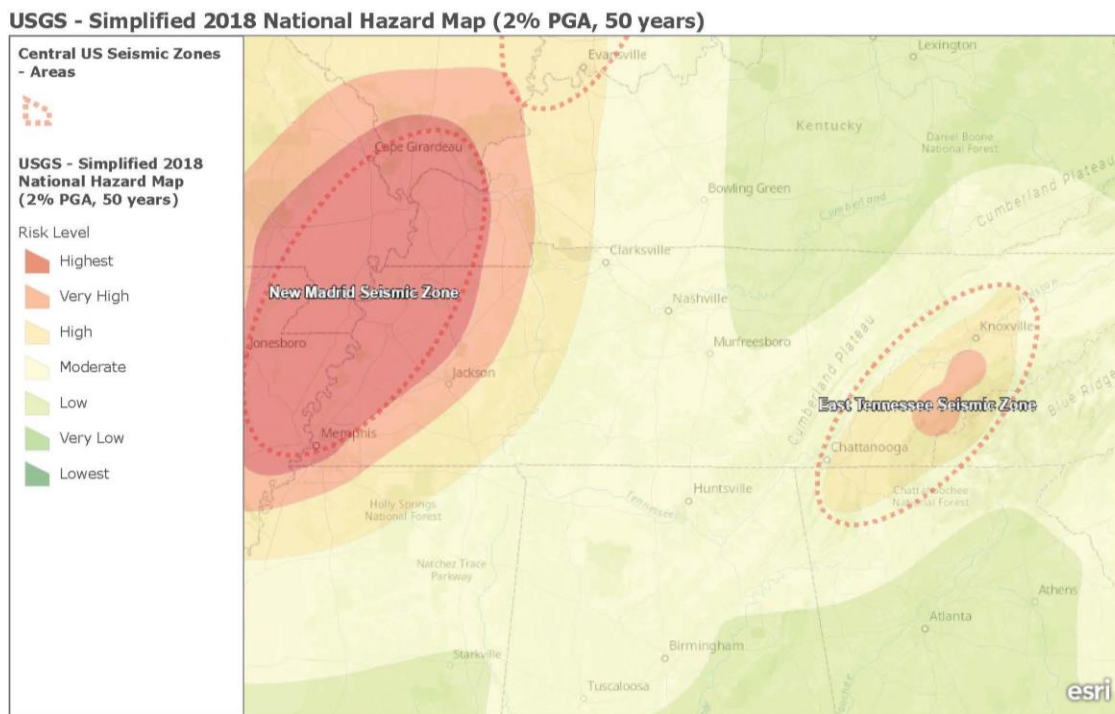
### 2.11.1 Hazard Overview

An earthquake results from a sudden release of energy in the Earth's crust that creates seismic waves. The energy originates from a subsurface fault. A fault is a fracture or discontinuity in a volume of rock along tectonic plates. In the most general sense, the word earthquake describes any event that generates seismic waves. Earthquakes are typically caused by the rupturing of geological faults. Occasionally, they are also caused by other events such as volcanic activity, landslides, mine blasts, and nuclear tests. An earthquake's point of initial rupture is called its focus or hypocenter. The epicenter is the point at ground level directly above the hypocenter.

### 2.11.2 County Profile

Williamson County is near the major intraplate (within a tectonic plate) seismic zone known as the New Madrid Seismic Zone. The New Madrid Seismic Zone (NMSZ) is an approximately 120-mile-long fault system that stretches across five states, including Western Tennessee. Williamson County is near the East Tennessee Seismic Zone (ETSZ) which stretches across three states. The figure below illustrates the risk level of the NMSZ/ETSZ within the state.

**Figure 13: New Madrid Seismic Zone (Source: [CUSEC](#))**



Earthquake hazard map showing peak ground accelerations having a 2 percent probability of being exceeded in 50 years, for a firm rock site.

Esri, USGS | Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS

Williamson County has not experienced any recorded earthquakes in the last twenty years above a small magnitude (1.0 or greater), however, the NMSZ is known for producing four of the largest North American earthquakes in recorded history, all of which would have been felt in Williamson County. This includes the noted three-month period between December 1811 and February 1812 that had at least four earthquakes which are understood by scientists to be greater than a M7.0. During this period, there were dozens of strong earthquakes ranging between M6.0

and M7.5. Thousands of smaller shocks were documented. Similar to the 1811-12 New Madrid earthquake sequence which created Reelfoot Lake in Lake County, Tennessee, very large magnitude earthquake sequences are believed to have occurred in pre-historic times as well. Paleo-liquefaction and geologic evidence suggest large earthquake sequences occurred in the New Madrid Seismic Zone in 1450 AD and 900AD.

Based on geologic research on the paleo seismic record of past earthquakes, the USGS estimates that there is a 7 to 10 percent chance of a New Madrid earthquake the size of those in 1811-12 occurring in the next 50 years. However, the occurrence of even a moderate-sized earthquake located in close proximity to urban centers such as Memphis or St. Louis could be locally devastating. The last magnitude-6 earthquake struck near Charleston, Missouri, in 1895. The chance of such an earthquake occurring in the New Madrid region in the next 50 years is 25 to 40 percent.

These probabilities are derived from the USGS National Seismic Hazard Maps, which are developed from geologic information about faults, evidence of prehistoric earthquakes, instrumental and historical earthquake catalogs generated by seismic monitoring, and ground deformation measurements. The National Seismic Hazard Maps are used to estimate probabilities of large earthquakes and the ground shaking to be expected if those earthquakes occur.

The Eastern Tennessee Seismic Zone (ETSZ), a zone of small earthquakes stretching from northeastern Alabama to southwestern Virginia. The ETSZ is the second-most active natural seismic zone in the central and eastern United States, behind the New Madrid Seismic Zone in the Mississippi River region that produced the 1811-1812 magnitude 7+ earthquakes. In historic times, the ETSZ has not produced earthquakes larger than magnitude 4.8, however, scientists believe the ETSZ is capable of generating magnitude 6 or greater. The ETSZ region is home to several nuclear power plants and hydroelectric dams related to the Tennessee Valley Authority, along with major population centers such as Knoxville and Chattanooga.

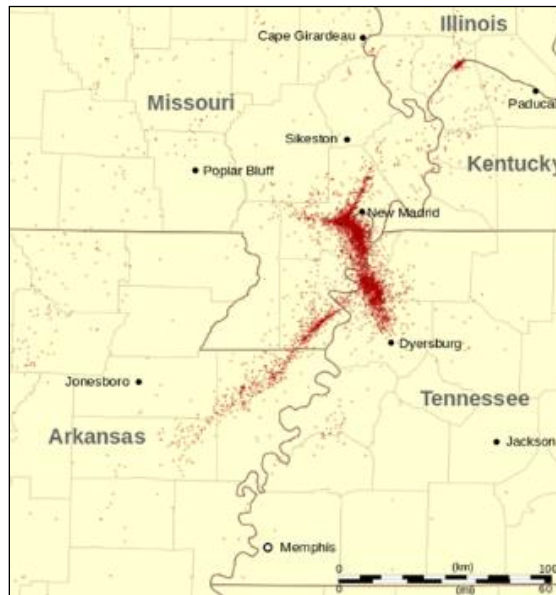
**Table 24: Richter Scale Classification (Source: USGS)**

Richter Scale for Earthquakes		
Magnitudes	Description	Typical Impacts
< 2.0	Micro	Not felt.
2.0-2.9	Slight	Generally, not felt but recorded.
3.0-3.9	Minor	Often felt, but rarely causes damage.
4.0-4.9	Light	Noticeable shaking of indoor items and rattling noises. Significant damage is likely.
5.0-5.9	Moderate	It can cause major damage to poorly constructed buildings in small regions. At most slight damage to well-designed buildings.

Richter Scale for Earthquakes		
Magnitudes	Description	Typical Impacts
6.0-6.9	Strong	It can be destructive in areas up to about 100 miles across populated areas.
7.0-7.9	Major	It can cause serious damage over larger areas.
8.0-8.9	Great	It can cause severe damage in areas several hundred miles across.
9.0-9.9	Epic	They are devastating in areas several thousand miles across.

Since 1812, the most significant recorded earthquakes from the New Madrid Zone were in 1895 and 1968. Since seismic measurement instruments were installed in and around the zone in the 1970s, more than 4,000 small earthquakes have been recorded, with the vast majority being too small to be felt.

**Figure 14: NMSZ Earthquakes Recorded Since 1974 (Source: USGS)**



According to a 2008 FEMA report, a severe earthquake in the NMSZ could result in the highest economic loss due to a natural disaster in U.S. history. Based on this report, a 7.7 magnitude quake in the NMSZ would result in thousands of fatalities, hundreds of billions of dollars in damage to structures, and total disruption of vital infrastructure in Western Tennessee, including Williamson County.

**Probability of Future Events – Likely**

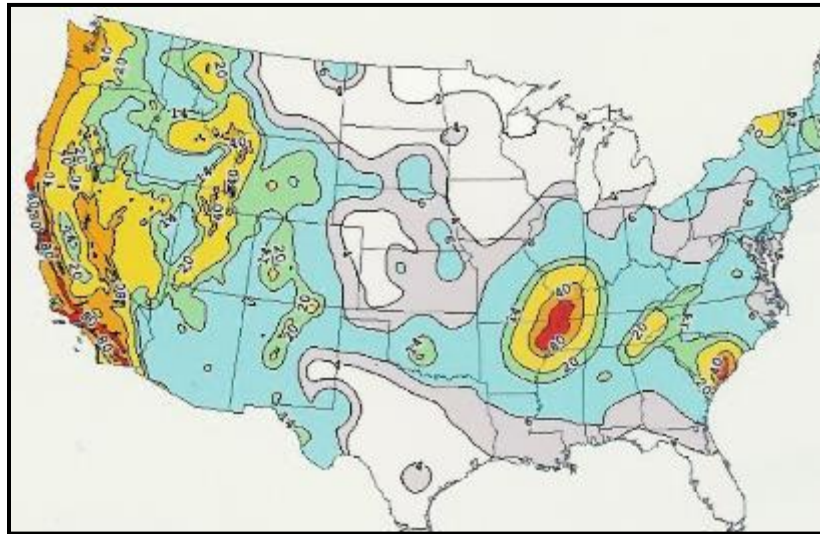
A catastrophic earthquake at the NMSZ would result in \$100-200 million in building damages. Furthermore, according to the HAZUS, Williamson County will experience the following in a catastrophic earthquake scenario:

**Table 25: Catastrophic Earthquake Damages**

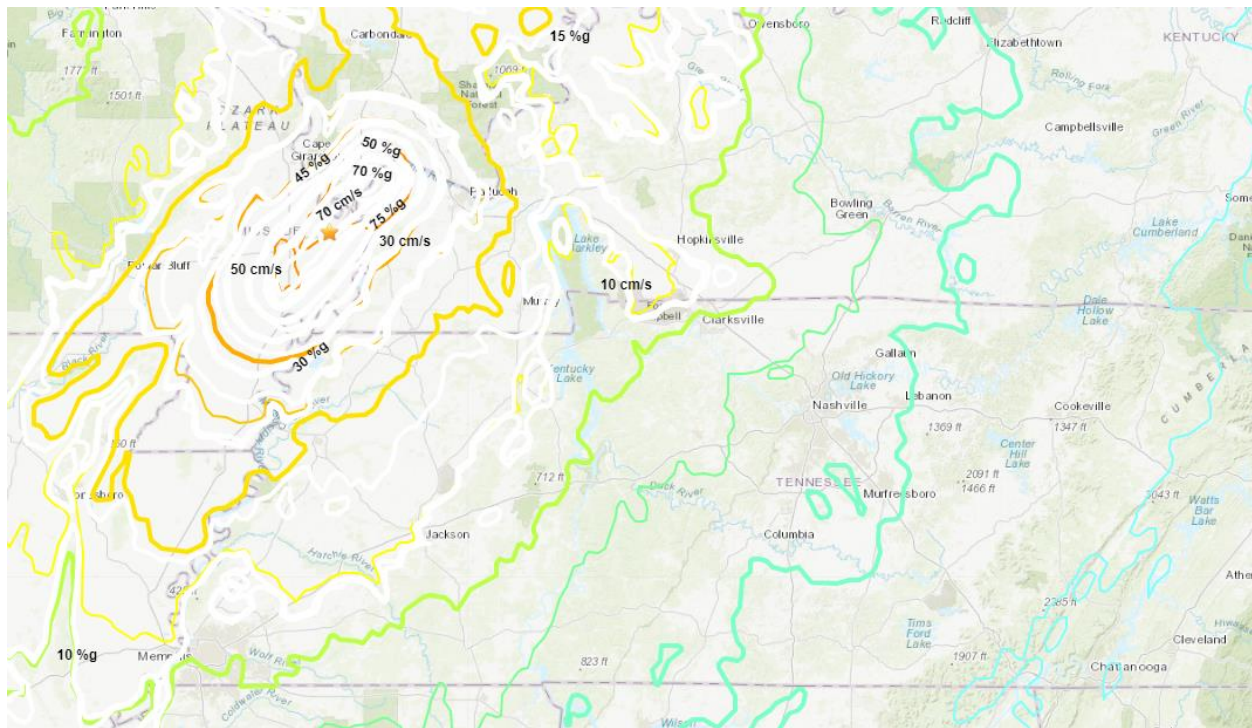
Impact Overview		Numerical Value	
Fatalities		1	
Injuries		31	
Displaced Residents		37	
Residents Requiring Shelter		17	
Debris (tons)		43,000	
Residencies experiencing >moderate damage		557	
Day 1			
Households without power		0	
Households without potable water		0	
Resources Functioning on Day 1		Infrastructure Functioning after Day 1	
Resource	Percentage Functioning	Resource	Percentage Functioning
Hospitals	100	Highway Segments	100
Police Stations	100	Railway Segments	100
Fire Stations	100	Airport Segments	N/A
Schools	100	Bus facilities	N/A
Communications	100	Ports	N/A

Many buildings and the majority of infrastructure networks throughout the county could be vulnerable to earthquake impacts. HAZUS estimates that there are 63 thousand buildings in the region which have an aggregate total replacement value of \$54,689 million. In terms of building construction types found in the region, wood frame construction makes up 77% of the building inventory. Throughout the county, all buildings and infrastructure are vulnerable to earthquake impacts.

**Figure 15: National Seismic Hazard Map (Source: USGS) Ground Motions with a 2% Chance of Occurring in 50 Years**

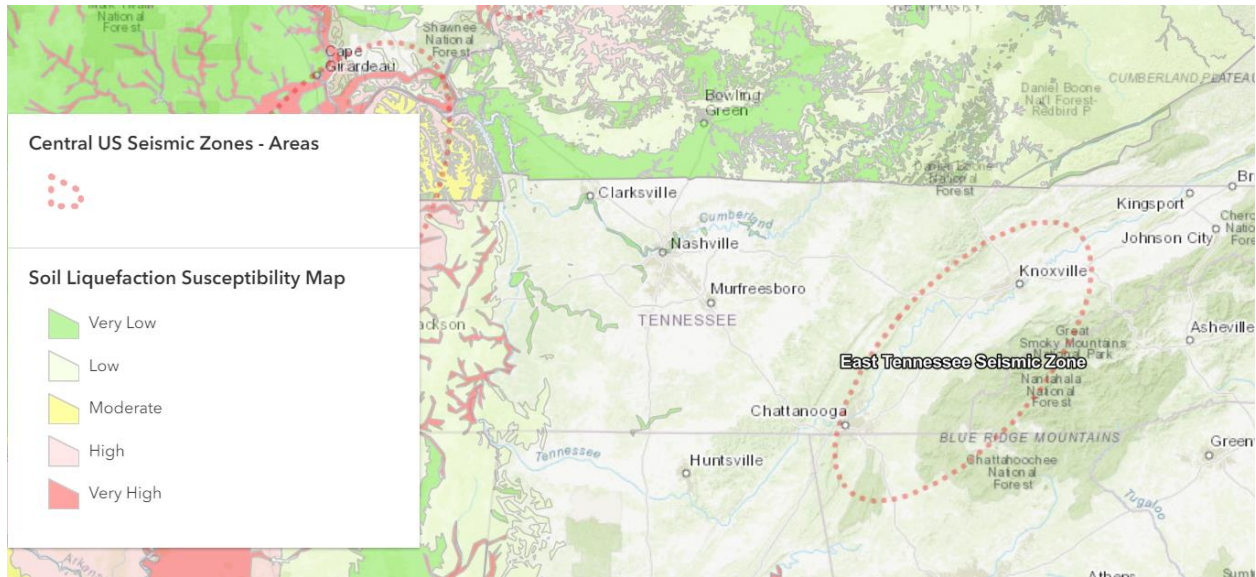


**Figure 16: Mercalli Intensity Zones In Williamson County (Source: [USGS](#))**



As indicated in the above maps, all of Williamson County’s jurisdictions and districts sit within intensity zones IV (light) to VI (strong) of the Modified Mercalli Intensity Scale due to its proximity to the NMSZ/ETSZ.

According to the Central United States Earthquake Consortium (CUSEC), Williamson county has a low level of risk for liquefaction following an earthquake.

**Figure 17: Earthquake Induced Liquefaction (Source: [CUSEC](#))**

### 2.11.3 Risk Assessment

The [National Risk Index](#) is a dataset and online tool to help illustrate the United States communities most at risk for natural hazards. It was built and designed by FEMA in close collaboration with various stakeholders and partners in academia; local, state and federal government. The Risk Index leverages available source data for natural hazards and community risk factors to develop a baseline relative risk assessment for each county and census tract. Some of these community risk factors include social vulnerability which is determined by the data pulled from the Census performed every ten years. A higher social vulnerability score is proportional to a higher risk score.

#### **National Risk Index Score for Earthquake = Relatively Moderate**

Although the National Risk Index is a well-valued tool it fails to properly show the feedback from the participating jurisdictions. Therefore, all identified hazards were evaluated in regard to risk by an established risk-scoring system provided by the Williamson County Emergency Management Agency and approved by the HMPC.

To determine the overall risk of earthquake/seismic incidents in Williamson County, data was taken from the National Weather Service (NWS) as well as the United States Geological Survey (USGS).

Similar to the other natural hazards, data from these two sources were the primary resources used to determine how many days seismic activity was experienced in Williamson County. However, knowledge and experience of local citizens and the HMPC was also incorporated to create a more accurate assessment.

The impact and probability numbers assigned to this hazard are as follows:

Human Impact	Property Impact	Business Impact	Operational Impact	Environmental Impact	Probability	Risk Score
4	5	4	4	4	1	5.2

Given the information above it becomes vital that all participating jurisdictions are able to prioritize the necessity of mitigation actions so that they can become more resilient in the whole community that they serve.

#### **2.11.4 Land Use and Development Trends**

Heavily populated or industrialized centers are at a higher risk for catastrophic earthquake damage. Williamson County, like much of Tennessee, is experiencing rapid growth increasing the likelihood of significant impacts to life and property from a significant earthquake.

#### **2.11.5 Multi-Jurisdictional Differences**

Counties predominantly in the West Portion of Tennessee will be more likely impacted by the New Madrid Zone. However, a significant magnitude earthquake can cause primary and secondary effects across the state.

#### **2.11.6 Summary**

Due to its proximity to the New Madrid Fault, the entirety of Williamson County could be subject to an earthquake. This includes the entire County population and all infrastructure. A significant earthquake event would result in a substantial loss of life and possibly a significant economic loss. Although the HAZUS report does not show a significant expectation of damage, the HMPC, with more direct knowledge of the county, recognizes the threat is greater than predicted.

## 2.12 Pandemic/Communicable Disease

### 2.12.1 Hazard Overview

Communicable disease (infectious disease) is defined as an illness caused by a specific infectious agent or its toxic product that results from transmission of that agent or its products from an infected person, animal, or reservoir to a susceptible host, directly or indirectly either through an intermediate plant or animal host, vector, or inanimate environment. Vector-borne diseases include bacterial and viral diseases transmitted by mosquitoes, ticks, and fleas. Pandemics are a widespread occurrence of a communicable disease that spans a whole country or the world at a particular time.

### 2.12.2 County Profile

Historically, examples of communicable disease outbreaks in Tennessee are West Nile Virus (mosquito-borne), bed bugs, and pertussis (whooping cough). The most recently declared worldwide communicable disease emergency that affected Tennessee was the COVID-19 (coronavirus) pandemic in 2020. Communicable disease cases are reported to the [Tennessee Department of Health](#) which provides reporting guidance and resources for communicable disease outbreaks within the state. Within Tennessee 12 diseases are categorized as immediate notification and 25 as next business day notification.

#### Event Narrative 1: 2009 H1N1 Pandemic

In the spring of 2009, a strain of H1N1 spread quickly across the U.S. and the globe. The U.S. government declared H1N1 (swine flu) a public health emergency in April 2006. By November 2009, 48 states reported cases of H1N1, mostly in children and young adults. The CDC estimates that 43 million to 89 million people had H1N1 between April 2009 and April 2010, resulting in an estimated 8,870 and 18,300 H1N1-related deaths.

#### Event Narrative 2: 2014 Ebola Outbreak

During the 2014 West African Ebola outbreak, 11 people were treated for Ebola Virus Disease (EVD) in the U.S., two of whom died. The majority were infected with the Ebola virus outside of the U.S. and either medically evacuated into the U.S. for treatment or entered the country as airline passengers.

#### Event Narrative 3: 2020 Coronavirus Pandemic

In December 2019, a coronavirus disease (COVID-19) outbreak was identified in Wuhan, China. In 2020, COVID-19 quickly spread to the United States, and in March 2020, the World Health Organization characterized COVID-19 as a pandemic. The United States declared a national emergency. Williamson County experienced the first case of COVID-19 in the state of Tennessee. It is estimated that 81,995 people were infected, resulting in 469 COVID-19-related deaths in Williamson County.

For the most current data, visit: <https://www.tn.gov/content/tn/health/cedep/ncov/data.html>

### 2.12.3 Risk Assessment

The entirety of Williamson County including all assets located within the County can be considered at risk. Vulnerable and underserved populations have a higher risk of severe illness following disease infections. Historically, these populations include adults aged 65 or older,

infants under 2 years old, marginalized populations experiencing health or social inequities, and individuals with medical conditions. While a pandemic outbreak will not directly impact critical facilities and infrastructure, it could severely impact local healthcare services, with clinical systems and 911 becoming overwhelmed. A severe pandemic may result in an interruption of services and a shortage of supplies.

The [Social Vulnerability Index \(SVI\)](#) is a dataset that uses 16 census variables that help local officials identify communities that may need support before, during or after disasters. Unfortunately, the National Risk Index does not capture non-natural disaster impacts, therefore, using the SVI can help public health officials and local planners better prepare for and respond to emergency events such as disease outbreaks.

**Social Vulnerability Index Score for Williamson County: 0.0213 (Low Level of Vulnerability)**

Although the Social Vulnerability Index (SVI) is a well-valued resource it fails to properly show the feedback from the participating jurisdictions. Therefore, all identified hazards were evaluated in regard to risk by an established risk-scoring system provided by the Williamson County Emergency Management Agency and approved by the HMPC. Local jurisdictions evaluated the conditions using a mid-level impact scenario of the identified hazard.

To determine the overall risk of a Pandemic in Williamson County, data was taken from the Williamson County Computer Aided Dispatch (CAD) system, WebEOC, the Centers for Disease Control and Prevention (CDC), the Tennessee Department of Health and from news reports deemed reliable.

All data in this category includes any recognized pandemics or epidemics that have posed a risk to life safety or had a significant impact on the operations conducted within Williamson County.

The impact and probability numbers assigned to this hazard are as follows:

Human Impact	Property Impact	Business Impact	Operational Impact	Environmental Impact	Probability	Risk Score
4	1	4	3	1	1	3.6

Given the information above it becomes vital that all participating jurisdictions are able to prioritize the necessity of mitigation actions so that they can become more resilient in the whole community that they serve.

**2.12.4 Land Use & Development**

Considering that the entire County is at risk of communicable disease, increased development, and population growth can reasonably translate to increased impacts due to these events. The population in Williamson County is expected to rise similarly to its surrounding counties and Tennessee. An increase in population may lead to an increased risk of infection and new and improved business, which in turn means an increase in the number and value of assets at risk of economic disruption.

### **2.12.5 Multi-Jurisdictional Differences**

The entirety of Williamson County and the incorporated jurisdictions, including all assets located within, can be considered equally at risk of communicable disease outbreaks. This includes the entire population, all critical facilities, buildings (commercial and residential), and infrastructure.

### **2.12.6 Summary**

Williamson County is subject to communicable diseases through plant or animal host, vector, or inanimate environments. Communicable diseases can spread, leading to deaths, local business impacts and closures, and supply chain disruptions. Infections and hospitalizations due to communicable diseases can overwhelm local healthcare services.

## 2.13 Geological Incident

### 2.13.1 Hazard Overview

Geological incidents within Williamson County could include both landslides and sinkholes. According to the United States Geological Survey (USGS), “A landslide is defined as the movement of a mass of rock, debris, or earth down a slope. Landslides are a type of "mass wasting," which denotes any down-slope movement of soil and rock under the direct influence of gravity. The term "landslide" encompasses five modes of slope movement: falls, topples, slides, spreads, and flows. These are further subdivided by the type of geologic material (bedrock, debris, or earth). Debris flows (commonly referred to as mudflows or mudslides) and rock falls are examples of common landslide types.

Almost every landslide has multiple causes. Slope movement occurs when forces acting down-slope (mainly due to gravity) exceed the strength of the earth materials that compose the slope. Causes include factors that increase the effects of down-slope forces and factors that contribute to low or reduced strength. Landslides can be initiated in slopes already on the verge of movement by rainfall, snowmelt, changes in water level, stream erosion, changes in ground water, earthquakes, volcanic activity, disturbance by human activities, or any combination of these factors.”

### 2.13.2 County Profile

Historically, the presence of sinkholes and landslides have not been a high risk for Williamson County. However, through various risk assessment meetings with the HMPC, members identified numerous occasions where landslides and sinkholes had occurred. Many of these members were part of emergency services within Williamson County and referred to instances where they responded to these hazards in nearby jurisdictions. Sinkholes are known to occur due to the karst topography that is not only common in Williamson County, but across middle Tennessee. Unfortunately, due to the low frequency of the hazard, the county and all participating municipalities have confirmed they do not actively map this hazard when they occur or consistently maintain a detailed narrative of these events.

The City of Brentwood was able to provide further context regarding their experiences with landslides, detailing the results of damage that occurred after the 2010 floods and subsequent landslide. Due to the flooding, the city experienced a large landslide that fortunately claimed no lives, but caused significant damage and required extensive recovery operations. The fiscal impacts of this event required nine contracts of more than \$10,000 which resulted in a total impact of \$247,983. Upon a thorough review and dedicated research effort, no further information could be found to provide a narrative of these events for the events described above or for the other municipalities included in this plan. As such, there is no available information other than the opinions of the subject matter experts involved in the planning process to provide an extent or detailed history of this risk occurring in Williamson County or any of its municipalities.

The National Risk Index (NRI) has recorded three occurrences of landslides in a 12-year span from 2010 to 2021. As such, we can expect a low probability of this event occurring per year in the future. We might expect that we may have one incident of this nature every 3-4 years. However, changes in climate and land use have begun to influence this risk in Williamson County. First, significant changes have occurred in land use and land cover caused by the

significant increase in the population of Williamson County. With the rapid growth of the county, changes in land use are heavily influencing the way that our natural environment responds to natural disasters. Recent studies of urban growth maps show that Williamson County is growing in a “hop-sotch” pattern including rural areas, especially in eastern parts of the county that were not intended for such development. Areas designed for urban growth in city areas around Fairview, Franklin, Brentwood, and Nolensville were not developed as heavily as expected in comparison to the rural areas which were developed more than expected. With the significant growth in population and new construction, Williamson County lost an estimated 260,000 acres of farmland from 2002 to 2020. This change not only leads to congestion, but also to stormwater issues, flooding, water quality issues, and new runoff patterns that contribute to an increased risk of geological hazards.

As Williamson County still has a significant agricultural industry, farmers may choose to switch to crops that have a higher economic return instead of their customary crops in an attempt to change with climate conditions. This change in crop production, or crop-switching, is commonplace across the United States as farmers look to adapt to climate change and maximize their yields and profits according to the London School of Economics and the City University of New York. This may influence the irrigation of rainfall and the amount of land cover present. Extreme weather events, warming temperatures, extreme cold weather, rising sea levels, and increased precipitation can contribute significantly to the frequency, severity, and intensity of geological incidents. As more heat and water is in the atmosphere with warmer ocean temperatures, it is likely storms will continue to increase in severity, and increase the probability of a geological incident occurring.

### **Event Narrative 1: 05/02/10**

On May 2<sup>nd</sup>, 2010, after experiencing over 13” of rain in two days, the members of the Pleasant View Baptist Church released a notice that all members would have to use a different entry into the congregation due to a mudslide that had completely blocked the normal entrance to the church. Although the high elevation of the church property protected it from flood waters, the debris from the mudslide caused damage and blocked an entrance/exit. These same mudslides blocked roads and menaced houses on a scale most locals had never witnessed prior.

The Williamson County Highway Department crews were kept busy right after the rain event, clearing hillside debris off roadways. Some of the biggest slides happened on Highway 96 West, near the Natchez Trace Bridge, as well as on Holly Tree Gap, where a slide closed that roadway for about a week.

This flooding event in May of 2010 caused significant amounts of landslides to occur across middle Tennessee. The landslides damaged homes, businesses, and blocked travel on various roadways.

For the most current data, visit:

<https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=ae120962f459434b8c904b456c82669d>

### **2.13.3 Risk Assessment**

The [National Risk Index](#) is a dataset and online tool to help illustrate the United States communities most at risk for natural hazards. It was built and designed by FEMA in close collaboration with various stakeholders and partners in academia; local, state and federal

government. The Risk Index leverages available source data for natural hazards and community risk factors to develop a baseline relative risk assessment for each county and census tract. Some of these community risk factors include social vulnerability which is determined by the data pulled from the Census performed every ten years. A higher social vulnerability score is proportional to a higher risk score.

**National Risk Index Score for Landslides = Relatively Moderate**

Although the National Risk Index is a well-valued tool it fails to properly show the feedback from the participating jurisdictions. Therefore, all identified hazards were evaluated in regard to risk by an established risk-scoring system provided by the Williamson County Emergency Management Agency and approved by the HMPC. Local jurisdictions evaluated the conditions using a mid-level impact scenario of the identified hazard.

To determine the overall risk of Geological incidents in Williamson County, data was taken from the National Weather Service (NWS) as well as the United States Geological Survey (USGS).

Similar to the other natural hazards, data from these two sources were the primary resources used to determine how many days seismic activity was experienced in Williamson County. However, knowledge and experience of local citizens and the HMPC was also incorporated to create a more accurate assessment.

The impact and probability numbers assigned to this hazard are as follows:

Human Impact	Property Impact	Business Impact	Operational Impact	Environmental Impact	Probability	Risk Score
4	1	4	3	1	1	3.6

Given the information above it becomes vital that all participating jurisdictions are able to prioritize the necessity of mitigation actions so that they can become more resilient in the whole community that they serve.

**2.13.4 Land Use & Development**

Considering that the entire County is at risk of geological incidents; increased development, and population growth can reasonably translate to increased impacts due to these events. The population in Williamson County is expected to rise similarly to its surrounding counties and Tennessee. An increase in population may lead to an increased risk of incidents and increased risk.

**2.13.5 Multi-Jurisdictional Differences**

The entirety of Williamson County and the incorporated jurisdictions, including all assets located within, can be considered equally at risk of geological incidents. Although not all municipalities have experienced this risk, all land in Williamson County is susceptible to this hazard. The USDA classifies all of the landmass in Williamson County under the Ecological Region Name of Interior Plateau and tracks data as appropriate to soil including moisture class, landform and profile depth. This includes the entire population, all critical facilities, buildings (commercial and residential), and infrastructure.

### **2.13.6 Summary**

Williamson County is at risk of geological incidents that can be initiated through a series of events, whether it be from seismic activity or due to significant rain and flooding. Sinkholes are not commonplace but they have caused damage in the past and have posed themselves as a risk to the well-being of the Williamson County citizenry.

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## Section Three: Mitigation Strategy

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### 3.1 Mitigation Goals

Goals are general guidelines that explain what is to be achieved. They are usually broad-based policy-type statements, long-term, and represent global visions. Goals help define benefits the plan is trying to achieve.

#### 3.1.1 Goal Setting Exercise

In 2023, and again in 2024, the HMPC agreed upon the goals for their hazard mitigation plan. It was decided that the goals from the 2017 plan should be carried over into the 2024 plan as they still reflected the current hazards and current conditions in the community.

#### 3.1.2 Resulting 2024 Plan Update Goals

At the end of the meeting, the HMPC agreed upon three general goals for planning efforts. Those goals are as follows:

**Goal 1:** Protect the lives and health of citizens from the effects of natural hazards.

**Goal 2:** Emphasize mitigation planning to decrease vulnerability to new and existing structures.

**Goal 3:** Encourage public support and commitment to hazard mitigation by communicating mitigation benefits.

### 3.2 Expanding & Improving Mitigation Programs

Each municipality within Williamson County, including the unincorporated areas, are all experiencing rapid growth. As such, increased residences are being constructed, new roads are being built, and the size of the government infrastructure is working to grow with it.

Each municipal and county emergency management professional has been pursuing mitigation planning in unity and will continue to do so in future planning processes. Each emergency management professional for the unincorporated and incorporated municipalities of Williamson County has been given the authority to carry out mitigation planning efforts including application for grants, planning, and the execution of mitigation actions. Some mitigation actions will require consultation or approval by other representatives and as such, the municipal and county emergency management programs will be responsible for facilitating this process. Some communities in Williamson County are unable to dedicate a staff member full-time to the position of emergency management and as such, will rely on assistance from the county to help carry out mitigation efforts in their municipalities. These needs will be assessed throughout the continual planning process and will be addressed to local government leadership or public safety representatives as appropriate. In all mitigation planning efforts, members of the HMPC will be engaged to continue involving stakeholders from various fields and to build a more stable mitigation planning committee.

### 3.3 Compliance with NFIP

Williamson County and all municipalities therein participate in FEMA's National Flood Insurance Program (NFIP). Each participating community enforces a flood damage prevention ordinance that regulates development within the Special Flood Hazard Area (SFHA).

Additionally, as members of FEMA’s NFIP, each community requires Elevation Certificates on all new buildings and substantial improvements within the SFHA.

Given the flood hazards in the planning area, an emphasis will be placed on continued compliance with the NFIP. Currently mapped floodplains in the unincorporated county cover approximately 15,316 acres. Many of the structures were constructed prior to the county’s first flood insurance study in 1981. Since 2008, the County has also participated in the NFIP’s Community Rating System (CRS). The program provides flood insurance discounts to communities for exceptional floodplain management. The county is classified as a Class 8 community which allows for a 10% discount on certain flood insurance premiums.

Each jurisdiction participates in NFIP Webinars hosted by the State National Flood Insurance Program Office. Though not all jurisdictions have attended the same amount due to promotions and changes in staffing, each jurisdiction attends approximately three webinars per year at minimum. Each participating community will take the following steps to meet or exceed the following minimum requirements as set by the NFIP:

- Issuing or denying floodplain development/building permits;
- Inspecting all development to ensure compliance with the local ordinance;
- Maintaining records of floodplain development;
- Assisting in the preparation and revision of floodplain maps;
- Helping residents obtain information on flood hazards, floodplain map data, flood insurance, and proper construction measures.

As of May 31, 2024, the following are the designees appointed as the responsible individual for the NFIP in their municipality:

Municipality/Jurisdiction	Name:	Title:	Phone Number:
City of Brentwood	Todd Petrowski	City Planner	615-371-2232
City of Fairview	Micah Sullivan	Building Inspector	615-799-1585
City of Franklin	Shanna McCoy	Zoning Administrator	615-550-6631
City of Spring Hill	Dwayne Hicks	Codes Director	615-439-5606
Town of Nolensville	Don Swartz	Engineering Director	615-776-3323
Town of Thompson’s Station	Micah Wood	Interim Town Administrator	615-794-4333
Williamson County School District	N/A	N/A	N/A
Williamson County Unincorporated	Floyd Heflin	County Engineer	615-790-5731

**3.4 Substantial Damage (SD)/Substantial Improvement (SI)**

Williamson County will ensure that SD/SI provisions are followed after each applicable incident. Officials in NFIP-participating communities are responsible for regulating all development in SFHAs by issuing permits and enforcing local floodplain requirements, including SD, for the repairs of damaged buildings. After an event, they must:

- Determine where the damage occurred within the community and if the damaged structures are in an SFHA.
- Determine what to use for “market value” and cost to repair consistently; uniformly applying regulations will protect against liability and promote equitable administration.

- Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure’s pre-damage value.
- Require permits for floodplain development.

Following a disaster event, the floodplain manager should act quickly to move forward with the SI/SD process listed in *Figure 18*. Technical assistance may be available from FEMA and/or the state NFIP office. When there is a Presidentially Declared Disaster, communities may be reimbursed for these activities through FEMA Public Assistance.

**Figure 18: Substantial Damage Assessment Process**



State and federal officials do not make NFIP SD determinations. Local officials make these determinations based on their land use authority and locally adopted regulations.

The local emergency management representative in coordination with other effected municipalities or the county will be responsible for coordinating these efforts with the NFIP officials. Local government may be responsible for making determinations regarding SD/SI and/or may contract this responsibility out as appropriate and in accordance with law. Although local governments have trained staff, they may be overwhelmed in a large incident and may require assistance from the private sector.

The methodology for conducting these assessments will most likely rely on a GIS-based software product to guide assessors in the field and report back any information regarding SD/SI determinations. At a minimum, Williamson County and all municipalities will meet the minimum requirements of the NFIP by utilizing the Substantial Damage Estimator (SDE) as provided by FEMA. To ensure the public is aware of the requirements for SD/SI, the local external affairs officers or public information offices in coordination with all affected municipalities will be responsible for sharing requirements with the public.

**3.5 Prioritization Process**

The prioritization process was necessary as most mitigation projects represent a significant investment of financial and personal resources. By evaluating each project’s degree of feasibility and the level of costs versus benefits, Williamson County could determine which projects should be included based on the available funding and time. The HMPC used the SAFE-T method to prioritize these projects. This approach was adopted from the successful methodology used by other counties in FEMA Region 4. This rating system uses five variables to evaluate each project’s overall feasibility and appropriateness. *Figure 19* further explains this method.

**Figure 19: SAFE-T Project Prioritization**

Project Prioritization Method: SAFE-T			
Variable		Value	Description
<b>S</b>	<b>Societal:</b> The public must support the overall implementation strategy and specified mitigation actions. The projects will be evaluated in terms of community acceptance, social vulnerability and societal benefits	<b>1</b>	Low community acceptance/priority
		<b>2</b>	Moderate community acceptance/priority
		<b>3</b>	High community acceptance/priority
<b>A</b>	<b>Administrative:</b> The projects will be evaluated for anticipated staffing and maintenance requirements to determine if the jurisdiction has the personnel and administrative capabilities necessary to implement the project or whether outside help will be needed.	<b>1</b>	High staffing, outside help needed
		<b>2</b>	Some staffing, no outside help needed
		<b>3</b>	Low staffing, no outside help needed
<b>F</b>	<b>Financial:</b> The projects will be evaluated on their general cost-effectiveness and whether additional outside funding will be required.	<b>1</b>	Somewhat cost-effective
		<b>2</b>	Moderately cost effective
		<b>3</b>	Very cost-effective
<b>E</b>	<b>Environmental:</b> The projects will be evaluated for any immediate or long-term environmental impacts caused by their construction or operation.	<b>1</b>	Many environmental impacts
		<b>2</b>	Some environmental impacts
		<b>3</b>	Few environmental impacts
<b>T</b>	<b>Technical:</b> the projects will be evaluated on their ability to reduce losses in the short term or long term.	<b>1</b>	Short-term fix
		<b>2</b>	Medium-term fix
		<b>3</b>	Long-term fix

The identification and analysis process of mitigation alternatives allowed the HMPC to come to a consensus and prioritize recommended mitigation actions. The HMPC discussed the contribution of the effort to save lives or property first and foremost, with additional consideration given to the benefit-cost aspect of a project; however, this was not a quantitative analysis. The team agreed that prioritizing the actions collectively enabled the actions to be ranked in order of relative importance and helped steer the development of additional actions that meet the more essential objectives while eliminating some of the actions which did not garner much support. The cost-effectiveness of any mitigation alternative will be considered in greater detail by performing benefit-cost project analyses when seeking FEMA mitigation grant funding for eligible actions associated with this plan.

### 3.6 Mitigation Action Plan

The Mitigation Action Plan identified in Table 26 was developed to present the recommendations developed by the HMPC for how the communities can reduce the risk and vulnerability of people, property, infrastructure, and natural and cultural resources to future disaster losses. Emphasis was placed on both future and existing development. The action plan summarizes who is responsible for implementing each of the prioritized actions and when and how the actions will be implemented. Due to funding availability and other criteria, it should be clarified that the actions included in this mitigation strategy are subject to further review and refinement, alternatives analyses, and reprioritization. This document does not obligate Williamson County and the incorporated jurisdictions to implement any or all of these projects.

Rather this mitigation strategy represents the desires of the community to mitigate the risks and vulnerabilities from identified hazards.

**Table 26: Williamson County New Mitigation Actions and Projects**

Name:	Hazards Mitigated:	Action Description:	Responsible Department:	Time Frame:	Funding Source:	Societal	Administrative	Financial	Environmental	Technical	Total SAFE-T Prioritization Score	Estimated Cost:	New or Existing Infrastructure
All participating jurisdictions	All-hazards	Create a joint damage assessment tool that can be implemented within all agencies in Williamson County responsible for collecting damage assessment data.	GIS	Short-Term (0-3 years)	HMGP, Local Funds	2	2	3	3	1	11	\$1,500	Both New and Existing
All participating jurisdictions	All-hazards	Obtain local data including tax parcels, building footprints, critical facility locations, and other information for use in risk analysis.	Emergency Management	Short-Term (0-3 years)	Local Funds	3	2	3	3	1	12	\$0	Both New and Existing
All participating jurisdictions	All-hazards	Identify the most at-risk critical facilities and evaluate potential mitigation techniques. Each participating jurisdiction should attempt to identify their top five most vulnerable critical infrastructure facilities and detail this information with the county and Tennessee homeland security agent assigned to Williamson County.	Emergency Management	Short-Term (0-3 years)	Local Funds	3	2	3	3	1	12	\$0	Both New and Existing
All	All-hazards	Obtain hazard data and use	Emergency	Short-	Local Funds	3	2	2	3	1	11	\$0	Both New

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participating jurisdictions		GIS to map risk for various hazards. The final product will result in an interactive series of maps that residents of each participating municipality can use to understand their risk.	Management, GIS	Term (0-3 years)									and Existing
All participating jurisdictions	All-hazards	Incorporate a stand-alone element for hazard mitigation into the applicable comprehensive (land use) plan.	Emergency Management, planning, codes enforcement	Short-Term (0-3 years)	Local Funds	2	3	3	3	1	12	\$0	Both New and Existing
All participating jurisdictions	All-hazards	Form a plan implementation steering committee to monitor progress on local mitigation actions. Include a mix of representatives from neighborhoods, local businesses, and local government.	Emergency Management	Short-Term (0-3 years)	Local Funds	2	1	3	3	1	10	\$0	Both New and Existing
All participating jurisdictions	All-hazards	Establish an interactive website for educating the public on hazard mitigation and preparedness measures. This website will also potentially serve as the future hazard mitigation plan as desired by the jurisdictions involved.	Emergency Management, GIS	Medium-Term (3-5 years)	Local Funds	3	1	2	3	2	11	\$5,000	Both New and Existing

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All participating jurisdictions	All-hazards	Purchase and install NOAA weather radios in schools, government buildings, parks, etc.	Emergency Management	Medium-Term (3-5 years)	HMGP, Local Funds	3	2	2	3	2	12	\$3,000	Both New and Existing
City of Brentwood	Flood	Work with property owner of Ward Circle pond to increase water retention capabilities during heavy rains	Engineering	Short-Term (0-3 years)	Local Funds	3	3	3	1	3	13	\$1,000	Existing
City of Brentwood	Tornado	Support Severe Weather Awareness Week	Community Relations	Ongoing	Local Funds	3	3	3	1	3	13	\$1,000	Both New and Existing
City of Brentwood	Wildfire/Brush Fire	Join "Firewise Communities" program	Fire & Rescue	Short-Term (0-3 years)	Local Funds	3	3	3	1	3	13	\$1,000	Both New and Existing
City of Brentwood	Wildfire/Brush Fire	Map vulnerable areas to reduce risk	GIS	Short-Term (0-3 years)	Local Funds	3	3	3	1	3	13	\$2,500	Both New and Existing
City of Brentwood	Wildfire/Brush Fire	Inform the public about proper evacuation procedures and IPAWS.	Community Relations	Ongoing	Local Funds	3	3	3	1	3	13	\$1,000	Both New and Existing
City of Brentwood	Drought/Excessive Heat	Develop drought communication plan	Community Relations	Ongoing	Local Funds	3	3	3	1	3	13	\$1,000	Both New and Existing
City of Brentwood	Drought/Excessive Heat	Educate the public on water-saving techniques	Community Relations and Water Services	Ongoing	Local Funds	3	3	3	1	3	13	\$1,000	Both New and Existing

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City of Brentwood	Severe Winter Weather	Research and implement equipment advances and additions to provide more comprehensive snow removal efforts.	Public Works	Ongoing	Local Funds	3	3	3	1	3	13	\$2,500	Both New and Existing
City of Brentwood	Severe Winter Weather	Research and implement improved technology for mixing anti-icing cocktails, improved de-icing, and reduced salt consumption	Public Works	Ongoing	Local Funds	3	3	3	1	3	13	\$2,500	Both New and Existing
City of Brentwood	Severe Winter Weather	Maintain/update snow removal routes.	Public Works	Medium-Term (3-5 years)	Local Funds	3	3	3	3	2	14	\$0.00	New
City of Brentwood	Severe Winter Weather	Deliver snow plow training to non-Public Works employees to increase staffing during winter storms.	Public Works	Ongoing	Local Funds	3	3	3	1	3	13	\$50,000	Both New and Existing
City of Brentwood	Earthquake/Seismic Activity	Map and assess at-risk critical infrastructure and key resources.	GIS	Short-Term (0-3 years)	Local Funds	3	3	3	1	3	13	\$5,000	Both New and Existing
City of Brentwood	Earthquake/Seismic Activity	Protect at-risk critical infrastructure and key resources.	Engineering	Medium-Term (3-5 years)	BRIC	3	1	3	1	3	13	\$500,000	Both New and Existing
City of Brentwood	Earthquake/Seismic Activity	Educate the public on earthquake awareness.	Community Relations	Ongoing	Local Funds	3	3	3	1	3	13	\$10,000	Both New and Existing

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City of Brentwood	Geological Incident	Map vulnerable areas to reduce risk.	GIS	Short-Term (0-3 years)	Local Funds	3	3	3	1	3	13	\$2,500	Both New and Existing
City of Brentwood	Geological Incident	Post landslide area signage.	Public Works	Short-Term (0-3 years)	BRIC	3	3	3	1	3	13	\$5,000	Both New and Existing
City of Brentwood	Pandemic	Purchase and store PPE and supplies to avoid impacts on supply chain.	Finance	Short-Term (0-3 years)	HMGP, BRIC	3	3	3	1	3	13	\$50,000	Both New and Existing
City of Brentwood	Pandemic	Exercise Continuity of Operations plan every four months	Fire & Rescue/Emergency Management	Ongoing	Local Funds	3	3	3	1	3	13	\$2,500	Both New and Existing
City of Brentwood	Flood	Implement an "Adopt a Storm Drain" program	Public Works	Short-Term (0-3 years)	Local Funds	2	3	3	1	3	12	\$2,500	Existing
City of Brentwood	Tornado	Encourage safe room construction in single-family residences and multi-family complexes.	Planning and Codes	Ongoing	Local Funds	2	3	3	1	3	12	\$1,000	New
City of Brentwood	Tornado	Promote purchase and use of NOAA weather radios	Community Relations	Ongoing	Local Funds	2	3	3	1	3	12	\$1,000	Both New and Existing
City of Brentwood	Drought/Excessive Heat	Develop and enforce irrigation restrictions during droughts.	Planning and Codes	Ongoing	Local Funds	2	3	3	1	3	12	\$25,000	Both New and Existing

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City of Brentwood	Geological Incident	Install catch-fall nets or berms for rocks at steep slopes near roadways.	Public Works	Short-Term (0-3 years)	BRIC	3	1	3	1	3	11	\$100,000	Both New and Existing
City of Brentwood	Pandemic	Install air filtration (MERV13 filters and/or UV) at all city facilities.	City Administration	Short-Term (0-3 years)	BRIC	3	1	3	1	3	11	\$250,000	Both New and Existing
City of Brentwood	Flood	Adopt policies for storm water runoff and implement a storm water utility fee	Engineering	Short-Term (0-3 years)	Local Funds	1	1	3	1	3	9	\$5,000	Both New and Existing
City of Brentwood	Flood	Enforce maximum lot coverage requirement/encourage green space.	City Administration	Long-Term (5-10 years)	Local Funds	2	3	3	2	3	13	\$0.00	New
City of Brentwood	Flood	Utilize GIS mapping to better determine floodplain and floodway.	City Administration	Long-Term (5-10 years)	Local Funds	3	1	3	3	3	13	\$0.00	New
City of Brentwood	Flood	Enforce strict detention requirements.	City Administration	Medium-Term (3-5 years)	Local Funds	1	2	3	3	2	11	\$0.00	New
City of Brentwood	Flood	Maintain dedicated emergency access ways.	Public Works	Short-Term (0-3 years)	Local Funds	3	2	2	2	1	10	\$10,000	New
City of Brentwood	Severe Winter Weather	Stockpile 2,300-2,500 tons of salt at two weather protected strategic locations.	Public Works	Short-Term (0-3 years)	Local Funds	2	2	2	3	1	10	\$100,000	New
City of Brentwood	Severe Winter Weather	Stage trucks pre-loaded with salt prior to expected winter weather events.	Public Works	Short-Term (0-3 years)	Local Funds	3	2	1	3	1	10	\$5,000	New

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				years)									
City of Brentwood	Severe Winter Weather	Annually, prior to winter, check/prepare all snow removal equipment	Public Works	Short-Term (0-3 years)	Local Funds	2	2	3	3	1	11	\$25,000	New
City of Brentwood	Severe Winter Weather	Replace aging/damaged snow removal equipment.	Public Works	Short-Term (0-3 years)	Local Funds	3	3	2	3	1	12	\$50,000	New
City of Brentwood	Wildfire/ Brushfire	Enforcement of the State of Tennessee Forestry Department Burn permitting and Burn banning program.	City Administration	Long-Term (5-10 years)	Local Funds	2	2	3	3	3	13	\$0.00	Both New and Existing
City of Brentwood/City of Franklin	Tornado	Annual service agreement for weather monitoring system and tornado sirens	City Administrations	Long-Term (5-10 years)	Local Funds	2	2	2	3	3	12	\$4,000	Both New and Existing
City of Franklin	Flood	Clean and improve drainage ditches and retention areas within the park system, as well as protection of property from flood events.	Parks Department	Short-Term (0-3 years)	Local Funds	3	2	1	3	1	10	\$3,000	Pre-Existing
City of Franklin	Wildfire/ Brushfire	Removal of dead trees, shrubbery, and stumps and evaluation, treatment and trimming of trees in area parks and other park properties.	Parks Department	Short-Term (0-3 years)	Local Funds	3	1	2	2	1	9	\$4,000	New
City of Franklin	Severe Winter Weather	Clearing of ice and snow for emergency vehicles and citizens.	Streets Department	Short-Term (0-3 years)	Local Funds	3	1	2	2	1	9	\$10,000	Pre-Existing
City of	Tornado	Construct new city hall that	City	Long-	Local Funds	2	1	2	2	3	10	\$5,000,000	New

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Franklin		includes tornado sheltering for 200+ employees and visitors during the day and provides for some sheltering during downtown special events.	Administration	Term (5-10 years)									
City of Franklin	Flood	Ralston Creek at Liberty Hills Stream restoration	City of Franklin, Stormwater	Long-Term (5-10 years)	Local Funds	3	1	2	3	3	12	\$50,000	New
City of Franklin	Flood	Procure AVL capabilities for all city vehicles enabling real time vehicle asset tracking for more accurate deployment of resources.	City Administration	Long-Term (5-10 years)	Local Funds	3	2	1	3	3	12	\$10,000	New
City of Spring Hill	Flood	Continuous cleaning of drainage ditches and drainage way to help alleviate flooding.	Public Works	Short-Term (0-3 years)	Local Funds	3	1	1	2	1	8	\$100,000	Pre-Existing
City of Spring Hill	Flood	Conduct inspections on stormwater detention ponds to ensure they are maintained and function properly.	Public Works	Short-Term (0-3 years)	Local Funds	2	2	2	3	3	12	\$10,000	Pre-Existing
City of Spring Hill	Flood	Promote the use of social media, text messaging, X, etc. for public announcement of tornado warning and watches similar to amber alerts/Nixle.	Emergency Management	Short-Term (0-3 years)	Local Funds	3	2	3	3	1	12	\$5,000	Pre-Existing
City of Spring Hill	Flood	Participation in NFIP.	City of Spring Hill	Long-Term (5-10 years)	Local Funds	2	2	3	3	3	12	\$1,000	Pre-Existing
City of Spring	Severe Winter	Purchase of snow chains for patrol cars for the purpose of	Police	Short-	Local Funds	1	3	3	3	1	11	\$1,500	New

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Hill	Weather	increased mobility on snow- and ice-covered roads.	Department	Term (0-3 years)									
City of Spring Hill	Wildfire/ Brushfire	Specify and adopt native plants, shrubbery and trees for incorporation into the city’s new uniform development code.	Planning Department	Long-Term (5-10 years)	Local Funds	1	2	2	3	3	11	\$1,000	Pre-Existing
City of Spring Hill	Excessive Heat/Drought	In brown-out situations, provide fans to social service agencies for distribution to homeless shelters and locations designated by Spring Hill Social Services	Planning Department	Long-Term (5-10 years)	Local Funds	3	1	2	3	3	12	\$15,000	Pre-Existing
City of Spring Hill	Excessive Heat/Drought	Impose water restrictions in drought conditions in accordance with the city’s emergency response plan and drought management plan.	Water Department	Long-Term (5-10 years)	Local Funds	1	2	3	3	3	12	\$1,000	Pre-Existing
Cumberland River Compact	Flood	Complete an additional stream restoration project assessment in Williamson County	Cumberland River Compact, environmental non-profit	Long-Term (5-10 years)	Local Funds	2	1	1	3	2	9	\$2,000	Both New and Existing
Franklin Special School District	Flood, Severe Winter Weather, Excessive Heat/Drought, Earthquake	Add a 300-500 Kw Portable Generator with the ability to connect to multiple school facilities one being Franklin Elementary School, in order to provide emergency backup power to these sites. This will enable us to	FSSD Finance and Administration	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	2	3	3	13	\$50,000	Existing

Williamson County Hazard Mitigation Plan (HMP)

294-HMP-2024

Name:	Hazards Mitigated:	Action Description:	Responsible Department:	Time Frame:	Funding Source:	Societal	Administrative	Financial	Environmental	Technical	Total SAFE-T Prioritization Score	Estimated Cost:	New or Existing Infrastructure
		operate the impacted facility as an emergency shelter as required.											
Franklin Special School District	Flood, Severe Winter Weather, Excessive Heat/Drought, Earthquake	Add a 300-500 Kw Portable Generator with the ability to connect to multiple school facilities one being Freedom Middle School, in order to provide emergency backup power to these sites. This will enable us to operate the impacted facility as an emergency shelter as required.	FSSD Finance and Administration	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	2	3	3	13	\$78,000	Existing
Franklin Special School District	Flood, Severe Winter Weather, Excessive Heat/Drought, Earthquake	Add a 300-500 Kw Portable Generator with the ability to connect to multiple school facilities one being Popular Grove School, in order to provide emergency backup power to these sites. This will enable us to operate the impacted facility as an emergency shelter as required.	FSSD Finance and Administration	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	2	3	3	13	\$55,000	Existing
Town of Nolensville	Flood	Acquisition of flood prone properties near mill creek.	Nolensville Fire and Rescue	Long-Term (5-10 years)	FMA, HMGP	2	1	2	3	3	11	\$2,000,000	Existing
Town of	Flood	Flood wall construction	Nolensville Fire	Long-	FMA, Local	3	2	2	2	3	12	\$300,000	Existing

**Williamson County Hazard Mitigation Plan (HMP)**

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<b>Name:</b>	<b>Hazards Mitigated:</b>	<b>Action Description:</b>	<b>Responsible Department:</b>	<b>Time Frame:</b>	<b>Funding Source:</b>	<b>Societal</b>	<b>Administrative</b>	<b>Financial</b>	<b>Environmental</b>	<b>Technical</b>	<b>Total SAFE-T Prioritization Score</b>	<b>Estimated Cost:</b>	<b>New or Existing Infrastructure</b>
Nolensville		along Bradfield Dr	and Rescue	Term (5-10 years)	Funds, HMGP								
Town of Nolensville	Flood	Enlargement and Replacement of drainage culverts along Rocky Fork Rd.	Nolensville Fire and Rescue	Long-Term (5-10 years)	FMA, Local Funds, HMGP	3	2	2	2	3	12	\$125,000	Existing
Town of Nolensville	Flood	Continuous cleaning of drainage ditches to help alleviate flooding.	Public Works	Short-Term (0-3 years)	Local Funds	2	1	1	2	1	7	\$35,000	Pre-Existing
Town of Nolensville	Tornado, Severe Winter Weather	Addition of a backup generator to Town Hall/Police station	Nolensville Fire and Rescue	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	2	3	3	13	\$50,000	Existing
Town of Nolensville	Tornado	Community safe room addition to new fire station under construction	Nolensville Fire and Rescue	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	1	3	3	3	13	\$250,000	Existing
Town of Nolensville	Flood	Purchase storm drain cleaning equipment.	Nolensville Fire and Rescue	Short-Term (0-3 years)	Local Funds, HMGP	1	3	2	3	2	11	\$50,000	Existing
Town of Thompson's Station	Flood	Establish and maintain riparian buffers per Tennessee Department of Environmental Conservation (TDEC).	Town of Thompson's Station Planning and Zoning	Long-Term (5-10 years)	Local Funds, HMGP	2	2	2	3	3	12	\$5,000	Both New and Existing
Town of Thompson's Station	Severe Winter Weather	Purchase new snow removal equipment (Truck, plow, salt spreader).	Maintenance Department	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	2	3	1	11	\$100,000	New
Town of Thompson's	Severe Winter Weather	Establish salt inventory and storage areas.	Maintenance Department	Long-Term (5-	HMGP, Local Funds	2	2	2	3	3	12	\$5,000	New

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<b>Name:</b>	<b>Hazards Mitigated:</b>	<b>Action Description:</b>	<b>Responsible Department:</b>	<b>Time Frame:</b>	<b>Funding Source:</b>	<b>Societal</b>	<b>Administrative</b>	<b>Financial</b>	<b>Environmental</b>	<b>Technical</b>	<b>Total SAFE-T Prioritization Score</b>	<b>Estimated Cost:</b>	<b>New or Existing Infrastructure</b>
Station				10 years)									
Town of Thompson's Station	Severe Winter Weather	Purchase a 289 CAT Skid steer dedicated to snow removal.	Public Works	Short-Term (0-3 years)	HMGP, Local Funds	3	2	2	2	3	12	\$140,000	New
Town of Thompson's Station	Wildfire/ Brushfire	Trimming of trees along roadway to protect Middle Tennessee Electric Membership Cooperation Power lines.	Town Administration and MTE	Short-Term (0-3 years)	Local Funds	3	2	2	2	1	10	\$10,000	Both New and Existing
Town of Thompson's Station	Flood	Regular maintenance on ditches and culverts.	Town of Thompson's Station Maintenance Department	Short-Term (0-3 years)	HMGP, Local Funds	3	2	1	2	1	9	\$10,000	Both New and Existing
Town of Thompson's Station	Flood	Enforcement of updated floodplain regulation.	Town of Thompson's Station Planning and Zoning	Long-Term (5-10 years)	HMGP, Local Funds	2	3	2	3	3	13	\$5,000	Both New and Existing
Town of Thompson's Station	Tornado	Designate Community shelter location	Town Administration	Long-Term (5-10 years)	Local Funds	3	3	3	3	3	15	\$0.00	New
Town of Thompson's Station	Wildfire/ Brushfire	Enforcement of the State of Tennessee Forestry Department Burn permitting and Burn banning program.	City Administration	Long-Term (5-10 years)	Local Funds	2	2	3	3	3	13	\$0.00	Both New and Existing
Williamson County	Flood	Voluntary acquisition and removal of qualified properties as disaster declarations make	Emergency Management	Long-Term (5-10 years)	HMGP, FMA, Local Funds	2	1	1	3	3	10	\$4,340,000	Both

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		grant funding available. Current repetitive loss properties do not meet benefit cost requirements.											
Williamson County	Flood	Participation in the NFIP and CRS with initial FIRMS dated November 1981; Updates in 1989, 1993, 2003, 2006, and 2016.	Williamson County Engineering and Codes Enforcement	Short-Term (0-3 years)	Local Funds	2	2	3	3	2	12	\$1,500	Existing
Williamson County	Flood	Continued application and enforcement of the Zoning ordinance (floodplain management) and Storm Water Management Regulations.	Williamson County Engineering and Codes Enforcement	Ongoing	HMGP, Local Funds	1	2	3	2	2	10	\$25,000	Both New and Existing
Williamson County	Pandemic	Establish a pandemic response plan in coordination with the local department of health and the Williamson County Emergency Management Agency.	Williamson County Emergency Management Agency	Short-Term (0-3 years)	HMGP, Local Funds	3	2	3	3	3	14	\$500	Existing
Williamson County	Drought/Excessive Heat	Develop an emergency action plan to provide cooling shelters to a population in need during excessive heat of about 300 people.	Williamson County Emergency Management Agency	Short-Term (0-3 years)	Local Funds	3	2	3	3	3	14	\$1,000	New
Williamson County	Earthquake/Seismic Activity	Adopt new international building codes regarding	Williamson County	Ongoing	HMGP, Local Funds	2	3	3	3	3	14	\$1,000	Both New and

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		earthquake standard proofing for facilities at risk.	Engineering and Codes Enforcement										Existing
Williamson County	Flood, Severe Winter Weather, Excessive Heat/Drought, Earthquake	Portable emergency generator capable of supporting any number of critical facilities throughout the county.	Emergency Management Agency	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	3	3	3	14	\$350,000	Existing
Williamson County	Geological Incident	Develop slope regulations, soil surveys, and require building pad certification letters of geotechnical reports for building envelops of concern.	Williamson County Engineering	Ongoing	HMGP, BRIC	2	3	3	3	3	14	\$1,000	Existing
Williamson County	Flood, Severe Winter Weather, Excessive Heat/Drought, Earthquake	Add an emergency generator and related equipment at Fire Station 15.	Emergency Management Agency	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	2	3	3	13	\$150,000	Existing
Williamson County	Flood, Severe Winter Weather, Excessive Heat/Drought, Earthquake	Add an emergency generator and related equipment at Fire Station 16.	Emergency Management Agency	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	2	3	3	13	\$75,000	Existing
Williamson County	Flood, Severe Winter	Add an emergency generator and related	Emergency Management	Short-Term (0-3	Local funds, HMGP,	3	2	2	3	3	13	\$100,000	Existing

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	Weather, Excessive Heat/Drought, Earthquake	equipment at Fire Station 17.	Agency	years)	BRIC								
Williamson County	Flood, Severe Winter Weather, Excessive Heat/Drought, Earthquake	Add an emergency generator and related equipment at Fire Station 22.	Emergency Management Agency	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	2	3	3	13	\$175,000	Existing
Williamson County	Flood, Severe Winter Weather, Excessive Heat/Drought, Earthquake	Add an emergency generator and related equipment at Fire Station 30.	Emergency Management Agency	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	2	3	3	13	\$50,000	Existing
Williamson County	Tornado	Fortify new jail structure to withstand weather impacts from high winds/tornados	Sheriff's Office	Long-Term (5-10 years)	Local Funds	2	2	3	3	3	13	\$280,000,000	New
Williamson County	Flood, Severe Winter Weather, Excessive Heat/Drought, Earthquake	Add an emergency generator and related equipment at Fire Station 35.	Emergency Management Agency	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	2	3	3	13	\$150,000	Existing
Williamson County	Flood, Severe Winter Weather, Excessive	Add an appropriately sized emergency generator to adequately power the entirety of its Williamson	Emergency Management Agency	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	2	3	3	13	\$1,050,000	Existing

**Williamson County Hazard Mitigation Plan (HMP)**

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	Heat/Drought, Earthquake	County Ag EXPO Park.											
Williamson County	Flood, Severe Winter Weather, Excessive Heat/Drought, Earthquake	Add an emergency generator for to WAKM AM-950's AM transmitter located in Williamson County.	Emergency Management Agency	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	2	3	3	13	\$75,000	Existing
Williamson County	Flood	Implement a flood mitigation study to determine the most effective method for limiting flooding in the area around Lynwood Branch along Chapel Ct., Howell Dr., and Brookside Dr.	Williamson County Emergency Management Agency and Engineering	Medium-Term (3-5 years)	HMGP, FMA, Local Funds	3	2	3	2	3	13	\$10,000	Both New and Existing
Williamson County	Earthquake/Seismic Activity	Install a generator or generator hookup to supply power to the secondary emergency operations center in case of a loss of power.	Williamson County Emergency Management Agency	Long-Term (5-10 years)	BRIC, Local Funds	2	3	2	3	3	13	\$100,000	Existing
Williamson County	Wildfire/Brush Fire	Develop an educational program that informs the public of wildfire/brush fire risks. Additionally, incorporate advertisement of burn bans when appropriate.	Williamson County Emergency Management Agency	Medium-Term (3-5 years)	Local Funds	3	3	2	3	2	13	\$1,000	Existing
Williamson County	Wildfire/Brush Fire	Develop land maintenance agreements for areas that are	Williamson County	Medium-Term (3-5	Local Funds	3	3	2	3	2	13	\$1,000	Existing

Williamson County Hazard Mitigation Plan (HMP)

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Name:	Hazards Mitigated:	Action Description:	Responsible Department:	Time Frame:	Funding Source:	Societal	Administrative	Financial	Environmental	Technical	Total SAFE-T Prioritization Score	Estimated Cost:	New or Existing Infrastructure
		at higher risk for wildfire/brush fire.	Emergency Management Agency	years)									
Williamson County Schools	Flood, Severe Winter Weather, Excessive Heat/Drought, Earthquake	Add a Portable Generator at Independence High School to permit the facility to operate as a shelter location.	WCS Maintenance	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	2	3	3	13	\$98,000	Existing
Williamson County Schools	Flood, Severe Winter Weather, Excessive Heat/Drought, Earthquake	Add a Portable Generator at Fairview High School to permit the facility to operate as a shelter location.	WCS Maintenance	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	2	3	3	13	\$98,000	Existing
Williamson County Schools	Tornado	Fortify/harden existing school structures in order to withstand high winds/tornado impacts	Williamson County Schools	Long-Term (5-10 years)	Local Funds	2	2	2	3	3	12	\$46,000	Both New and Existing
Williamson County Schools	Flood, Severe Winter Weather, Excessive Heat/Drought, Earthquake	Renovating an existing vestibule to hardened security measures at the main entry vestibule at Westwood Elementary to serve as a safe shelter location.	WCS Maintenance	Short-Term (0-3 years)	Local funds, HMGP, BRIC	3	2	2	3	3	13	\$11,000	Existing
Williamson County	Flood	Develop storage areas and drainage ways for water to flow with the intent to protect structures and	Community Development Department	Ongoing	FMA	2	1	3	3	3	12	\$10,000	Both New and Existing

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		prevent soil erosion.											
Williamson County	Wildfire/Brush Fire	Create fire stops in large wooded areas to help prevent the spread of a wildfire.	TN Division of Forestry	Ongoing	Local Funds	2	3	2	3	2	12	\$5,000	Both New and Existing
Williamson County	Flood	Coordinate with other county departments such as county highway and stormwater management to create a culvert reporting program for residents to report clogged or damaged culverts.	Williamson County Emergency Management Agency	Short-Term (0-3 years)	Local Funds	3	2	3	2	2	12	\$1,000	Both New and Existing
Williamson County	Tornado	Develop educational programs that encourage the use or installation of storm shelters for protection against tornados.	Williamson County Emergency Management Agency	Medium-Term (3-5 years)	Local Funds	2	2	3	3	2	12	\$0	Existing
Williamson County	Earthquake/Seismic Activity	Purchase and installation of five generator hook-ups to supply portable generator power to critical infrastructure facilities as recorded in the Critical2TN database.	Williamson County Emergency Management Agency	Medium-Term (3-5 years)	HMGP, BRIC, Local Funds	3	2	2	3	2	12	\$300,000	Existing
Williamson County	Flood	Create a program to make consistent notifications to homeowners of repetitive	Williamson County Engineering	Ongoing	BRIC, FMA, Local Funds	2	3	3	1	2	11	\$20,000	Both New and Existing

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		loss properties to help inform them of insurance opportunities and other methods to prepare for flooding incidents.											
Williamson County	Flood	Develop floodplain management/use policy for Williamson County.	Williamson County Engineering	Ongoing	BRIC, FMA	2	3	3	1	2	11	\$20,000	Both New and Existing
Williamson County	Flood	Development of stream buffer ordinances and policies to reduce stormwater runoff.	Williamson County Engineering	Ongoing	BRIC, FMA, Local Funds	2	3	3	1	2	11	\$100,000	Both New and Existing
Williamson County	Flood	Develop maintenance agreements with owners of stormwater infrastructure.	Williamson County Engineering	Ongoing	BRIC, FMA, Local Funds	2	3	3	1	2	11	\$100,000	Both New and Existing
Williamson County	Flood	Develop stream bank restoration programs for waterways across the county.	Williamson County Engineering	Ongoing	BRIC, FMA, Local Funds	2	3	3	1	2	11	\$100,000	Both New and Existing
Williamson County	Drought/Excessive Heat	Implementation of an educational program that covers water conservation, encourages use of native vegetation, and encourages use of pervious surfaces to increase groundwater recharge.	Williamson County Emergency Management Agency and Engineering	Long-Term (5-10 years)	HMGP, Local Funds	3	2	3	1	2	11	\$1,000	Existing
Williamson	Geological	Conduct a formal study to	Williamson	Medium-	Local Funds	2	2	2	3	2	11	\$50,000	New

**Williamson County Hazard Mitigation Plan (HMP)**

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County	Incident	identify areas that pose the greatest risk of landslides in Williamson County. Upon completion of this study, create and install signage to notify the public of the risk as applicable.	County Emergency Management Agency	Term (3-5 years)									
Williamson County	Pandemic	Purchase and acquire new filters for portable ventilation system capable of cleaning contaminated air using MERV-13 filters or better.	Williamson County Emergency Management Agency	Medium-Term (3-5 years)	BRIC, Local Funds	2	2	2	3	2	11	\$5,000	New
Williamson County	Severe Winter Weather	Create an annual plan for ensuring salt is pre-staged in the needed quantity prior to any severe winter weather.	Williamson County Highway	Short-Term (0-3 years)	Local Funds	1	2	2	3	2	10	\$1,000	Both New and Existing
Williamson County	Severe Winter Weather	Stockpile salt for roadways at 1,500 tons annually.	Williamson County Highway	Short-Term (0-3 years)	Local Funds	2	2	2	3	1	10	\$135,750	Pre-Existing
Williamson County	Severe Winter Weather	Investment in new severe winter weather activated signage to notify the public of dangerous winter-weather conditions.	Williamson County Highway	Short-Term (0-3 years)	Local Funds	1	2	2	3	2	10	\$50,000	Both New and Existing
Williamson County	Tornado	Construction of storm shelters built into the footings of new roadway bridges.	Williamson County Highway Department	Ongoing	FMA, Local Funds	2	2	2	1	2	9	\$10,000	New

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## Section Four: Implementation, Integration, and Maintenance

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### 4.1. Plan Adoption, Implementation, Monitoring, and Evaluation

This section provides an overview of the overall plan implementation, integration, and maintenance strategy and outlines the method and schedule for monitoring, evaluating, and updating the plan. This section also discusses incorporating the plan into existing planning mechanisms and how to address continued public involvement.

#### 4.1.1 Plan Adoption

The purpose of formally adopting this plan is to secure buy-in, raise awareness of the plan, and formalize the plan's implementation. Plans will be adopted by the appropriate governing body for each participating community. Executed resolutions will be maintained and made available by the Williamson County Emergency Management Agency.

#### 4.1.2 Implementation

Implementation and maintenance of the plan is critical to the overall success of hazard mitigation planning. This section provides an overview of the overall strategy for plan implementation and maintenance.

Mitigation is most successful when it is incorporated into the day-to-day functions and priorities of the government. Implementation will be accomplished by adhering to the schedules identified for each action and through constant, pervasive, and energetic efforts to network and highlight the multi-objective benefits to each program and the community. This effort is achieved through the routine actions of monitoring agendas, attending meetings, and promoting a safe, sustainable community. Involvement of the HMPC through continued meetings and planning is essential and will serve as a key component to completing mitigation actions. Additional mitigation strategies could include consistent and ongoing enforcement of existing policies and vigilant review of programs for coordination and multi-objective opportunities.

Simultaneous to these efforts, it is important to maintain constant monitoring of funding opportunities that can be leveraged to implement some of the costlier actions. This will include creating and maintaining a list of ideas on how to meet local match or participation requirements. When funding does become available, the communities will be able to capitalize on the opportunity due to the diligence of the HMPC. Funding opportunities to be monitored include special pre- and post-disaster funds, state and federal funds, benefit assessments, and other grant programs, including those that can serve or support multi-objective applications.

Elected officials, officials appointed to head community departments, and community staff are charged with the implementation of various activities in the plan. Recommendations will be made to modify timeframes for the completion of activities, funding resources, and responsible entities. On an annual basis, the priority standing of various activities may also be changed. Some activities that are found unachievable may be removed from the plan entirely and activities addressing problems unforeseen during plan development may be added.

#### 4.1.3 Integration into Local Planning Mechanism

A vital implementation mechanism that is highly effective and low-cost is the incorporation of the HMP recommendations and their underlying principles into other plans and tools. All plan

participants will use existing methods and programs to implement hazard mitigation actions where possible. As previously stated, mitigation is most successful when it is incorporated into government and public service's day-to-day functions and priorities. This plan builds upon the momentum developed through previous and related planning efforts and mitigation programs and recommends implementing actions, where possible, through these other program mechanisms. These existing mechanisms include:

- Regularity Capabilities
- Administrative Capabilities
- Fiscal Capabilities

For further information regarding the different capabilities refer to Section 3 – Mitigation Strategy.

Implementation and incorporation into existing planning mechanisms will be conducted by respective planning authorities and will be done through the routine actions of:

- Monitoring other planning/program agendas;
- Attending other planning/program meetings;
- Participating in other planning processes; and
- Monitoring community budget meetings for other community program opportunities.

The successful implementation of this mitigation strategy will require constant and vigilant review of existing plans and programs for coordination and multi-objective opportunities that promote a safe, sustainable community. Efforts should continuously be made to monitor the progress of mitigation actions implemented through other planning mechanisms. Where appropriate, priority actions should be incorporated into Hazard Mitigation Plan updates.

#### **4.1.4 Monitoring, Evaluating, Updating**

For the HMP update review process, the WCEMA Director will be responsible for facilitating, coordinating, and scheduling reviews and maintenance of the plan. The Director may delegate this responsibility to anyone in the WCEMA. The review of the Hazard Mitigation Plan will be conducted as follows:

- WCEMA will be responsible for leading the meeting to review the plan.
- Notices will be emailed to the members of the HMPC, federal, state, and local agencies, non-profit groups, local planning agencies, and representatives of business interests, neighboring communities, and others advising them of the date, time, and place for the review.
- Local City officials will be notified by email or phone call.
- Before the review, department heads and others tasked with implementing various projects/actions will be queried concerning progress in their area of responsibility and asked to present a report at the review meeting.
- A copy of the current plan will be available for public comment.

- After the review meeting, a status report will be developed outlining the implementation of projects over the past year.
- After the review meeting, a status report will be developed identifying current repetitive loss properties for evaluation.

### **Criteria for Annual Reviews**

The criteria recommended for annual reviews will include the following:

- Community growth or change in the past year to include residential, commercial, and industrial growth trends.
- The number of substantially damaged or improved structures by flood zone and review of jurisdictional NFIP membership.
- Renovations to public infrastructure, including water, sewer, drainage, roads, bridges, gas lines, and buildings.
- Natural hazard occurrences that required activation of the Emergency Operations Center (EOC) and whether the event resulted in a presidential disaster declaration.
- Natural hazard occurrences that were not of a magnitude to warrant activation of the EOC or a federal disaster declaration but were severe enough to cause damage in the community or closure of businesses, schools, or public services.
- The dates of hazardous events, narratives, and documented damages.
- Closures of places of employment or schools and the number of days closed.
- Road or bridge closures due to the hazard and the length of time closed.
- Assessment of the number of private and public buildings damaged due to the hazard and whether the damage was minor, substantial, major, or if buildings were destroyed. The assessment will include residences, mobile homes, commercial structures, industrial structures, and public buildings, such as schools and public safety buildings.
- Review of any changes in federal, state, and local policies to determine the impact of these policies on the community and how and if the policy changes can or should be incorporated into the Hazard Mitigation Plan.
- WCEMA will provide technical assistance in this meeting through staff or subject matter experts regarding the implementation of mitigation codes and ordinances.
- Review of the implementation status of projects/actions (mitigation strategies). The reason for delay will be discussed for any projects that are behind schedule or not yet started.

### **4.2 Continued Public Involvement**

Continued public involvement is imperative to the overall success of the plan's implementation. The update process provides an opportunity to solicit participation from new and existing stakeholders, publicize mitigation success stories, and seek additional public comment. The plan maintenance and update process will include continued public and stakeholder involvement and

input through attendance at designated committee meetings, web postings, press releases to local media, and public hearings.

#### **4.3 Public Involvement Process for Annual Reviews**

The public will be notified via the Williamson County website or any other form of a publicized social platform (i.e., local newspaper, Facebook, X) well in advance of any public meetings or comment periods.

#### **4.4 Public Involvement for Five-year Update**

When the HMPC reconvenes for the five-year update, they will coordinate with all stakeholders participating in the planning process—including those who joined the committee since the planning process began—to update and revise the plan. In reconvening, the HMPC will develop a plan for public involvement and will be responsible for disseminating information through various media channels detailing the plan update process. As part of this effort, public meetings will be held, and public comments will be solicited on the plan update draft.

Appendix A: Planning Documentation

HMP Planning Meeting 1:



Williamson County  
Emergency Management Agency  
Hazard Mitigation Planning Committee Meeting  
03/30/2023

Name	Organization	Email	Cell Phone
Nicholas Sturgeon	WCEMA	nsturgeon@williamsoncounty.gov	(629) 214-5715
Gino Fantoni	Franklin EM	gino.fantoni@franklin.tn.gov	615-587-1885
GREEN BOLD	SH. EMA	gbold@springville.tn.gov	615-924-4641
Todd Huppenstelt	Brentwood PW	todd.huppenstelt@brentwood.tn.gov	615-371-0000
Jill BURGIN	WCEMA	jill.burgin@williamsoncounty.gov	615-934-0007
Russell Peterson	City of Brentwood	russell.peterson@brentwood.tn.gov	615/405-1818
Scott Hughes	City of Fairview	scott.hughes@fairview.tn.gov	615-470-8709
Bob Leeman	City of Boardman	Bob.Leeman@knoxville.gov	615-877-2260



Williamson County EOC  
Sign-In



Event: HazMit Plan Meeting State Mission # FEMA # Date: 4/26/23

Name	Address	E-Mail
Russell Peterson	on file	
Nicholas Sturgeon	on file	on file
Scott Villier	on file	on file
Ken McLawton		
Todd Huppenstelt	on file	on file
Paul Tampien	WCAREES - KMYPT	
Sam Killingsworth	on file	on file
Ashtel Sampson	on file	on file
ERIN JARRELSKI	on file	on file
Jack Casner		michael.casner@tn.gov
Bill Jorgensen		
GREEN BOLD		
Joshua Walter		
Jill BURGIN		

HMP Planning Meeting 3:



Williamson County  
Emergency Management Agency  
Hazard Mitigation Planning Committee Meeting  
05/08/2023

Name	Organization	Email	Have a BOLDplanning Account (Y/N)?
Nicholas Sturgeon	WCEMA	nsturgeon@williamsoncounty.gov	Yes
Mario Forgiome	Wilco Engineering	mario.forgione@wilco.com	Yes
MAC NOLAN	WCE Solid Waste	mac.nolan@williamsoncounty.gov	Yes
Mark King	Maury Co EMA	markking@maurycounty.tn.gov	N
Russell Peterson	on file		
Joshua Walter	WCEMA	joshua.walter@wcema.org	No
GREEN BOLD	SH. EMA		yes
Todd Huppenstelt	WCEMA	on file	yes

HMP Planning Meeting 4 (Virtual):

Meeting Name	Meeting Start Time	Display Name	Role	Attendee Email	Connection Type
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Bob Leeman	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Brian Goss	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Cathy Montgomery	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Donny	attendee		Web app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Gine Cheatham	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Gino Fantoni	attendee		Mobile app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Hoop K9QJ5	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Jessica	attendee		Web app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Jim Colvin	attendee		Web app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Joshua Walter	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Katy Clouse, LMSW	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Katy Clouse, LMSW	attendee		Mobile app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Mac Nolan	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Mario Forgiome	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Mark King	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Matthew Lugo	attendee		Web app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Moderator	host		Web app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Phil Sherrad	attendee		Mobile app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Russell Peterson	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	Sean Cothron	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-03 12:15:29	WCEMA EOC	cohost		Web app

HMP Planning Meeting 5 (Virtual):

Meeting Name	Meeting Start Time	Display Name	Role	Attendee Email	Connection Type
Hazard Mitigation Public Meeting	2024-01-04 16:59:55	Andrew Gossett	attendee		Mobile app
Hazard Mitigation Public Meeting	2024-01-04 16:59:55	Ashlae	attendee		Mobile app
Hazard Mitigation Public Meeting	2024-01-04 16:59:55	C Ferguson	attendee		Mobile app
Hazard Mitigation Public Meeting	2024-01-04 16:59:55	Call-in User_1	attendee		Other app
Hazard Mitigation Public Meeting	2024-01-04 16:59:55	Eoc Info	host		Desktop app
Hazard Mitigation Public Meeting	2024-01-04 16:59:55	JK Hooper	attendee		Mobile app
Hazard Mitigation Public Meeting	2024-01-04 16:59:55	James G	attendee		Web app
Hazard Mitigation Public Meeting	2024-01-04 16:59:55	Jill Burgin	attendee		Web app
Hazard Mitigation Public Meeting	2024-01-04 16:59:55	Joe	attendee		Desktop app
Hazard Mitigation Public Meeting	2024-01-04 16:59:55	Joshua Walter	attendee		Desktop app
Hazard Mitigation Public Meeting	2024-01-04 16:59:55	Moderator	coHost		Desktop app
Hazard Mitigation Public Meeting	2024-01-04 16:59:55	Ronnie Leftwich	attendee		Desktop app
Hazard Mitigation Public Meeting	2024-01-04 16:59:55	Tanya and Dan Scherr	attendee		Desktop app

**Williamson County Hazard Mitigation Plan (HMP)**

**294-HMP-2024**

**HMP Planning Meeting 6 (Virtual):**

Meeting Name	Meeting Start Time	Display Name	Role	Attendee Email	Connection Type
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Bob Leeman	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Call-in User_1	attendee		Other app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Catherine Montgomery	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Cathy Montgomery	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Donny	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Eoc Info	coHost		Desktop app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Gene Cheatham	attendee		Mobile app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Gino Fantoni	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Jay.Bonson	attendee		Web app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	John Walsh	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Katy Clouse, LMSW	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Mac Nolen	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Mario Forgione	attendee		Mobile app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Moderator	host		Desktop app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Phil Sherrod	attendee		Mobile app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Russell Peterson	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-05 12:29:05	Russell Peterson	attendee		Desktop app

**HMP Planning Meeting 7 (Virtual):**

Meeting Name	Meeting Start Time	Display Name	Role	Attendee Email	Connection Type
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Catherine Montgomery	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Dallas Clements - WCEMA Reserves	attendee		Web app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Donny	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Eoc Info	host		Desktop app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Gene Cheatham	attendee		Mobile app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Gene Cheatham	attendee		Mobile app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Gino Fantoni	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Greg Boyd	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Joshua Walter	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Mac Nolen	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Mario Forgione	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Matthew Lupo	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Mekayle Houghton	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Moderator	coHost		Desktop app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Russell Peterson	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Sean Cothron	attendee		Desktop app
Hazard Mitigation Planning Committee	2024-01-08 11:55:56	Stark, Jeff OEM	attendee		Desktop app

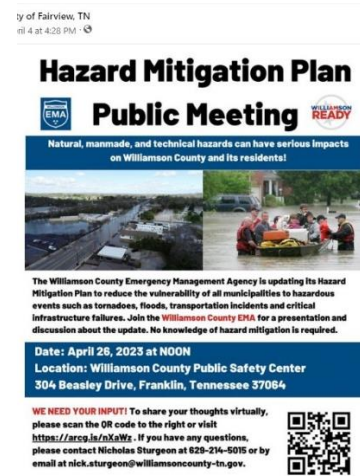
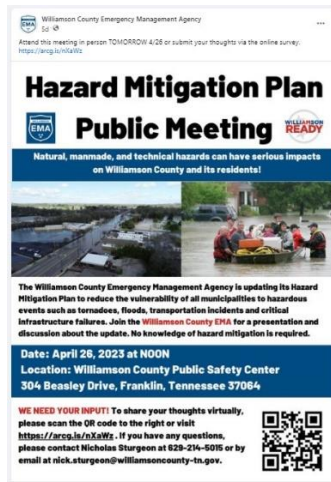
Those that were in attendance are recorded on the prior sign-in sheets are shown below with the jurisdiction in which they represented.

Name:	Jurisdiction:
Jessica Abrams	State of Tennessee
Jay Bonson	Williamson County
Greg Boyd	City of Spring Hill
Jill Burgin	Williamson County
Jack Casner	State of Tennessee
Gene Cheatham	Williamson County
Dallas Clements	Williamson County
Katy Clouse	Williamson County

Jim Colvin	City of Brentwood
Sean Cothron	Williamson County
Clint Derryberry	Maury County
Gino Fantoni	City of Franklin
C Ferguson	Williamson County
Mario Forgione	Williamson County
James G	Williamson County
Brian Goss	City of Brentwood
Andrew Gossett	Williamson County
James Hooper	Williamson County
Todd Hoppenstedt	City of Brentwood
Todd Horton	Williamson County
Mekayle Houghton	Williamson County
Scott Hughes	City of Fairview
Joe	Williamson County
Erin Jakuboski	Williamson County
Bill Jorgensen	Williamson County
Sam Killingsworth	Town of Nolensville
Mark King	Williamson County
Bob Leeman	City of Brentwood
Ronnie Leftwich	Williamson County
Matthew Lupo	Town of Nolensville
Ken McLawhon	Town of Thompson's Station
Cathy Montgomery	Williamson County
Mac Nolen	Williamson County
Donny Parker	Williamson County
Russell Peterson	City of Brentwood
Tanya Scherr	Williamson County
Dan Scherr	Williamson County
Phil Sherrod	Williamson County
Jeff Stark	Metro Nashville – Davidson County

Nicholas Sturgeon	Williamson County
Ashlae Sympson	Williamson County
Paul Tampien	Williamson County
John Walsh	Williamson County
Joshua Walter	Williamson County
Marc Waltz	Williamson County
Scott Williar	City of Franklin

Social Media Publication 1: Social Media Publication 2: Social Media Publication 3:



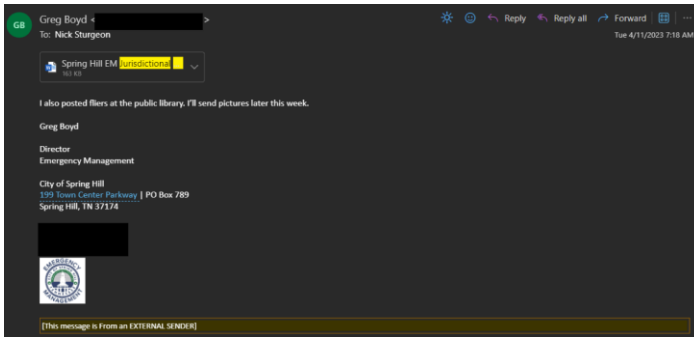
Social Media Publication 4: Social Media Publication 5: Social Media Publication 6:



Social Media Publication 7:



Proof of Flyer 1:



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## Appendix B: County Overview

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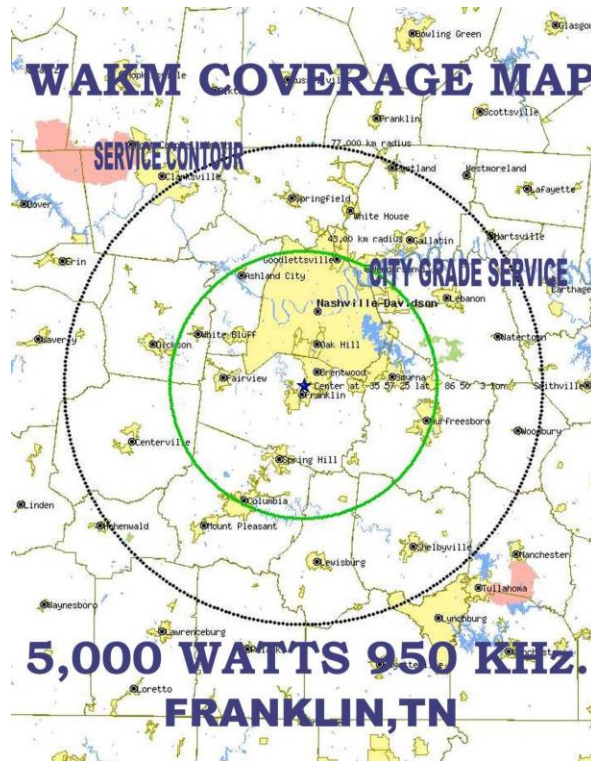
### CDC SVI Data:



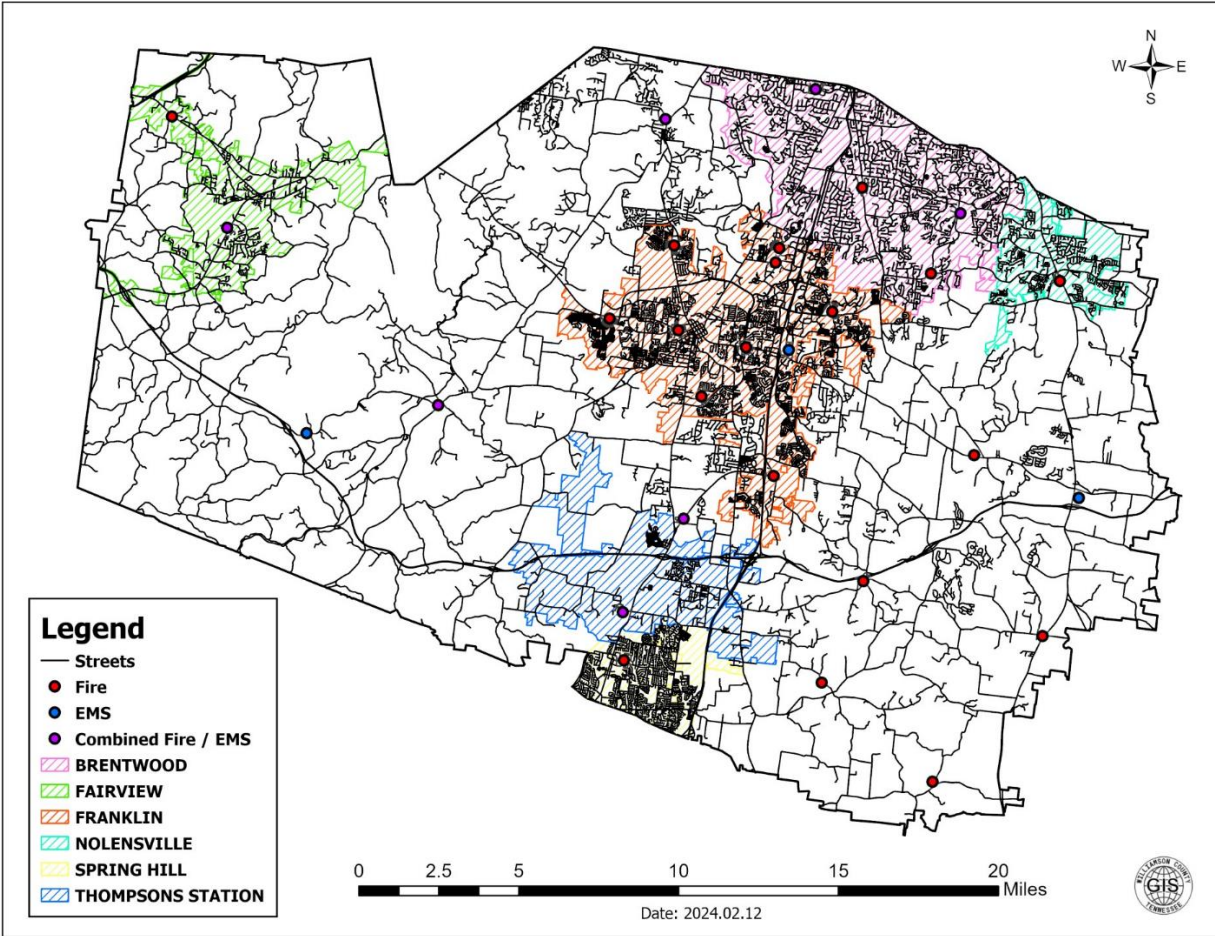
CDC SVI.xlsx

To view the data, please double click on the Excel icon above. If unable to view the data, please contact the WCEMA for assistance.

### WAKM Coverage Map



### Public Safety Facilities Map



National Risk Index Summary:

# National Risk Index



February 25, 2024

## Williamson County, Tennessee

### Summary

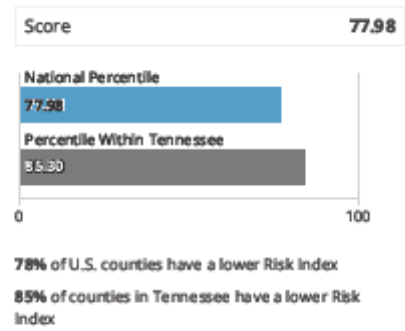
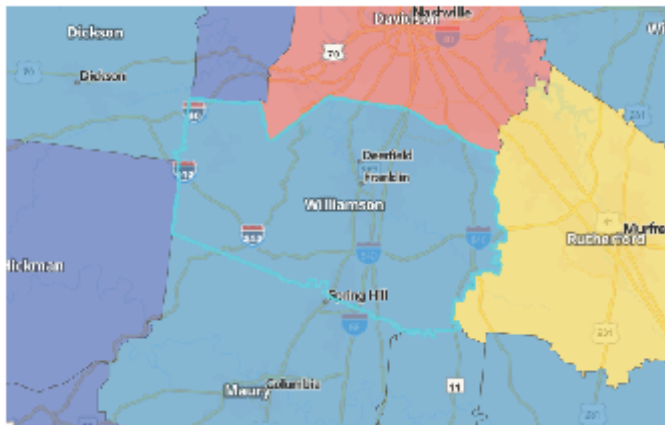


While reviewing this report, keep in mind that low risk is driven by lower loss due to natural hazards, lower social vulnerability, and higher community resilience.

For more information about the National Risk Index, its data, and how to interpret the information it provides, please review the **About the National Risk Index** and **How to Take Action** sections at the end of this report. Or, visit the National Risk Index website at [hazards.fema.gov/nri/learn-more](https://hazards.fema.gov/nri/learn-more) to access supporting documentation and links.

### Risk Index

The Risk Index rating is **Relatively Low** for Williamson County, TN when compared to the rest of the U.S.





### Hazard Type Risk Index

Hazard type Risk Index scores are calculated using data for only a single hazard type, and reflect a community's Expected Annual Loss value, community risk factors, and the adjustment factor used to calculate the risk value.

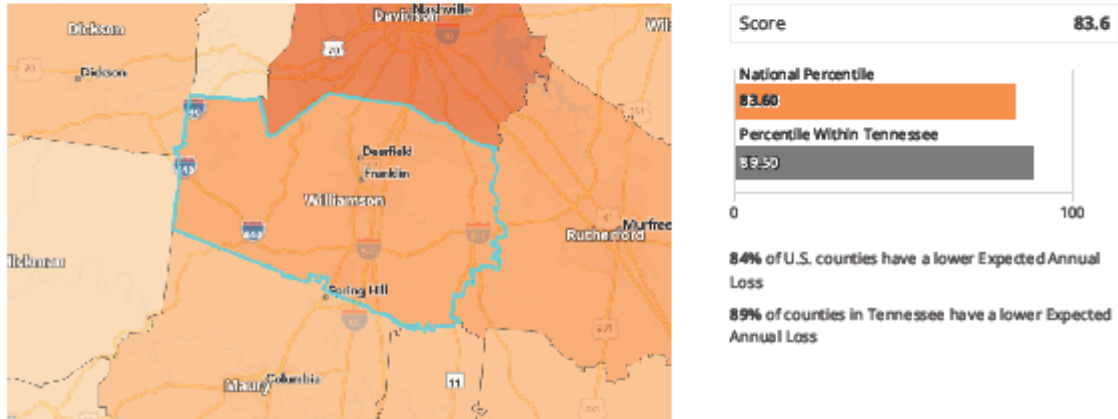
Hazard Type	Risk Index Rating	Risk Index Score	National Percentile
Avalanche	Not Applicable	-	
Coastal Flooding	Not Applicable	-	
Cold Wave	No Rating	0	0  -----  100
Drought	Very Low	23.5	0  -----  100
Earthquake	Relatively Moderate	93.6	0  -----  100
Hail	Very Low	13.4	0  -----  100
Heat Wave	Relatively Low	68.9	0  -----  100
Hurricane	Very Low	49.6	0  -----  100
Ice Storm	Relatively Low	38.5	0  -----  100
Landslide	Relatively Moderate	88.7	0  -----  100
Lightning	Relatively Moderate	70.1	0  -----  100
Riverine Flooding	Relatively Low	59.4	0  -----  100
Strong Wind	Relatively High	91.6	0  -----  100
Tornado	Relatively Moderate	91.7	0  -----  100
Tsunami	Not Applicable	-	
Volcanic Activity	Not Applicable	-	
Wildfire	Very Low	61.5	0  -----  100
Winter Weather	Relatively Low	28.6	0  -----  100

Risk Factor Breakdown

Hazard Type	EAL Value	Social Vulnerability	Community Resilience	CRF	Risk Value	Risk Index Score
Tornado	\$10,277,838	Very Low	Very High	0.8	\$8,124,847	91.7
Earthquake	\$7,700,935	Very Low	Very High	0.8	\$6,353,643	93.6
Strong Wind	\$2,454,509	Very Low	Very High	0.8	\$1,933,779	91.6
Riverine Flooding	\$938,277	Very Low	Very High	0.8	\$724,200	59.4
Heat Wave	\$342,286	Very Low	Very High	0.8	\$269,684	68.9
Lightning	\$264,346	Very Low	Very High	0.8	\$206,468	70.1
Hurricane	\$251,986	Very Low	Very High	0.8	\$198,134	49.6
Landslide	\$214,227	Very Low	Very High	0.8	\$159,934	88.7
Wildfire	\$120,740	Very Low	Very High	0.8	\$88,669	61.5
Ice Storm	\$46,134	Very Low	Very High	0.8	\$36,201	38.5
Winter Weather	\$30,880	Very Low	Very High	0.8	\$24,216	28.6
Hail	\$17,983	Very Low	Very High	0.8	\$14,186	13.4
Drought	\$1,863	Very Low	Very High	0.8	\$1,514	23.5
Cold Wave	\$0	Very Low	Very High	0.8	\$0	0
Avalanche	--	Very Low	Very High	0.8	--	--
Coastal Flooding	--	Very Low	Very High	0.8	--	--
Tsunami	--	Very Low	Very High	0.8	--	--
Volcanic Activity	--	Very Low	Very High	0.8	--	--

## Expected Annual Loss

In **Williamson County, TN**, expected loss each year due to natural hazards is **Relatively Moderate** when compared to the rest of the U.S.



### Expected Annual Loss Legend

- Very High
- Relatively High
- Relatively Moderate
- Relatively Low
- Very Low
- No Expected Annual Losses
- Not Applicable
- Insufficient Data

<b>Composite Expected Annual Loss</b>		<b>\$22,662,004.08</b>	
<b>Composite Expected Annual Loss Rate National Percentile</b>		<b>13.9</b>	
Building EAL	<b>\$13,745,769.17</b>	Population EAL	<b>0.77 fatalities</b>
Building EAL Rate	<b>\$1 per \$3.98K of building value</b>	Population EAL Rate	<b>1 per 322.74K people</b>
Agriculture EAL	<b>\$19,743.67</b>	Population Equivalence EAL	<b>\$8,896,491.23</b>
Agriculture EAL Rate	<b>\$1 per \$1.80K of agriculture value</b>		

## Expected Annual Loss for Hazard Types

Expected Annual Loss scores for hazard types are calculated using data for only a single hazard type, and reflect a community's relative expected annual loss for only that hazard type.

**14 of 18** hazard types contribute to the expected annual loss for **Williamson County, TN**.

Hazard Type	Expected Annual Loss Rating	EAL Value	Score
<b>Tornado</b>	Relatively High	\$10,277,838	94.7
<b>Earthquake</b>	Relatively Moderate	\$7,700,935	94.2

Hazard Type	Expected Annual Loss Rating	EAL Value	Score
Strong Wind	Relatively High	\$2,454,509	94.9
Riverine Flooding	Relatively Low	\$938,277	69.2
Heat Wave	Relatively Moderate	\$342,286	75.9
Lightning	Relatively Moderate	\$264,346	78.8
Hurricane	Very Low	\$251,986	52.5
Landslide	Relatively Moderate	\$214,227	94.2
Wildfire	Relatively Low	\$120,741	66.8
Ice Storm	Relatively Low	\$46,135	46.1
Winter Weather	Relatively Low	\$30,880	40.1
Hail	Very Low	\$17,983	20.5
Drought	Very Low	\$1,863	27.1
Cold Wave	No Expected Annual Losses	\$0	0.0
Avalanche	Not Applicable	--	--
Coastal Flooding	Not Applicable	--	--
Tsunami	Not Applicable	--	--
Volcanic Activity	Not Applicable	--	--

Expected Annual Loss Values

Hazard Type	Total	Building Value	Population Equivalence	Population	Agriculture Value
Avalanche	--	--	--	--	--
Coastal Flooding	--	--	--	--	--
Cold Wave	\$0	\$0	\$0	0.00	\$0
Drought	\$1,863	n/a	n/a	n/a	\$1,863
Earthquake	\$7,700,935	\$5,732,549	\$1,968,386	0.17	n/a
Hail	\$17,983	\$3,061	\$14,378	0.00	\$544
Heat Wave	\$342,286	\$3,684	\$338,576	0.03	\$26
Hurricane	\$251,986	\$248,386	\$1,991	0.00	\$1,610
Ice Storm	\$46,134	\$2,490	\$43,644	0.00	n/a
Landslide	\$214,227	\$186,141	\$28,086	0.00	n/a
Lightning	\$264,346	\$128,511	\$135,835	0.01	n/a
Riverine Flooding	\$938,277	\$577,459	\$359,701	0.03	\$1,117

Williamson County Hazard Mitigation Plan (HMP)

294-HMP-2024

Hazard Type	Total	Building Value	Population Equivalence	Population	Agriculture Value
<b>Strong Wind</b>	\$2,454,509	\$329,791	\$2,112,076	0.18	\$12,641
<b>Tornado</b>	\$10,277,838	\$6,405,114	\$3,870,787	0.33	\$1,937
Tsunami	--	--	--	--	--
Volcanic Activity	--	--	--	--	--
<b>Wildfire</b>	\$120,740	\$111,144	\$9,594	0.00	\$3
<b>Winter Weather</b>	\$30,880	\$17,439	\$13,437	0.00	\$4

Exposure Values

Hazard Type	Total	Building Value	Population Equivalence	Population	Agriculture Value
Avalanche	--	--	--	--	--
Coastal Flooding	--	--	--	--	--
<b>Cold Wave</b>	\$0	\$0	\$0	0.00	\$0
<b>Drought</b>	\$18,334,014	n/a	n/a	n/a	\$18,334,014
<b>Earthquake</b>	\$2,928,311,228,000	\$54,689,628,000	\$2,873,621,600,000	247,726.00	n/a
<b>Hail</b>	\$2,925,992,402,385	\$54,690,153,748	\$2,871,266,800,000	247,523.00	\$35,448,637
<b>Heat Wave</b>	\$2,925,992,402,385	\$54,690,153,748	\$2,871,266,800,000	247,523.00	\$35,448,637
<b>Hurricane</b>	\$2,924,987,957,567	\$54,672,983,997	\$2,870,279,605,130	247,437.90	\$35,368,440
<b>Ice Storm</b>	\$2,925,041,212,564	\$54,683,655,560	\$2,870,357,557,004	247,444.62	n/a
<b>Landslide</b>	\$1,125,211,552,939	\$20,983,240,890	\$1,104,228,312,049	95,192.10	n/a
<b>Lightning</b>	\$2,925,956,953,748	\$54,690,153,748	\$2,871,266,800,000	247,523.00	n/a
<b>Riverine Flooding</b>	\$67,934,556,133	\$1,303,522,809	\$66,624,960,029	5,743.53	\$6,073,295
<b>Strong Wind</b>	\$2,925,992,402,385	\$54,690,153,748	\$2,871,266,800,000	247,523.00	\$35,448,637
<b>Tornado</b>	\$2,925,992,402,385	\$54,690,153,748	\$2,871,266,800,000	247,523.00	\$35,448,637
Tsunami	--	--	--	--	--
Volcanic Activity	--	--	--	--	--
<b>Wildfire</b>	\$1,601,461,719,883	\$27,542,795,954	\$1,573,897,830,841	135,680.85	\$21,093,087
<b>Winter Weather</b>	\$2,925,992,402,385	\$54,690,153,748	\$2,871,266,800,000	247,523.00	\$35,448,637

Annualized Frequency Values

Hazard Type	Annualized Frequency	Events on Record	Period of Record
Avalanche	--	--	--

Hazard Type	Annualized Frequency	Events on Record	Period of Record
Coastal Flooding	--	--	--
Cold Wave	0 events per year	0	2005-2021 (16 years)
Drought	8.5 events per year	294	2000-2021 (22 years)
Earthquake	0.117% chance per year	n/a	2021 dataset
Hail	3.7 events per year	128	1986-2021 (34 years)
Heat Wave	0.1 events per year	2	2005-2021 (16 years)
Hurricane	0 events per year	3	East 1851-2021 (171 years) / West 1949-2021 (73 years)
Ice Storm	0.6 events per year	42	1946-2014 (67 years)
Landslide	0 events per year	3	2010-2021 (12 years)
Lightning	80.9 events per year	1,780	1991-2012 (22 years)
Riverine Flooding	2.2 events per year	52	1996-2019 (24 years)
Strong Wind	6.2 events per year	211	1986-2021 (34 years)
Tornado	0.5 events per year	22	1950-2021 (72 years)
Tsunami	--	--	--
Volcanic Activity	--	--	--
Wildfire	0.001% chance per year	n/a	2021 dataset
Winter Weather	1 event per year	16	2005-2021 (16 years)

Historic Loss Ratios

Hazard Type	Overall Rating
Avalanche	--
Coastal Flooding	--
Cold Wave	No Rating
Drought	Very Low
Earthquake	Relatively High
Hail	Very Low
Heat Wave	Relatively Low
Hurricane	Very Low
Ice Storm	Very Low
Landslide	Very Low
Lightning	Very Low

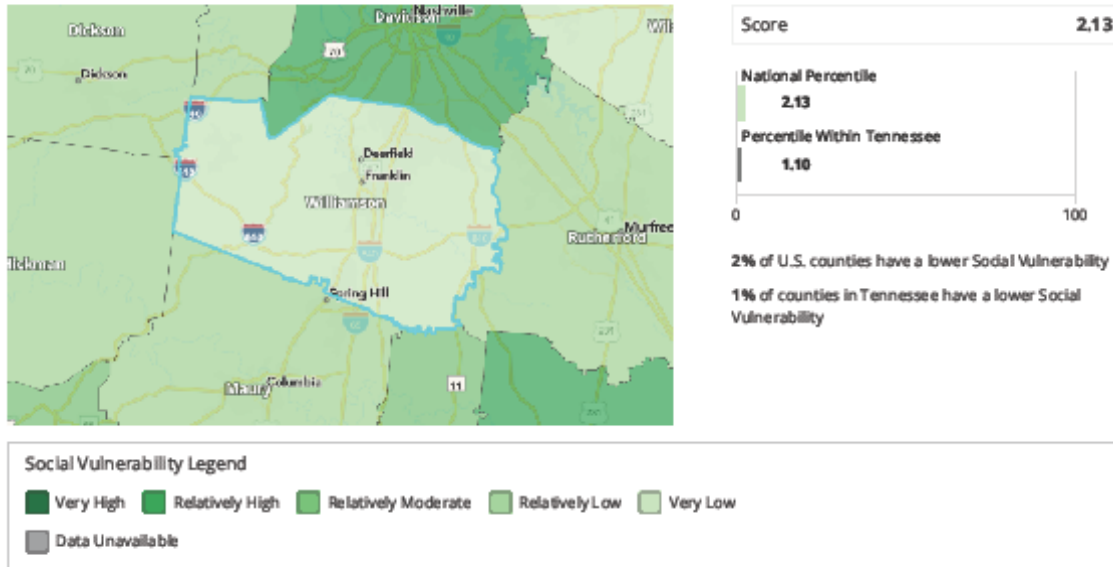
Hazard Type	Overall Rating
Riverine Flooding	Very Low
Strong Wind	Very Low
Tornado	Relatively Low
Tsunami	--
Volcanic Activity	--
Wildfire	Relatively Low
Winter Weather	Very Low

Expected Annual Loss Rate

Hazard Type	Building EAL Rate (per building value)	Population EAL Rate (per population)	Agriculture EAL Rate (per agriculture value)
Avalanche	--	--	--
Coastal Flooding	--	--	--
Cold Wave	--	--	--
Drought	--	--	\$1 per \$19.03K
Earthquake	\$1 per \$9.54K	1 per 1.46M	--
Hail	\$1 per \$17.87M	1 per 199.70M	\$1 per \$65.17K
Heat Wave	\$1 per \$14.85M	1 per 8.48M	\$1 per \$1.34M
Hurricane	\$1 per \$220.18K	1 per 1.44B	\$1 per \$22.02K
Ice Storm	\$1 per \$21.96M	1 per 65.79M	--
Landslide	\$1 per \$293.81K	1 per 102.23M	--
Lightning	\$1 per \$425.57K	1 per 21.14M	--
Riverine Flooding	\$1 per \$94.71K	1 per 7.98M	\$1 per \$31.74K
Strong Wind	\$1 per \$165.83K	1 per 1.36M	\$1 per \$2.80K
Tornado	\$1 per \$8.54K	1 per 741.78K	\$1 per \$18.30K
Tsunami	--	--	--
Volcanic Activity	--	--	--
Wildfire	\$1 per \$492.07K	1 per 299.28M	\$1 per \$12.02M
Winter Weather	\$1 per \$3.14M	1 per 213.68M	\$1 per \$9.94M

### Social Vulnerability

Social groups in Williamson County, TN have a Very Low susceptibility to the adverse impacts of natural hazards when compared to the rest of the U.S.

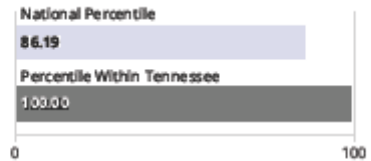


## Community Resilience

Communities in Williamson County, TN have a **Very High** ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions when compared to the rest of the U.S.



Score **86.19**



14% of U.S. counties have a higher Community Resilience

0% of counties in Tennessee have a higher Community Resilience

### Community Resilience Legend



## About the National Risk Index

The National Risk Index is a dataset and online tool to help illustrate the United States communities most at risk for 18 natural hazards: Avalanche, Coastal Flooding, Cold Wave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Riverine Flooding, Strong Wind, Tornado, Tsunami, Volcanic Activity, Wildfire, and Winter Weather.

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

Explore the National Risk Index Map at [hazards.fema.gov/nri/map](https://hazards.fema.gov/nri/map).

Visit the National Risk Index website at [hazards.fema.gov/nri/learn-more](https://hazards.fema.gov/nri/learn-more) to access supporting documentation and links.

## Calculating the Risk Index

Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability and Community Resilience:

$$\text{Risk Index} = \text{Expected Annual Loss} \times \text{Social Vulnerability} + \text{Community Resilience}$$

Risk Index scores are presented as a composite score for all 18 hazard types, as well as individual scores for each hazard type.

For more information, visit [hazards.fema.gov/nri/determining-risk](https://hazards.fema.gov/nri/determining-risk).

## Calculating Expected Annual Loss

Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios for 18 hazard types:

$$\text{Expected Annual Loss} = \text{Exposure} \times \text{Annualized Frequency} \times \text{Historic Loss Ratio}$$

Expected Annual Loss scores are presented as a composite score for all 18 hazard types, as well as individual scores for each hazard type.

For more information, visit [hazards.fema.gov/nri/expected-annual-loss](https://hazards.fema.gov/nri/expected-annual-loss).

## Calculating Social Vulnerability

Social Vulnerability is measured using the Social Vulnerability Index (SVI) published by the Centers for Disease Control and Prevention (CDC).

For more information, visit [hazards.fema.gov/nri/social-vulnerability](https://hazards.fema.gov/nri/social-vulnerability).

## Calculating Community Resilience

Community Resilience is measured at the County level using the Baseline Resilience Indicators for Communities (HVRl BRIC) published by the University of South Carolina's Hazards and Vulnerability Research Institute (HVRI).

For more information, visit [hazards.fema.gov/nri/community-resilience](https://hazards.fema.gov/nri/community-resilience).

## How to Take Action

There are many ways to reduce natural hazard risk through mitigation. Communities with high National Risk Index scores can take action to reduce risk by decreasing Expected Annual Loss due to natural hazards, decreasing Social Vulnerability, and increasing Community Resilience.

For information about how to take action and reduce your risk, visit [hazards.fema.gov/nri/take-action](https://hazards.fema.gov/nri/take-action).

## Disclaimer

The National Risk Index (the Risk Index or the Index) and its associated data are meant for planning purposes only. This tool was created for broad nationwide comparisons and is not a substitute for localized risk assessment analysis. Nationwide datasets used as inputs for the National Risk Index are, in many cases, not as accurate as available local data. Users with access to local data for each National Risk Index risk factor should consider substituting

the Risk Index data with local data to recalculate a more accurate risk index. If you decide to download the National Risk Index data and substitute it with local data, you assume responsibility for the accuracy of the data and any resulting data index. Please visit the [Contact Us](#) page if you would like to discuss this process further.

The methodology used by the National Risk Index has been reviewed by subject matter experts in the fields of natural hazard risk research, risk analysis, mitigation planning, and emergency management. The processing methods used to create the National Risk Index have produced results similar to those from other natural hazard risk analyses conducted on a smaller scale. The breadth and combination of geographic information systems (GIS) and data processing techniques leveraged by the National Risk Index enable it to incorporate multiple hazard types and risk factors, manage its nationwide scope, and capture what might have been missed using other methods.

The National Risk Index does not consider the intricate economic and physical interdependencies that exist across geographic regions. Keep in mind that hazard impacts in surrounding counties or Census tracts can cause indirect losses in your community regardless of your community's risk profile.

Nationwide data available for some risk factors are rudimentary at this time. The National Risk Index will be continuously updated as new data become available and improved methodologies are identified.

The National Risk Index Contact Us page is available at [hazards.fema.gov/nri/contact-us](https://hazards.fema.gov/nri/contact-us).

## Appendix C: Historical Hazard Data

### ETSU Climate Trend and Variations Report:

# Williamson County Climate Trends and Variations

## Flooding

The future risk of flooding in Williamson County is tied to predicted changes in the precipitation patterns. Tennessee and Williamson County have increasing trends in observed precipitation, and the Fourth National Climate Assessment (2018) reports that the broader Southeast region has seen an increase in the frequency and intensity of extreme rainfall events, there is high confidence that this trend will continue in the future. According to the Climate Mapping Risk Assessment (CMRA) Report, Williamson County is expected to experience a modest increase in various flood indicators by mid- and late-century. Both the increase in total precipitation and extreme rainfall events will increase the risk of flooding in Williamson County. The long-term (1895-2022) trend in annual precipitation shows an increase of +0.67” per decade, the medium-term (1961-2022) trend in precipitation shows an increase of +0.47” per decade, and the short-term (1991-2022) trend shows trend of 0.59” per decade. This indicates that precipitation has noticeably increased in Williamson County over the past several decades.

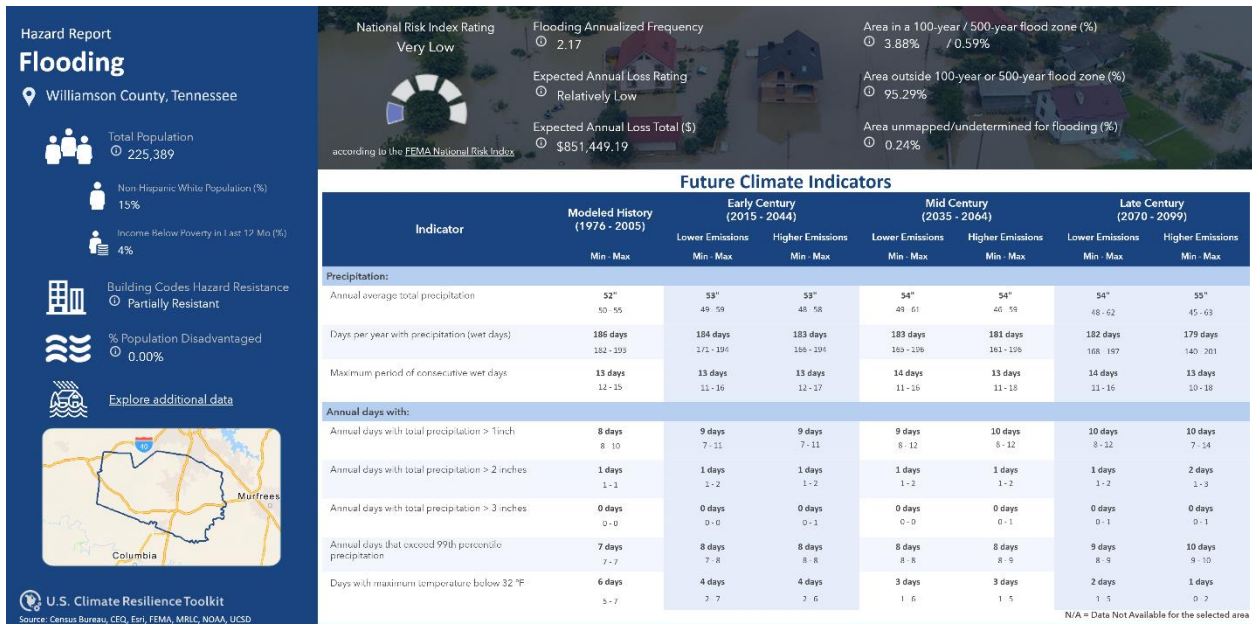


Figure 1: Climate Mapping Risk Assessment Report for Flooding in Williamson County.

(Source: US Climate Resilience Toolkit)

### Williamson County, Tennessee Precipitation

January-December

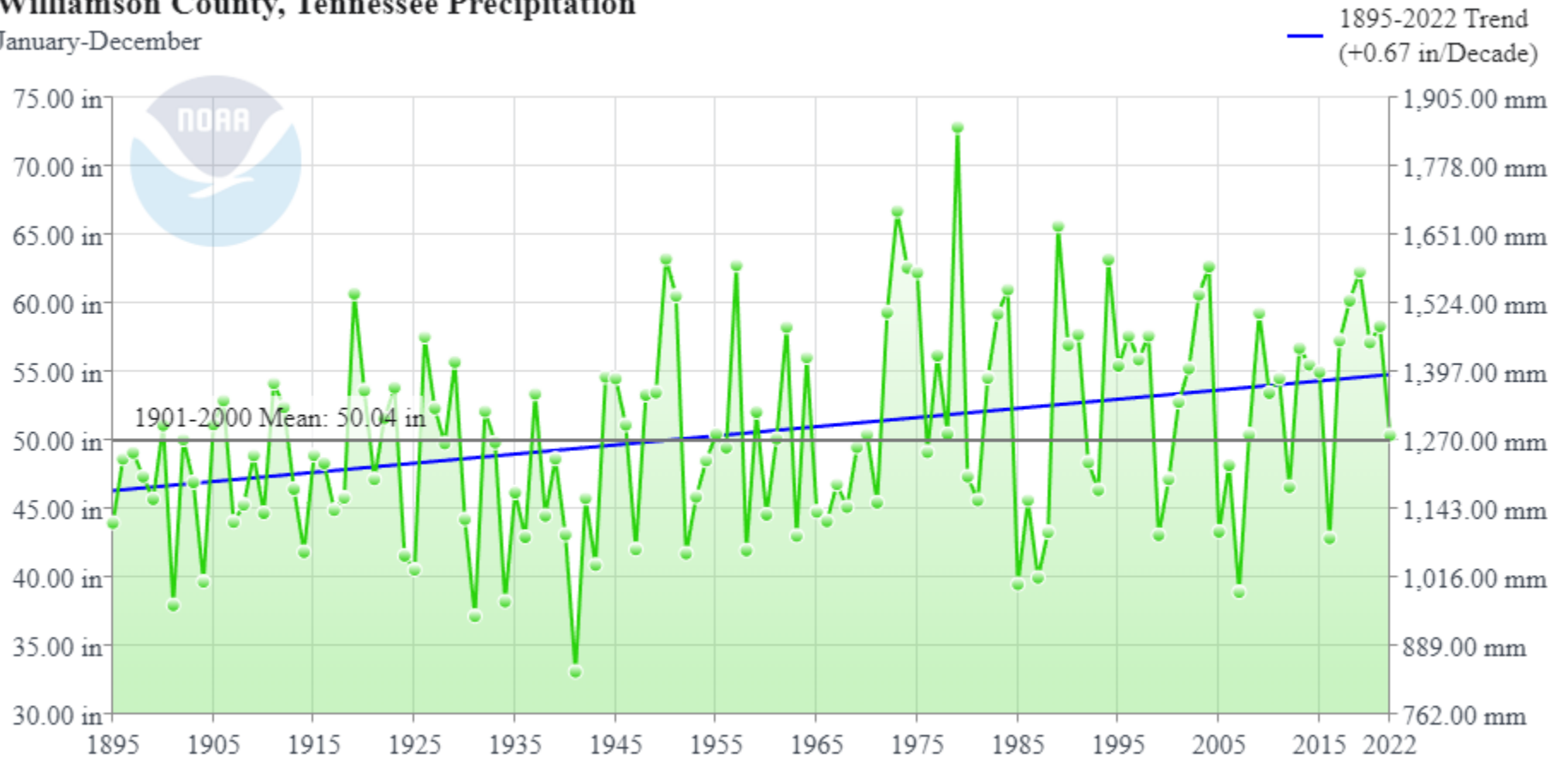
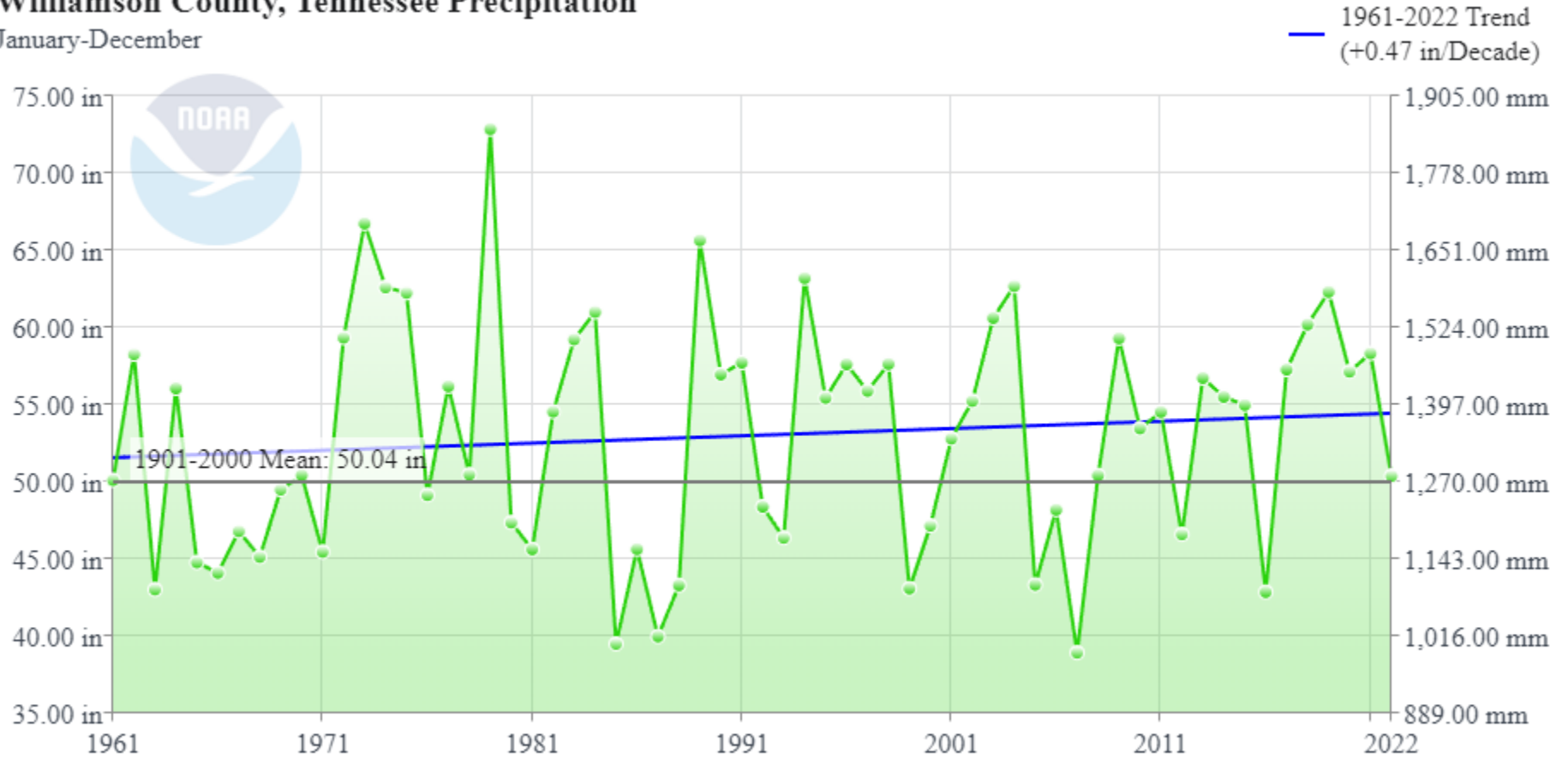


Figure 2: Total Annual Precipitation for Williamson County, Tennessee, Showing a +0.67-inch Increase per Decade Since 1895.

(Source: NOAA NCEI, Climate at a Glance: County Time Series)

**Williamson County, Tennessee Precipitation**  
January-December



**Figure 3: Total Annual Precipitation for Williamson County, Tennessee, Showing a +0.47-inch Increase per Decade Since 1961.**  
(Source: NOAA NCEI, Climate at a Glance: County Time Series)

### Williamson County, Tennessee Precipitation

January-December

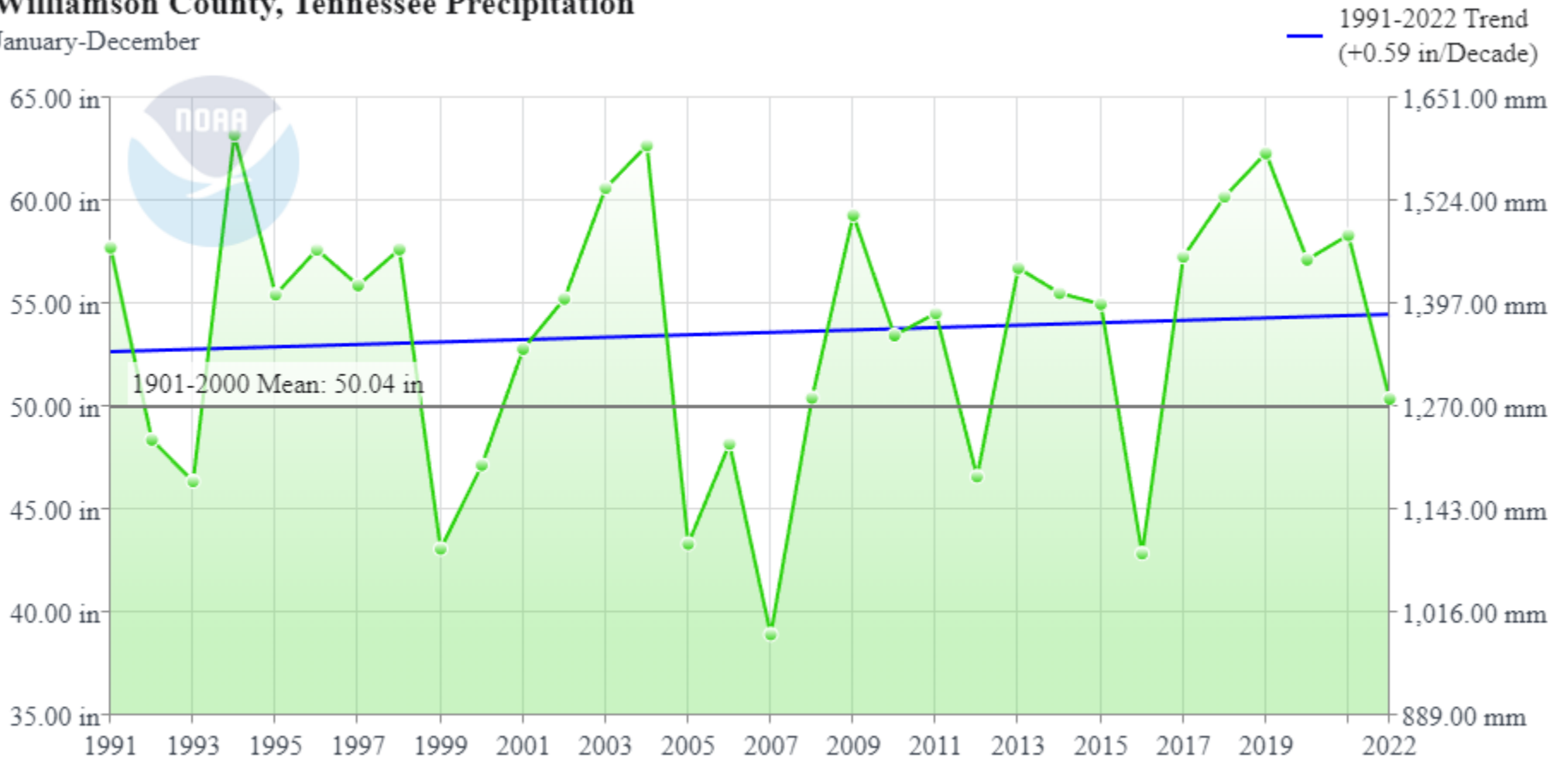
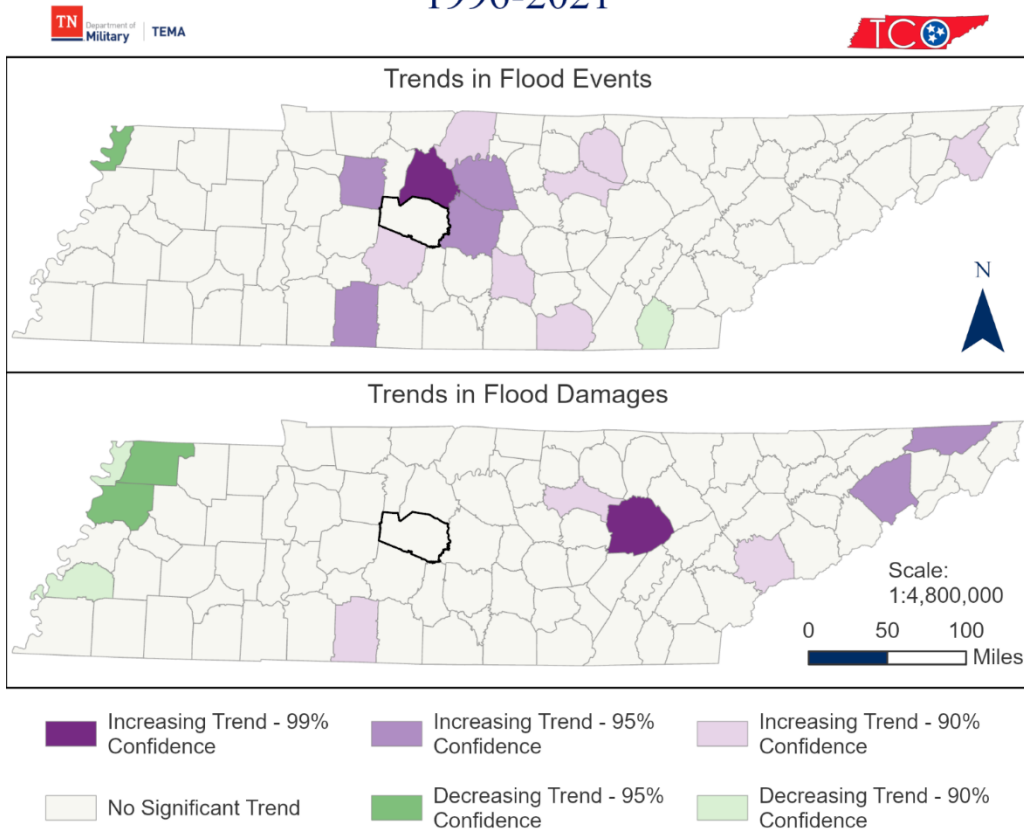


Figure 4: Total Annual Precipitation for Williamson County, Tennessee, Showing a +0.59-inch Increase per Decade Since 1991.

(Source: NOAA NCEI, Climate at a Glance: County Time Series)

Using the NOAA Storm Events Database, flood events and flood damages (dollars) were examined for trends between 1996 and 2021. While Williamson County did not show a significant trend in either the number of flood events or flood damages, several other nearby counties in Middle Tennessee did see increasing trends in the number of flood events in this time period.

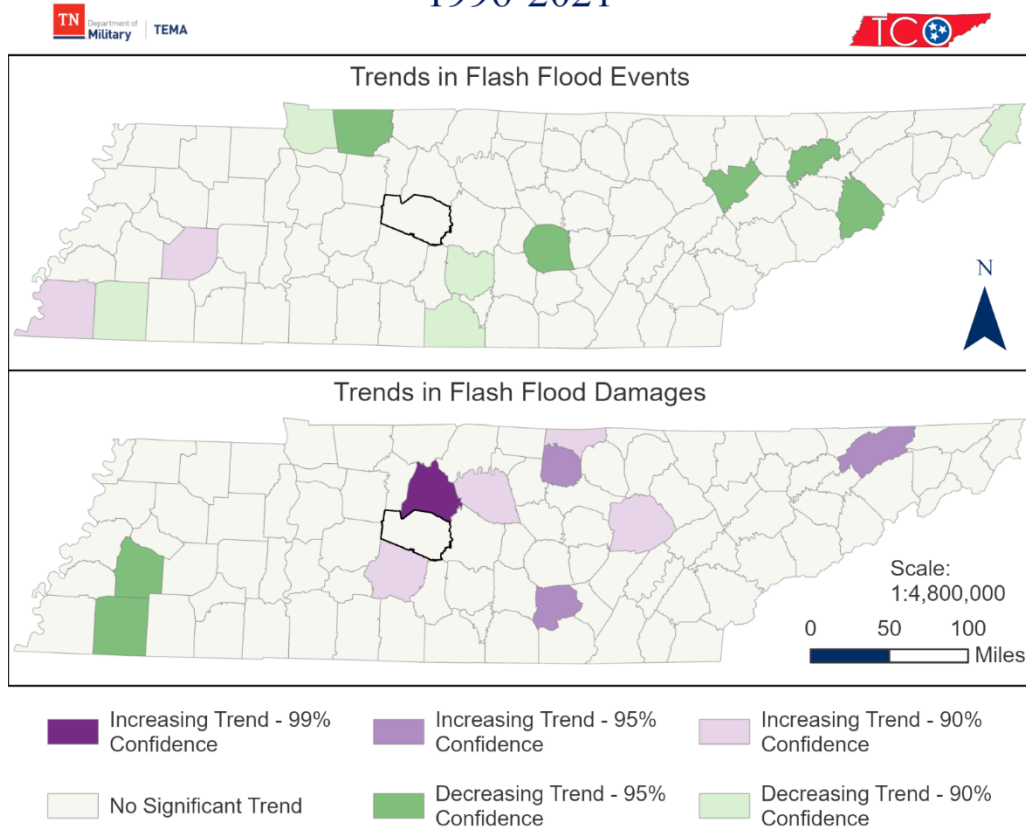
## Trend Analysis of Flood Events and Flood Damages 1996-2021



**Figure 5: Trend in Flood Events and Flood Damages Reported in the NCEI Storm Events Database from 1996 to 2021, Williamson County Outlined in Bold.**

The trends in flood events and flood damages presented above are for riverine flooding, but as overall rainfall increases and trends towards higher intensity precipitation events continue flash flooding may become a higher concern for parts of Tennessee, including Williamson County. The Tennessee Climate Office (TCO) analyzed trends in flash flood events and flash flood related damages from the NOAA Storm Events Database from 1996 to 2021. Williamson County showed no significant trend in these events, but some other nearby Middle Tennessee counties did show increasing trends in flash flood damage amounts.

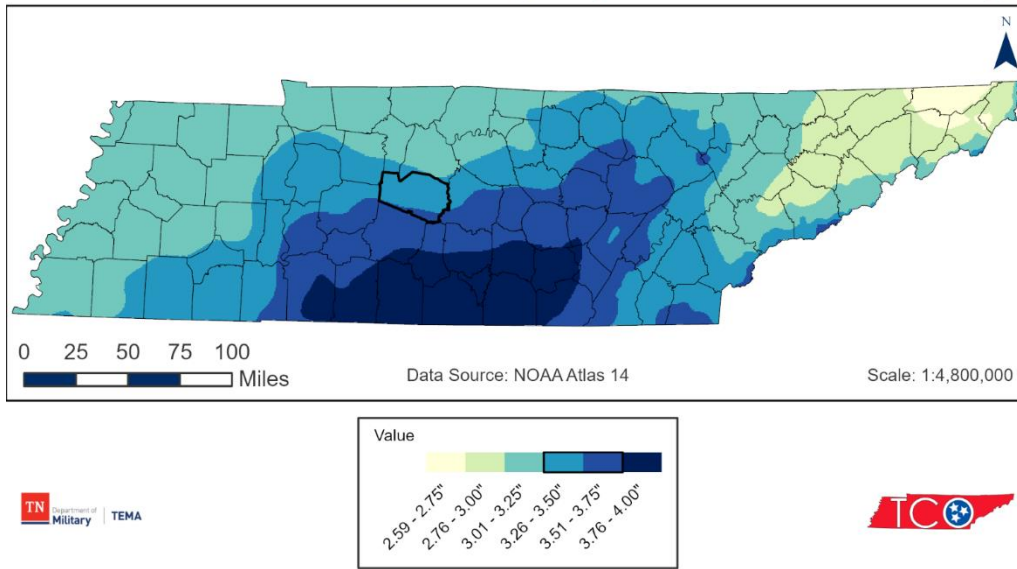
## Trend Analysis of Flash Flood Events and Damages 1996-2021



**Figure 6: Trend in Flash Flood Events and Flash Flood Damages Reported in the NCEI Storm Events Database from 1996 to 2021, Williamson County Outlined in Bold.**

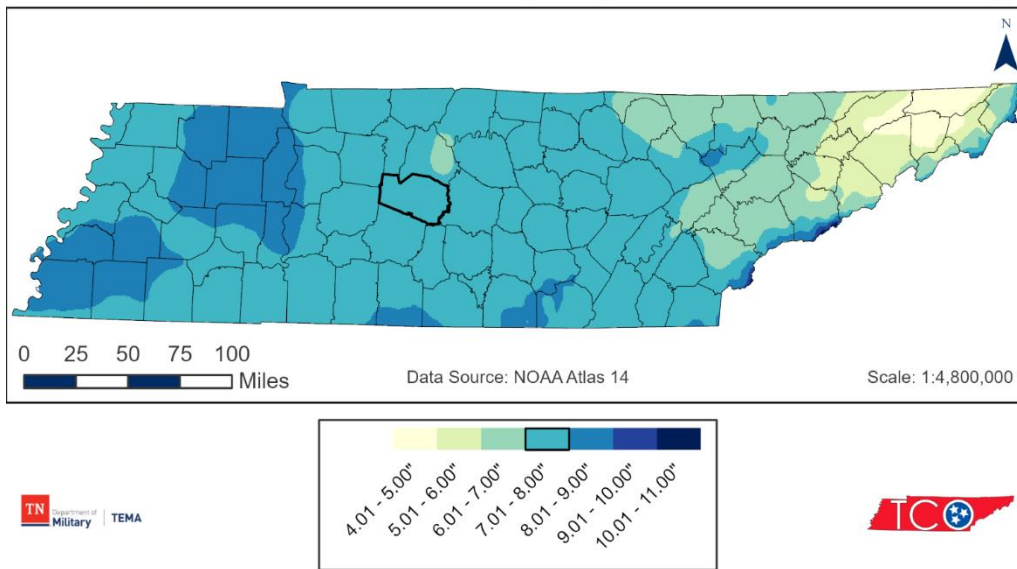
Extreme rainfall events are often categorized based on how much above or below their amounts were compared to the 100-year, or 1% annual probability, rainfall amounts. For Williamson County, a 100-year 1-hour extreme rainfall total would be approximately 3.26-3.75 inches. For a 100-year 24-hour extreme rainfall event, Williamson County would experience 7.01-8.00 inches of rain.

1-Hour Extreme Rainfall Amounts (100-year / 1% Annual Probability)



**Figure 7: 1-hour Extreme Rainfall Estimates for 100-year Return Period (1% Annual Probability of Exceedance) using NOAA Atlas 14, Williamson County, Outlined in Bold.**

24-Hour Extreme Rainfall Amounts (100-year / 1% Annual Probability)

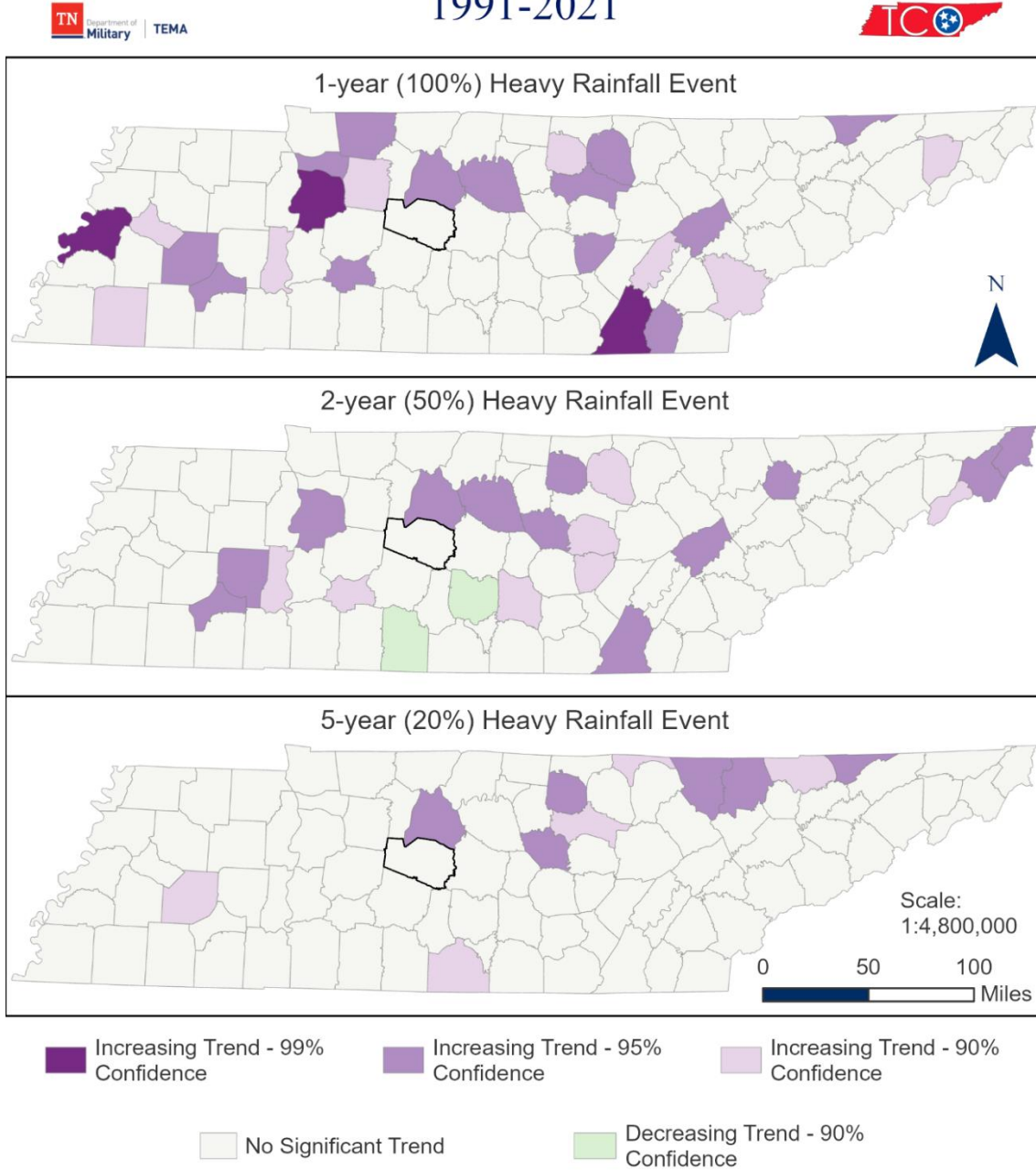


**Figure 8: 24-hour Extreme Rainfall Estimates for 100-year Return Period (1% Annual Probability of Exceedance) using NOAA Atlas 14, Williamson County, Outlined in Bold.**

The TCO analyzed trends in heavy precipitation days per year in counties across Tennessee, these were the number of days that daily rainfall totals exceeded a 1-year (100% chance of annual

probability), 2-year (50% chance of annual probability), or a 5-year (20% chance of annual probability) event. Williamson County showed no significant trend in these heavy rainfall events.

## Trend Analysis of Heavy Precipitation Events 1991-2021

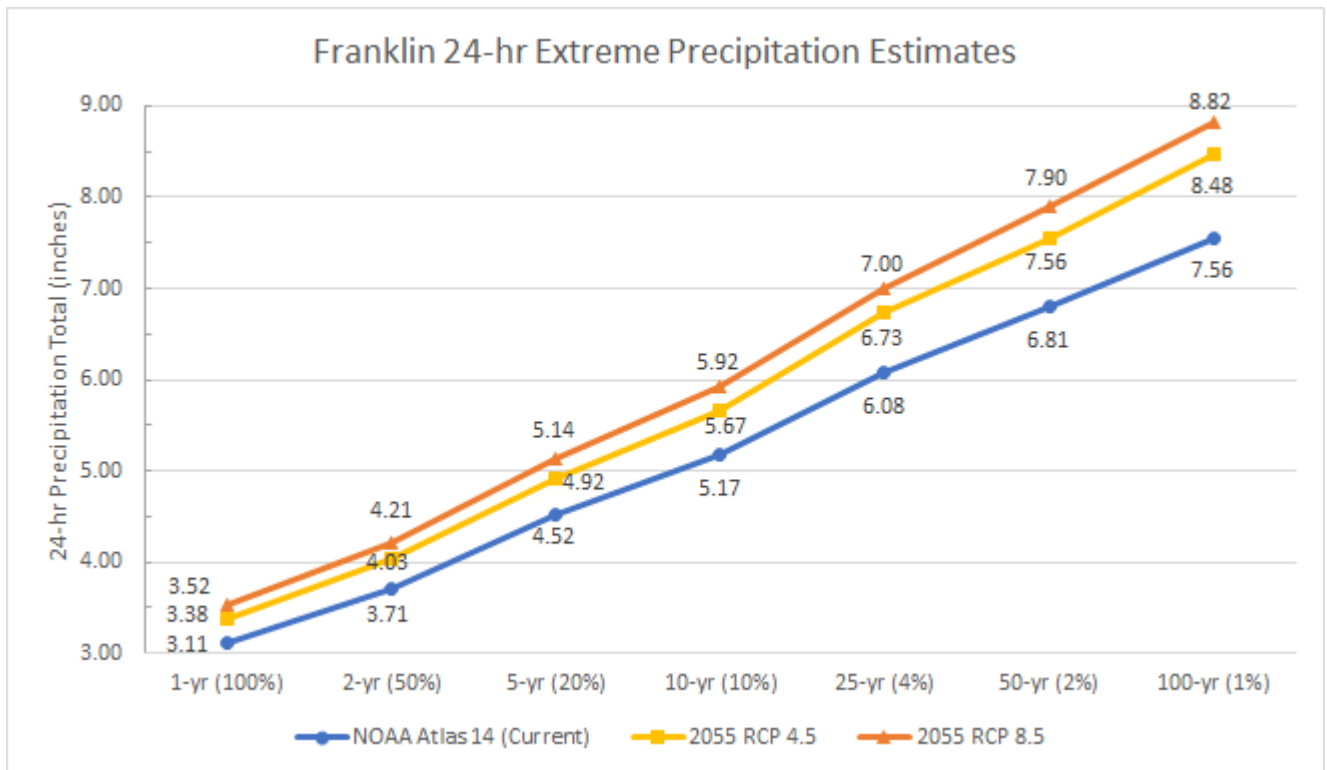


**Figure 9: Trend in Heavy Precipitation Events (1-year, 2-year, and 5-year Return Period Exceedance Events), Williamson County Outlined in Bold.**

Additional data from the CMRA report for Williamson County predicts an increase in the number of days per year with extreme precipitation for Williamson County throughout the 21<sup>st</sup> century. Based on analysis by the NCICS and NOAA, Franklin (the county seat of Williamson County) currently has a 100-year 24-hour extreme rainfall amount of 7.56 inches and that amount is predicted to rise by as much as 1.26 inches (to 8.82”) by 2055.

**Table 1: Possible Change in the Number of Days per Year with Precipitation Exceeding 99<sup>th</sup> Percentile (Extreme Precipitation Days).**

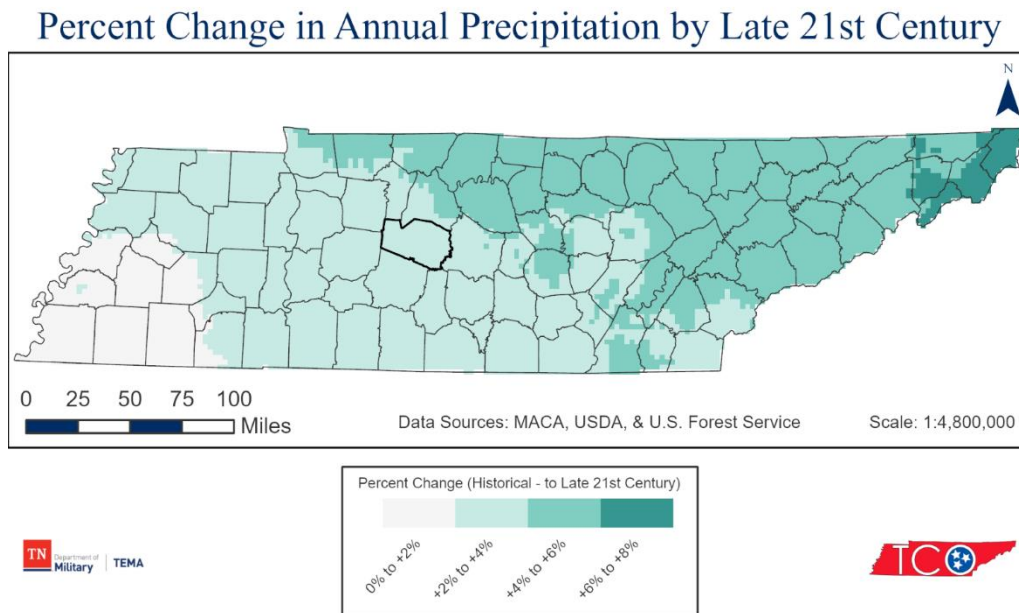
High Emissions Scenario	Modeled History (1976-2005)	Early Century (2015-2044)	Mid Century (2035-2064)	Late Century (2070-2099)
Driest Projection	6.5	+1.1	+1.4	+2.8
Mean Projection	6.8	+1.2	+1.5	+2.9
Wettest Projection	7.2	+1.2	+1.6	+3.2
Low Emissions Scenario	Modeled History (1976-2005)	Early Century (2015-2044)	Mid Century (2035-2064)	Late Century (2070-2099)
Driest Projection	6.5	+0.7	+1.1	+1.6
Mean Projection	6.8	+0.8	+1.1	+1.7
Wettest Projection	7.2	+0.8	+1.2	+1.7



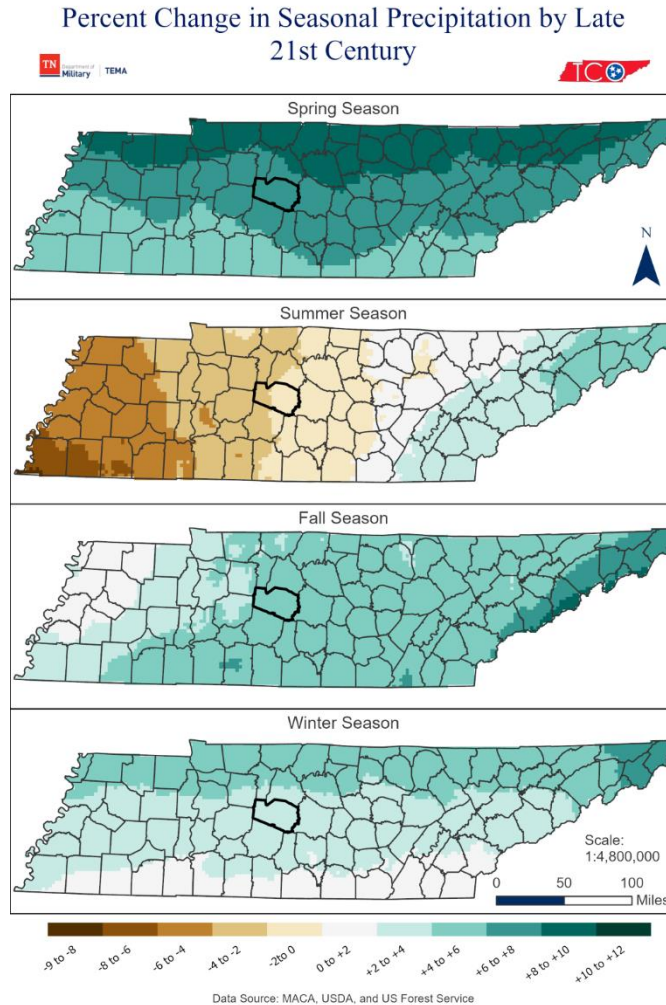
**Figure 10: 24-hour Extreme Rainfall Estimates for 1-year, 2-year, 5-year, 10-year, 25-year, 50-**

**year, and 100-year Return Periods using NOAA Atlas 14 (historical data) and Mid-Century Values for 2055 using RCP4.5 and RCP8.5 Emission Scenarios.**

The US Department of Agriculture and US Forest Service created a report based on models and projection data from Multivariate Adaptive Constructed Analogs (MACA), that show most of Tennessee is expected to see an increase in annual precipitation by the late 21st century. Williamson County is projected to see an increase of 2-4% in annual precipitation by the late 21st century. However, potential changes in precipitation are not expected to be spread equally across all four seasons. The largest change for Williamson County comes in spring precipitation totals, with a projected 6-8% increase over historical spring precipitation. Summer precipitation is projected to decrease 0.1-4% from the historical average, Fall is projected to see a 4-6% increase in precipitation, and Winter is projected to have a 2-4% increase in precipitation across Williamson County.



**Figure 11: Projected Change in Annual Precipitation for Tennessee, Williamson County Outlined in Bold.**



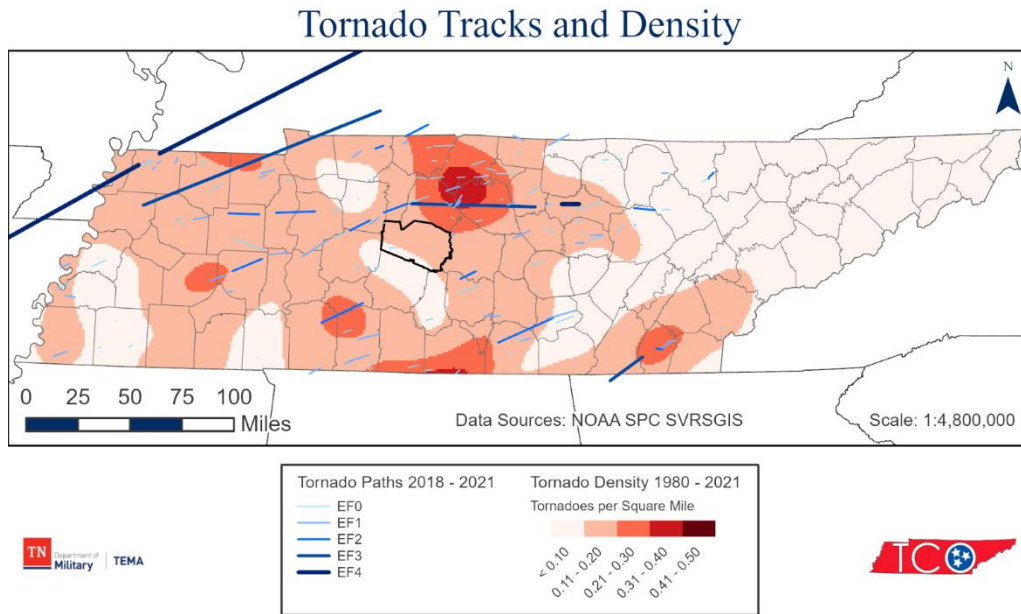
**Figure 12: Projected Change in Seasonal Precipitation for Tennessee, Williamson County Outlined in Bold.**

## Tornado

It is uncertain how climate trends will impact the overall frequency of tornadoes, with convective storms (from which tornadoes form) being the least well understood extreme events when it comes to attributing future changes to climate trends and variations. However, some studies suggest that the number of days conducive to severe thunderstorms, which can spawn tornadoes, may increase in certain regions including West and Middle Tennessee. Additionally, warmer temperatures can provide more energy to storms, potentially leading to more intense tornadoes. Tornado formation depends on the interaction of multiple atmospheric factors, including temperature, humidity, wind shear, and instability. While climate trends may alter some of these factors, the precise impact on tornado formation remains uncertain. Warmer temperatures and increased moisture content in the atmosphere can contribute to more

favorable conditions for tornado formation, but other factors like wind shear patterns may also change and reduce the chances for tornado formation.

Using historical data from 1980 to 2021, Williamson County has a moderate density for tornadoes in Tennessee, with an average of 0.11 to 0.2 tornado tracks per square mile in most of the county, with extreme southern parts of the county with less than 0.1 tracks per square mile in this time period.



**Figure 13: Tornado Tracks from 2018-2021 and the Density of Tornado Tracks across Tennessee from 1980 to 2021, Williamson County Outlined in Bold.**

Using data from the NOAA Storm Events Database, trend analysis and emerging hotspot analysis were performed on the number of tornadoes reported in each county of Tennessee from 1996 to 2021. There was not a significant increasing or decreasing trend in the number of tornadoes observed in Williamson County. However, Williamson County and other neighboring counties to the north were identified as a sporadic hot spot for tornadoes, meaning the county was a hot spot for tornadoes in the final year in the analysis with a history of also being an on-again and off-again hot spot through the period, but less than 90 percent of the time-step intervals have been statistically significant hot spots. These results indicate that while there has been a moderate number of tornadoes occurring in Williamson County, there has not been a significant increase in the number of tornadoes observed per year over the past 26 years.

Trend in Tornadoes (1996 - 2021)

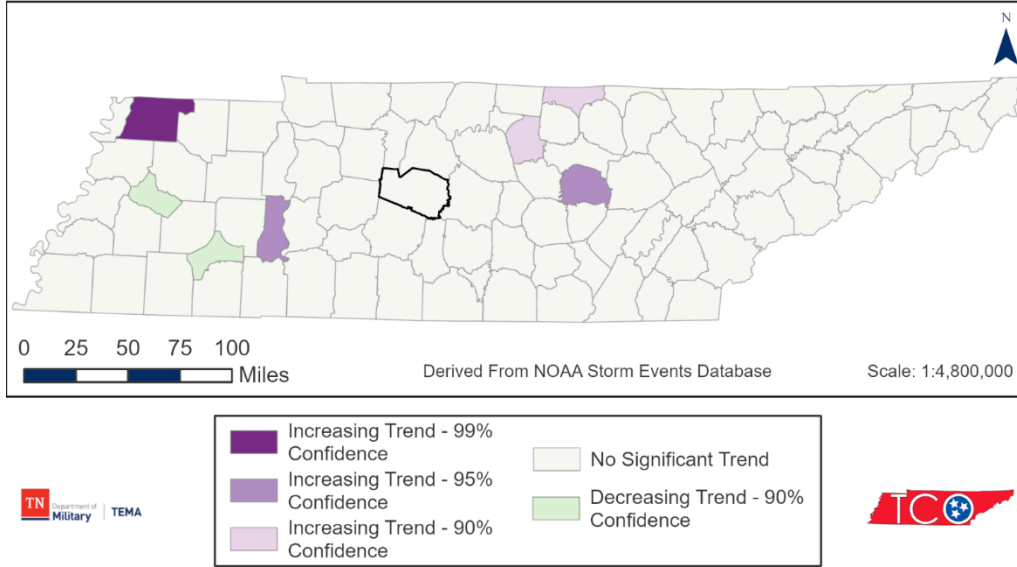


Figure 14: Trends in the Number of Tornadoes Recorded in the NCEI Storm Events Database from 1996 to 2021, Williamson County Outlined in Bold.

Emerging Hot Spot Analysis of Tornadoes (1996 - 2021)

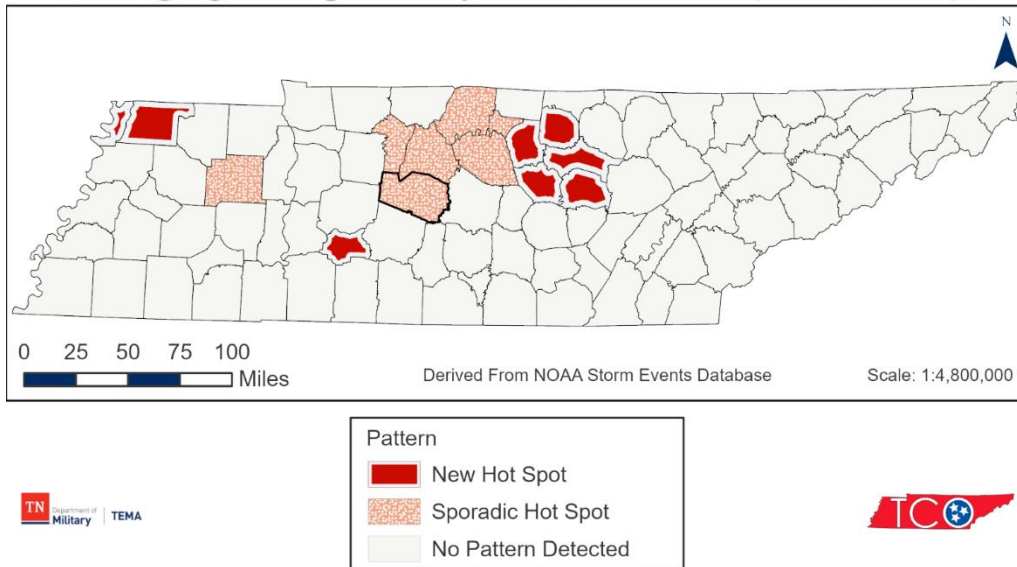


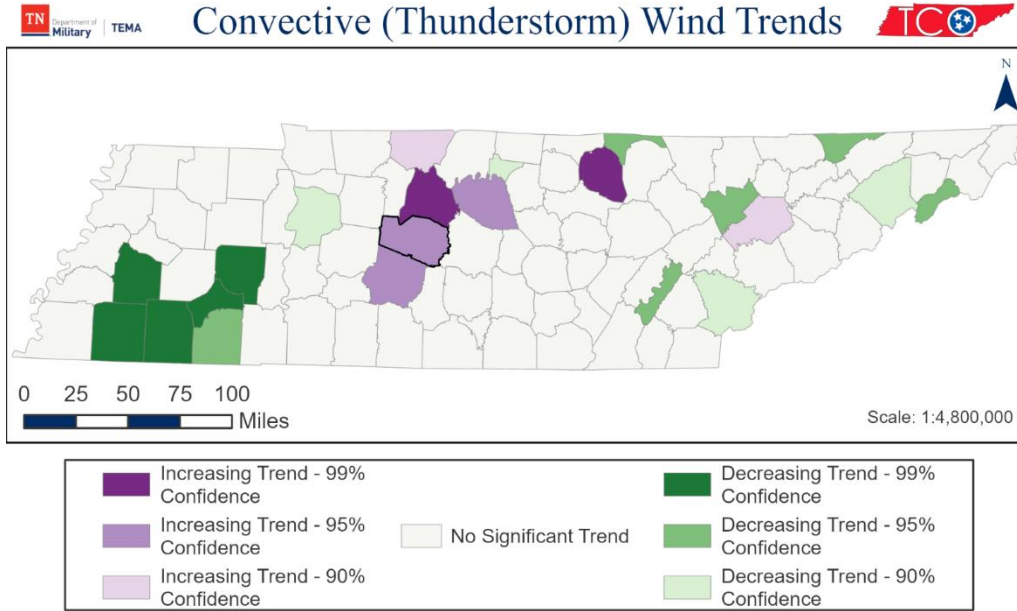
Figure 15: Emerging Hot Spot Analysis based on the Number of Tornadoes per Year Recorded in the NCEI Storm Events Database from 1996 to 2021, Williamson County Outlined in Bold.

Severe Weather

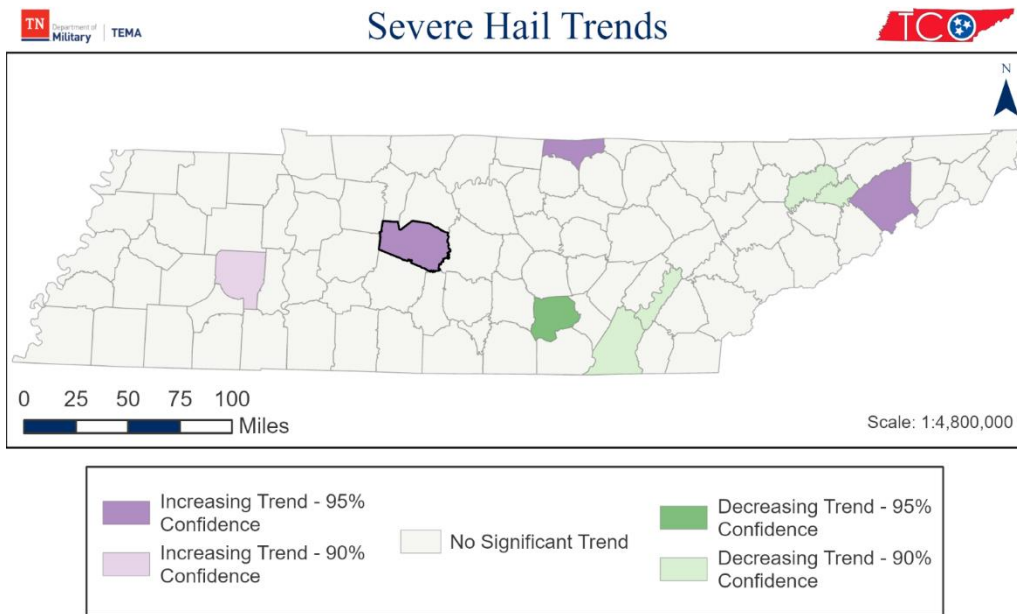
Climate trends and variations may lead to an increase in frequency and intensity of certain types of severe storms. Warmer air temperatures can contribute to more moisture in the atmosphere, providing fuel for stronger rainfall events and potentially more intense thunderstorms. The increased energy in the atmosphere can also contribute to the development of more powerful storms. Climate trends can also result in altered precipitation patterns influencing the distribution, timing, and intensity of rainfall during storms. Climate trends can influence the paths and tracks of severe storms too. Changes in atmospheric circulation patterns may lead to shifts in the regions where storms typically form or move, potentially affecting the areas that are historically vulnerable to specific types of storms. This can result in new areas being exposed to severe storms while other areas experience a decrease. Research by Ashley et al. (2023) into supercell thunderstorm formation compared historical data (1990-2005) and future climate models for the late 21st century (2085 – 2100), which indicate that the mid-South region of the U.S. (including West and Middle Tennessee) could see an increase in the number of supercell thunderstorms capable of producing severe thunderstorm hazards and tornadoes. These increases were mostly found in the late winter to early spring months of February, March, and April. Additionally, they found that an increasing number of supercell thunderstorms in this region could form in the late afternoon to overnight hours. Climate trends can contribute to compound events where multiple extreme weather events can occur simultaneously or in succession. These compound events can amplify the overall impacts on communities and ecosystems, making them more challenging to manage and recover from.

### Severe Thunderstorms (Convective Wind, Hail and Lightning)

The Tennessee Climate Office (TCO) analyzed trends for thunderstorm winds (convective wind) and severe hail reports in counties across Tennessee using the NOAA Storm Events Database with data from 1996 to 2021, and lightning strikes per county from 1996 to 2021 from the NOAA Severe Weather Data Inventory (SWDI). The trend analysis for convective winds and severe hail showed a significant increasing trend in the number of events in Williamson County at the 95% confidence level. There was a decreasing trend in the number of lightning strikes per year in Williamson County at the 95% confidence interval.



**Figure 16: Trends in the Number of Thunderstorm Wind Events Recorded in the NCEI Storm Events Database from 1996 to 2021, Williamson County Outlined in Bold.**



**Figure 17: Trends in the Number of Severe Hail Events Recorded in the NCEI Storm Events Database from 1996 to 2021, Williamson County Outlined in Bold.**

Average Lightning Strikes per Year (1996-2021)

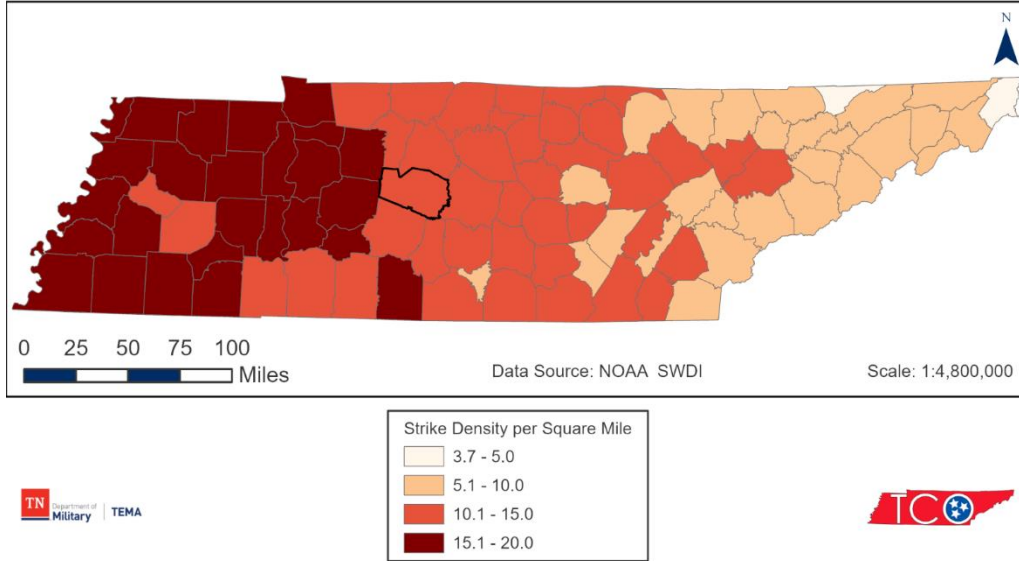


Figure 18: Average Annual Number of Lightning Strikes per Square Mile from 1996 to 2021, Williamson County Outlined in Bold.

Trend in Lightning Strikes (1996 - 2021)

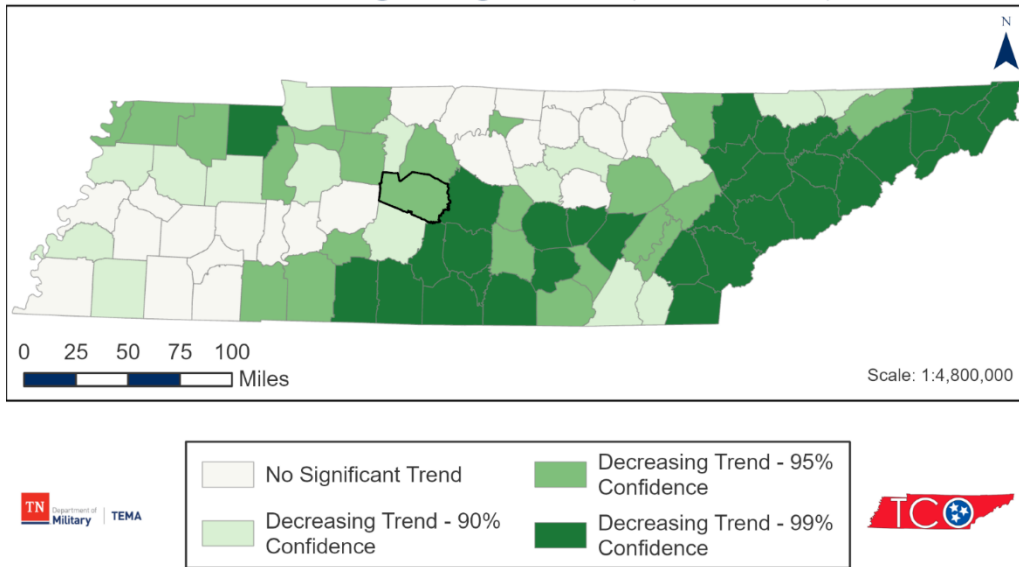
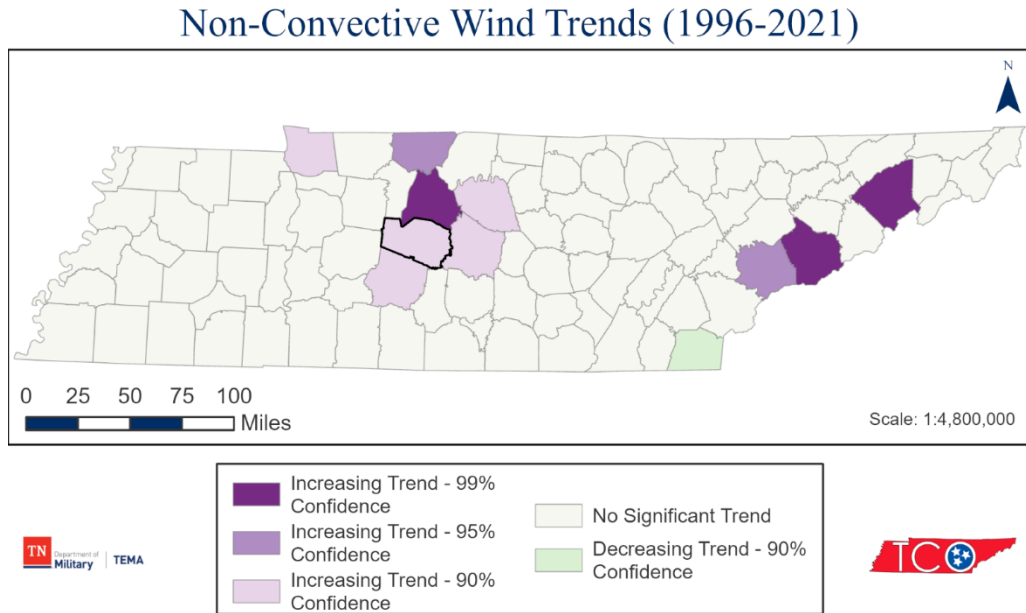


Figure 19: Trends in the Number of Lightning Strikes per County Recorded in the NOAA Severe Weather Data Inventory from 1996 to 2021, Williamson County Outlined in Bold.

Non-Thunderstorm Winds

The Tennessee Climate Office (TCO) also analyzed trends for non-convective (non-thunderstorm) wind reports in counties across Tennessee using the NOAA Storm Events Database with data from 1996 to 2021, and Williamson County showed a significant increasing trend at the 90% confidence level in non-convective wind events during this time along with several other counties in Middle Tennessee.

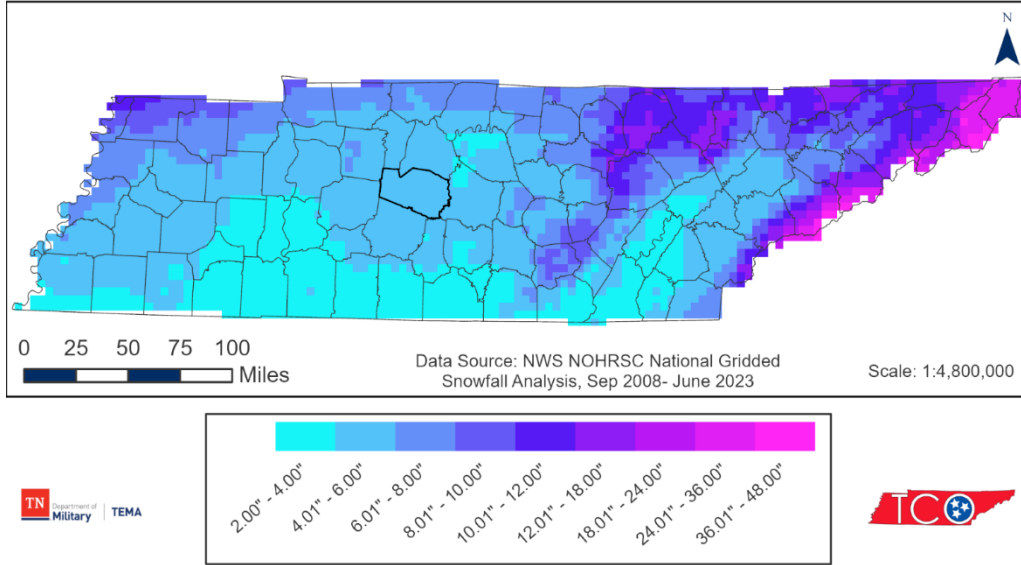


**Figure 20: Trends in the Number of Non-Convective Wind Events Recorded in the NCEI Storm Events Database from 1996 to 2021, Williamson County Outlined in Bold.**

### Winter Weather

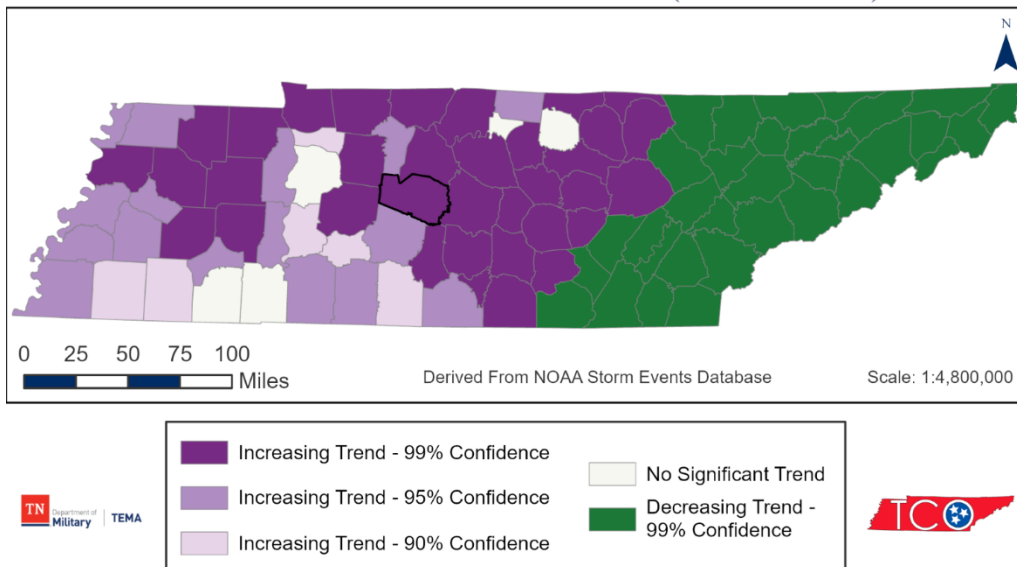
Data from the National Weather Service NOHRSC National Gridded Snowfall Analysis webpage covering the winters of 2008-2009 to 2022-2023 (the last 15-years) indicates that the average annual snowfall for Williamson County ranges from 4 to 6-inches per year. Using data from the NOAA Storm Events Database, trend analysis was performed on winter weather-related storms from 1996 to 2021 across the state of Tennessee. In this time period there was an increasing trend in the number of winter storms impacting Williamson County, this trend was significant to the 99% confidence level.

### Average Annual Snowfall



**Figure 21: Average Annual Snowfall from the Winter of 2008/2009 to the Winter of 2022/2023, Williamson County Outlined in Bold.**

### Trend in Winter Weather Events (1996 - 2021)



**Figure 22: Trends in the Number of Winter Weather-Related Events Recorded in the NCEI Storm Events Database from 1996 to 2021, Williamson County Outlined in Bold.**

Climate trends and variability will impact the future likelihood of winter weather events or severe winter storms in Tennessee, likely decreasing but not eliminating the overall risk. Average annual temperatures are expected to increase across the Southeast US, including temperatures during the winter season. Williamson County has an observed warming trend of +0.1°F per decade from

1896 to 2023 throughout the meteorological/climatological winter season (December – February). In the medium-term (1961 - 2023) the winter temperature trend shows greater warming at +0.8°F per decade, however the short-term (1991 - 2023) trend shows slightly moderated warming of +0.6°F per decade during the winter season. The moderation was caused by the exclusion of the very cold winters of 1963 and 1977-1979.

### Williamson County, Tennessee Average Temperature

December-February

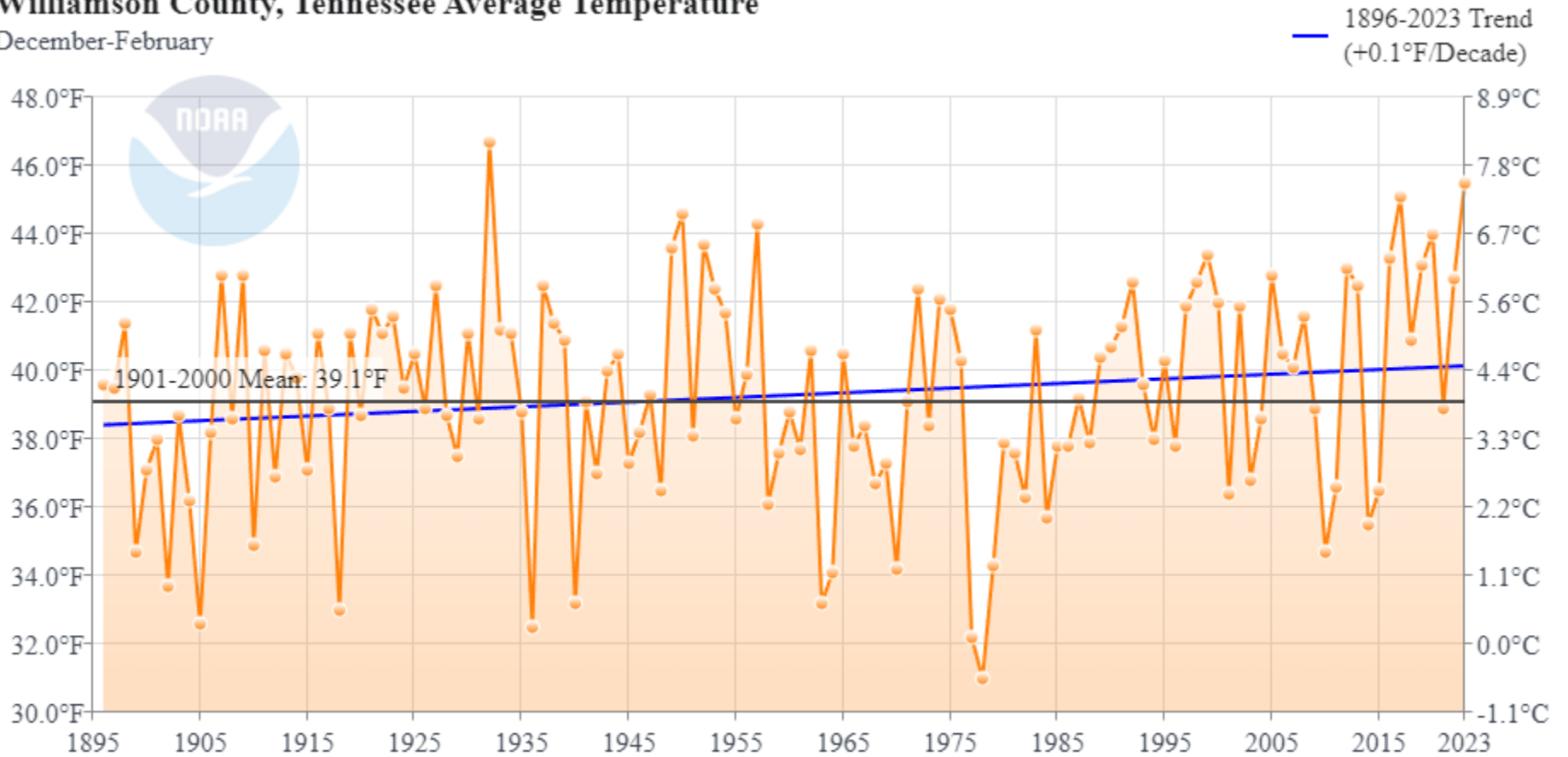


Figure 23: Winter (December to February) Mean Temperature for Williamson County, Tennessee, Showing a +0.1°F Increase per Decade Since 1895.

(Source: NOAA NCEI, Climate at a Glance: County Time Series)

### Williamson County, Tennessee Average Temperature

December-February

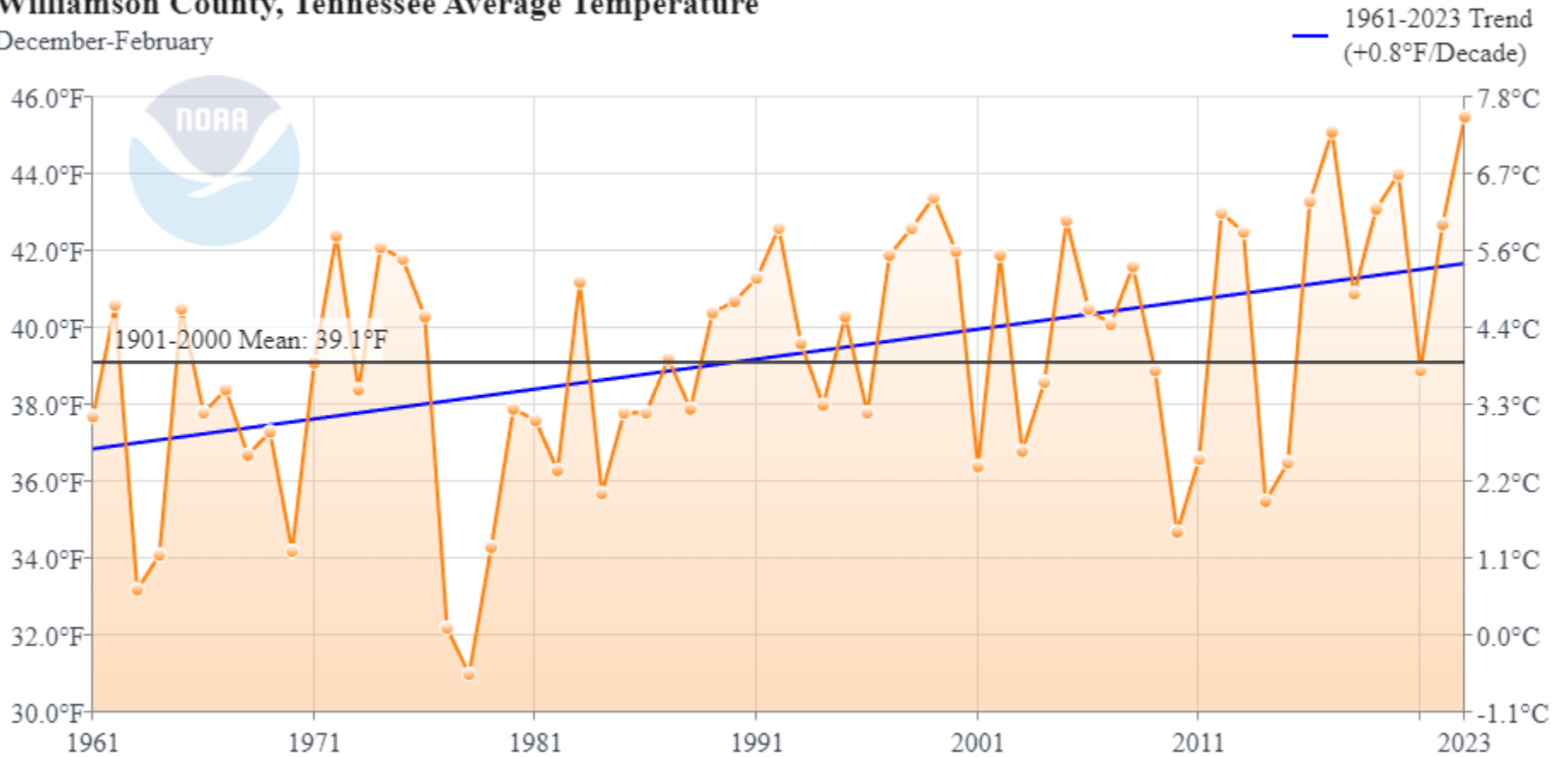


Figure 24: Winter (December to February) Mean Temperature for Williamson County, Tennessee, Showing a +0.8°F Increase per Decade Since 1961.

(Source: NOAA NCEI, Climate at a Glance: County Time Series)

### Williamson County, Tennessee Average Temperature

December-February

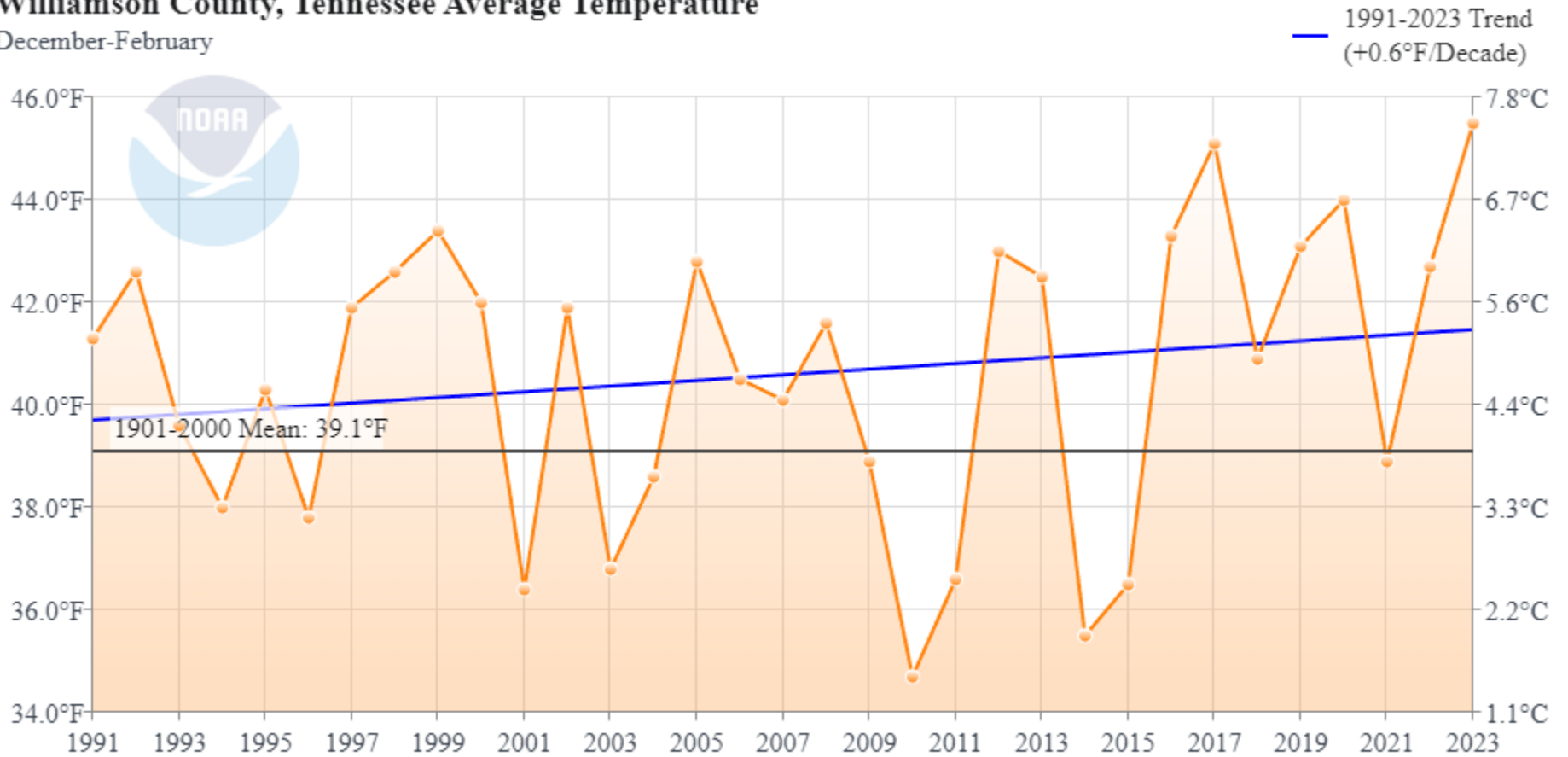
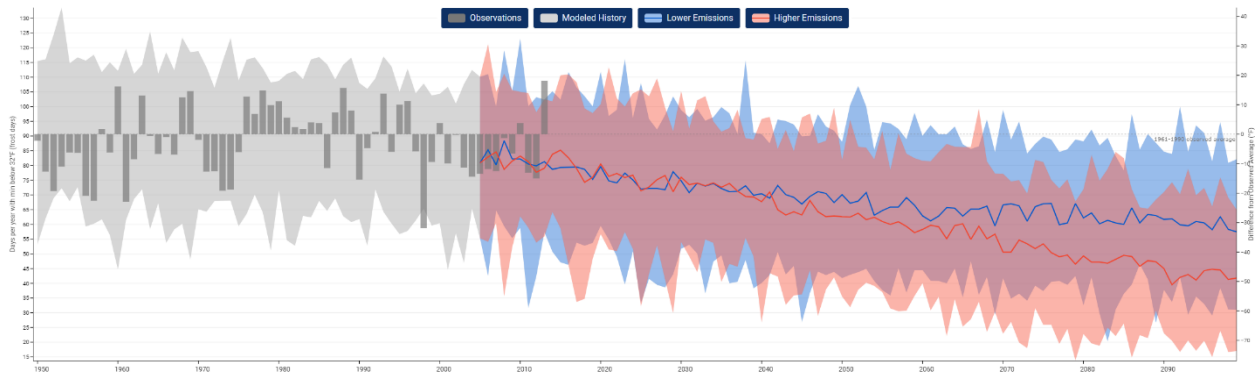


Figure 25: Winter (December to February) Mean Temperature for Williamson County, Tennessee, Showing a +0.6°F Increase per Decade Since 1991.

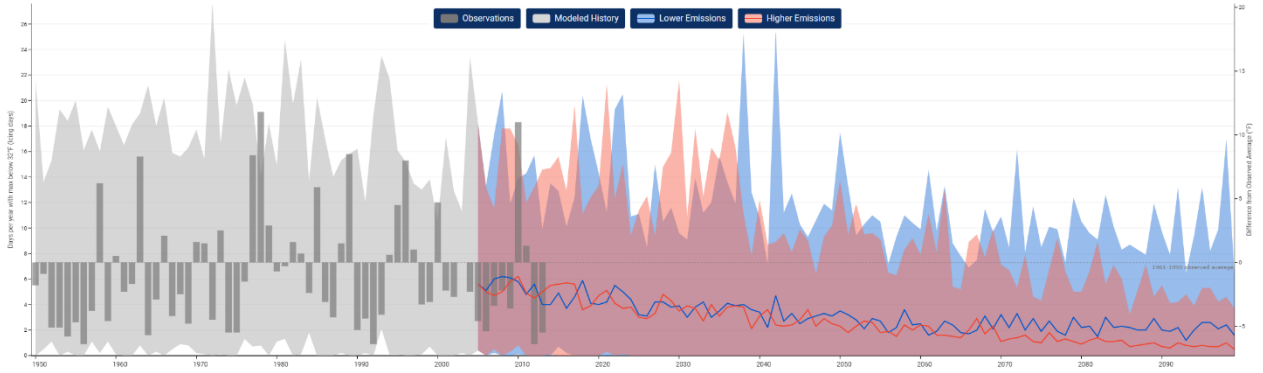
(Source: NOAA NCEI, Climate at a Glance: County Time Series)

In addition to the increasing average annual and winter temperatures, the USDA and U.S. Forest Service Office of Sustainability and Climate projects that the length of the frost-free season will increase by 50-55 days across Williamson County by the late 21st century. This means that the amount of time during the year where winter weather is possible will decrease. Currently, on average the frost season in Williamson County lasts for about five and a half months of the year (from Late October until early April), but by the late 21st century that is projected to decrease to just four months of the year. In the following two figures the historical and projected number of Frost Days (days with a minimum temperature below freezing) and Icing Days (days with a maximum temperature below freezing) are shown for Williamson County from the U.S. Climate Resilience Toolkit Climate Explorer. The mean projection for the low emissions scenario indicates that Williamson County could have approximately 32 fewer Frost Days per year by the end of the century, while the mean projection for the high emissions scenario indicates Williamson County could have 48 fewer Frost Days per year than the 1961-1990 observed average number of frost days. The mean projection for the low emissions scenario shows that Williamson County could observe approximately six fewer Icing Days per year, while the high emissions scenario shows that Williamson County could observe approximately eight fewer Icing Days per year by the end of the century compared to the 1961-1990 observed average.



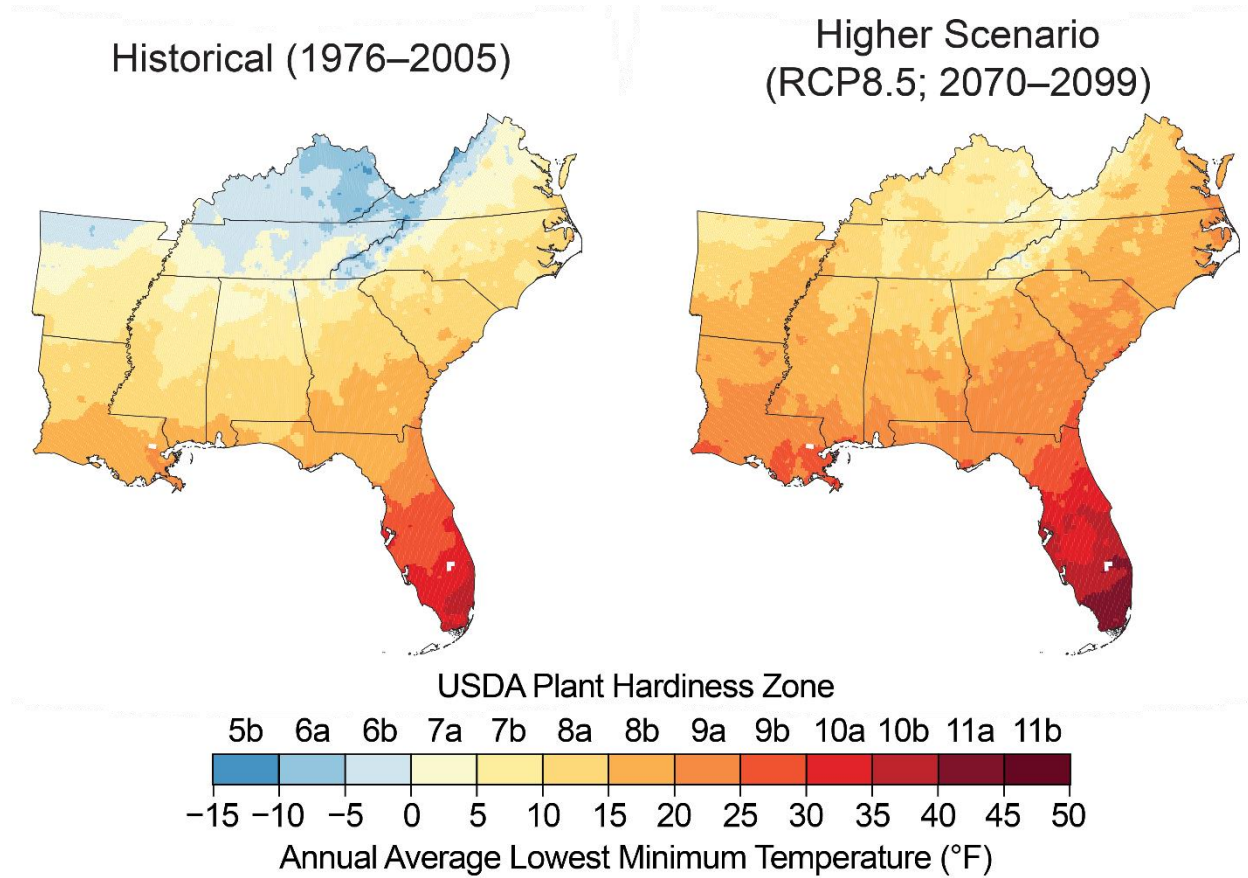
**Figure 26: Days Per Year with Minimum Temperature Below 32°F (Frost Days) with Historical Observations from 1950 to 2013 and High (red) and Low (blue) Emission Scenarios Going to 2100 for Williamson County, Tennessee.**

**(Source: U.S. Climate Resilience Toolkit Climate Explorer)**



**Figure 27: Days per Year with a Maximum Temperature Below 32°F (Icing Days) With Historical Observations from 1950 to 2013 and High (red) and Low (blue) Emission Scenarios Going to 2100 for Williamson County, Tennessee. (Source: U.S. Climate Resilience Toolkit Climate Explorer)**

Additionally, the USDA forecasted changes in plant hardiness zones for the Southeast U.S. The following figure, from the Fourth National Climate Assessment (2018) indicates that Williamson County may transition from Plant Hardiness Zones 6b/7a (historical data, 1976-2005) to Plant Hardiness Zones 8a by 2070-2099, based on climate models using the RCP8.5 (higher emissions) greenhouse gas emissions scenario. That would correlate to a warming of approximately 15-20 degrees in the average coldest temperature expected in parts of the county, from historical values of -5°F to +5°F to future values of +10°F to +15°F.



**Figure 28: Comparison of Plant Hardiness Zones Across the Southeast U.S. from Historical Averages and Projected Values for Late Century using RCP8.5 (high emissions) Scenario Models.**

**(Source: Fourth National Climate Assessment (Southeast Chapter))**

## Drought

The future risk of drought in Williamson County is tied to changes in the precipitation and temperature patterns the county may experience due to climate trends and variations. The Fourth National Climate Assessment (2018, NCA4) states climate variability is expected to increase the average temperature and the number of high-heat days in the southeastern United States and intensify the hydrologic cycle, leading to an increase in both extreme precipitation events and periods of drought in the southeastern United States. The Climate Mapping Risk Assessment (CMRA) Report for Williamson County shows that while overall annual precipitation may increase, the number of dry days is expected to increase through the 21st century. Additionally, high-heat days are expected to increase as well, which could combine to favor short term periods of drought.

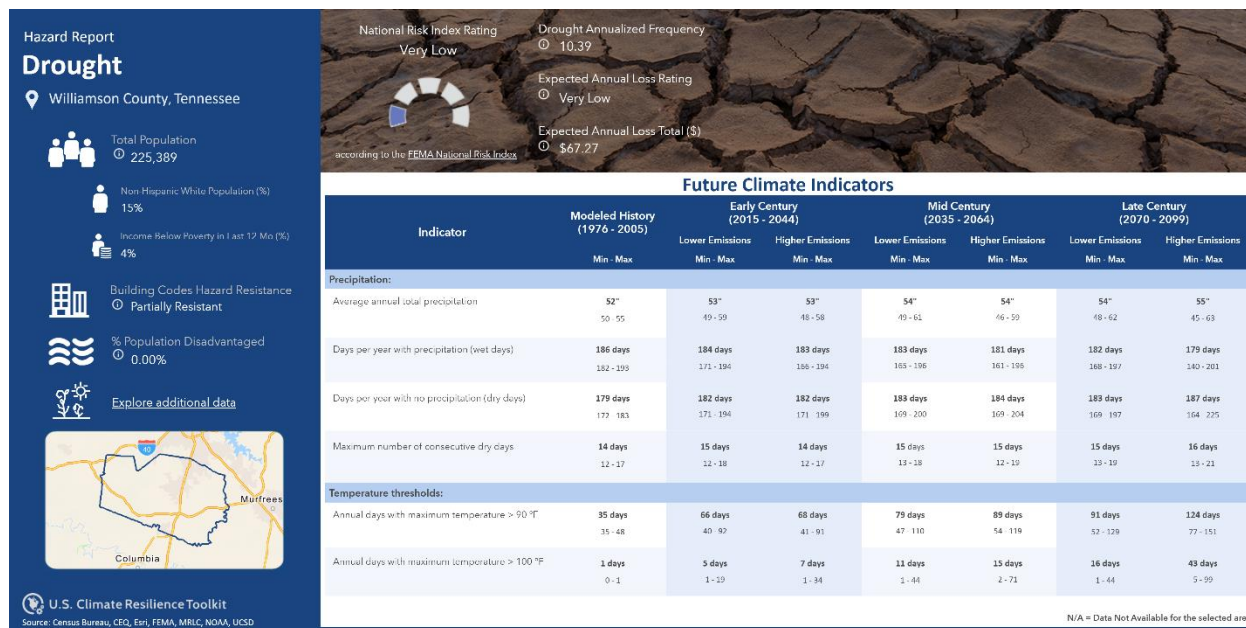


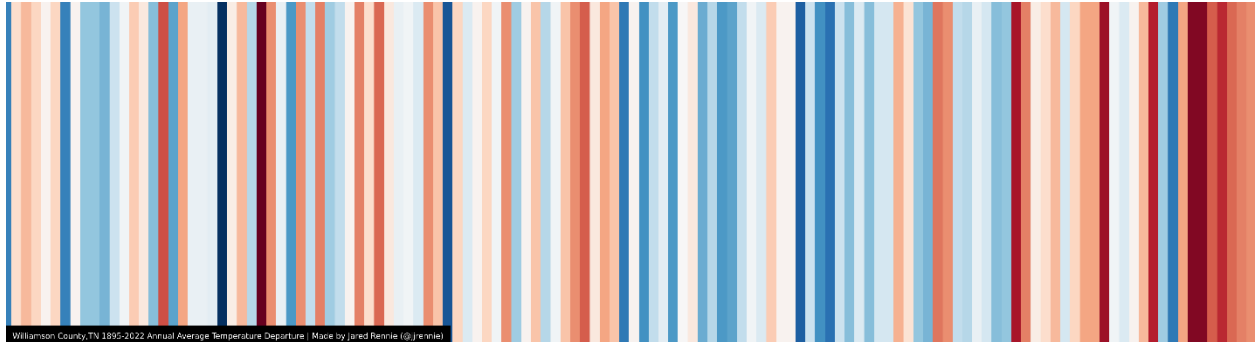
Figure 29: Climate Mapping Risk Assessment Report for Drought in Williamson County.

(Source: US Climate Resilience Toolkit)

The increasing trend in average temperature and total precipitation in Williamson County is also supported by observed historical data available from the NOAA National Centers for Environmental Information Climate at a Glance tool (refer to subsequent figures). The trend of increasing temperature and annual precipitation has been more pronounced over the past several decades compared to the longer-term (1895-2022) trend. The long-term trend in temperature is slightly positive at +0.1°F per decade due to several warm decades in the early 20<sup>th</sup> century followed by a cool period from the 1950’s to the early 1980’s, and then years that were mostly warmer than the 20<sup>th</sup> century average after 1985. The medium-term (1961-2022) shows an increased warming trend of +0.4°F per decade and the short-term (1991-2022) shows the most extreme trend of +0.6°F per decade. Additionally, the county’s climate stripes graphics from NOAA show that aside from a few warmer than normal years early in the period, most of the above average temperature years have occurred in the past two decades. This indicates that warming has substantially increased in Williamson County and based on the NCA4, this trend is expected to continue in the future.

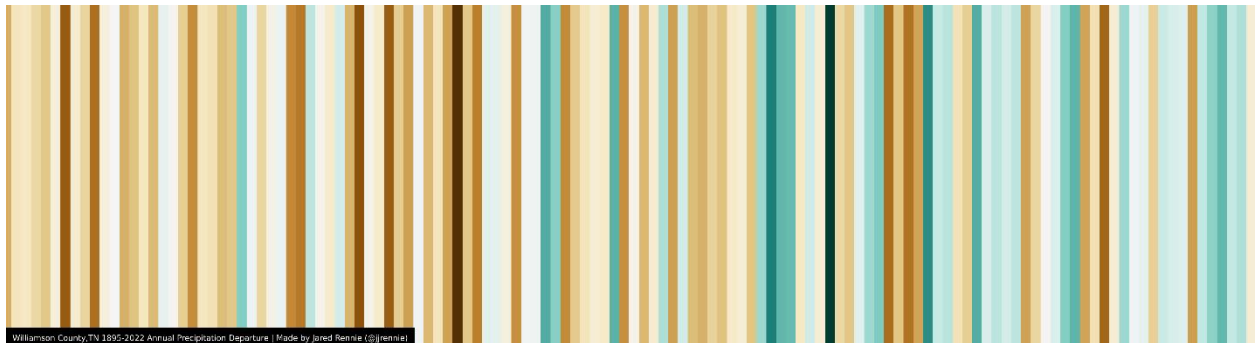
However, total precipitation has also been increasing in Williamson County, with the long-term (1895-2022) trend in precipitation having a +0.67” increase per decade, while the medium-term (1961-2022) shows an increased trend of +0.47” per decade, and the short-term (1991-2022) shows a trend of +0.59” per decade. This indicates that precipitation has increased in Williamson County and based on the NCA4, this trend is expected to continue in the future. Refer to Figures 2-4 in the Flood section for additional information. An increasing trend in precipitation may infer a decrease in drought potential; however, the observed pattern has been highly variable year-to-year and on shorter time periods. As temperatures increase, there can be more rapid

evapotranspiration, potentially leading to more rapid onset of drought occurrences (i.e., Flash Droughts).



**Figure 30: Observed (1895-2022) Annual Temperature for Williamson County, Tennessee, Compared to the 20th Century Average with Darkening Shades of Blue for Below Average Temperature and Darkening Shades of Red for Above Average Temperature.**

(Source: NOAA NCEI)



**Figure 31: Observed (1895-2022) Annual Precipitation for Williamson County, Tennessee, Compared to the 20th Century Average with Darkening Shades of Brown for Below Average Precipitation and Darkening Shades of Green for Above Average.**

(Source: NOAA NCEI)

### Williamson County, Tennessee Average Temperature

January-December

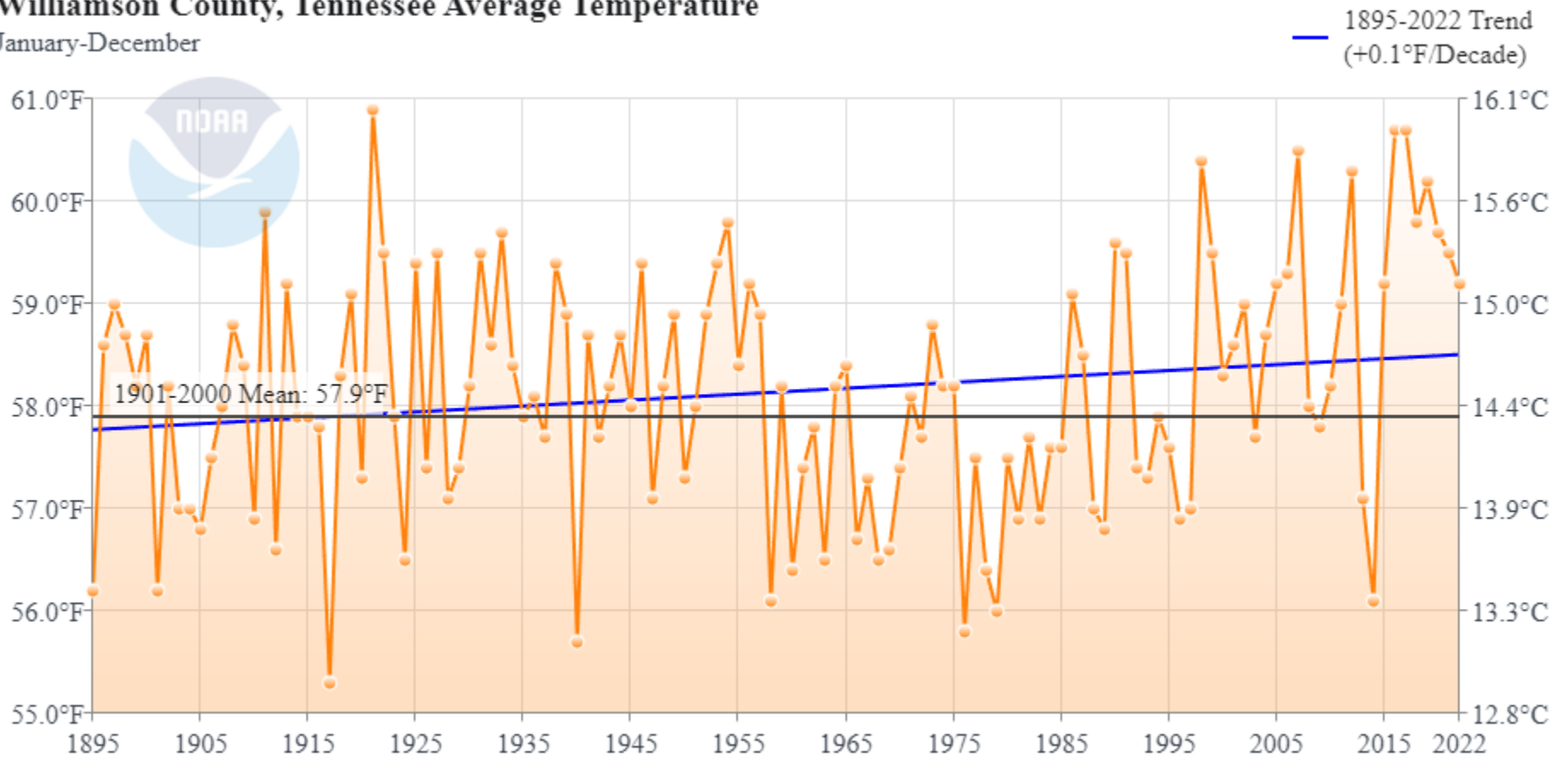


Figure 32: Annual Average Temperature for Williamson County Tennessee, Showing a +0.1°F Increase per Decade Since 1895.

(Source: NOAA NCEI, Climate at a Glance: County Time Series)

### Williamson County, Tennessee Average Temperature

January-December

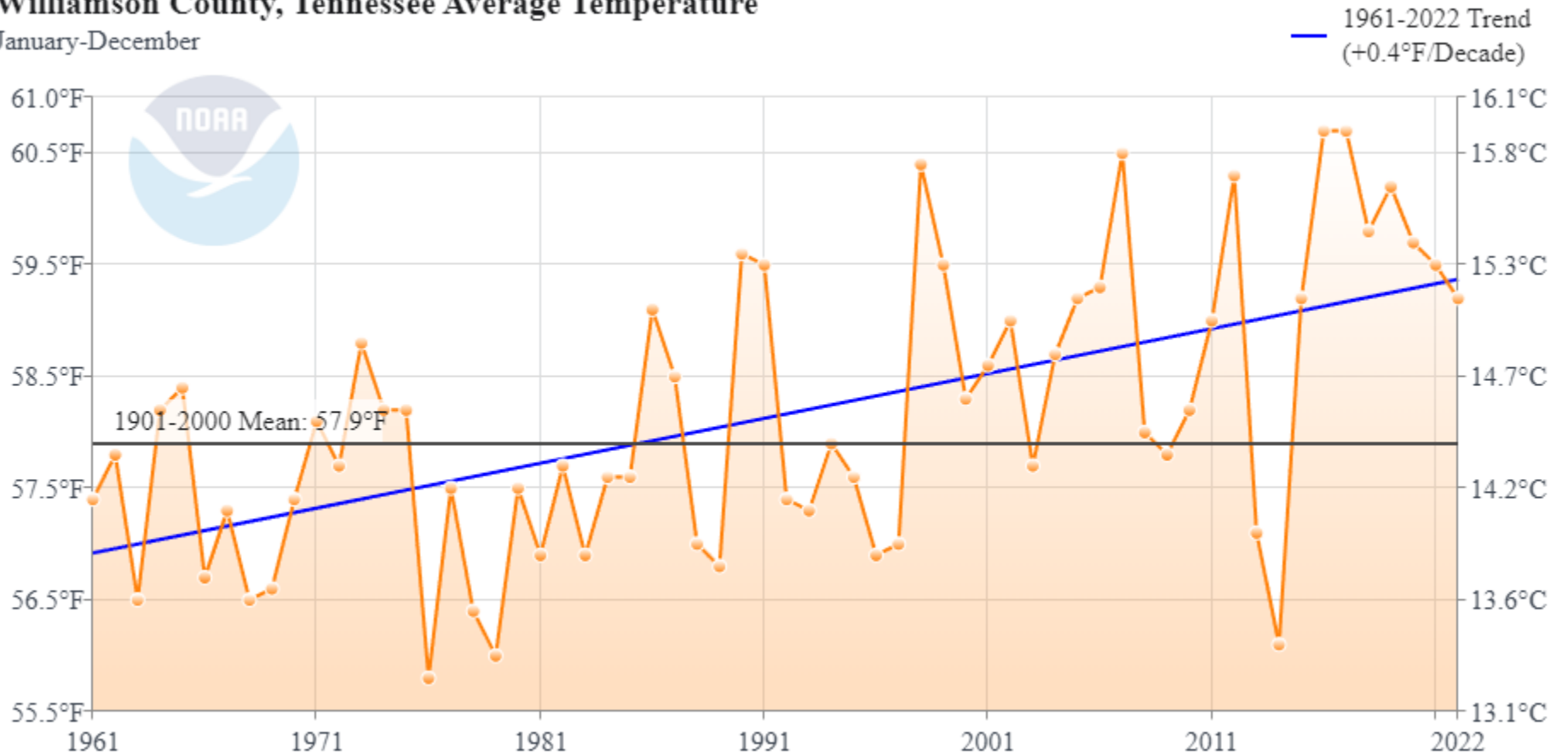


Figure 33: Annual Average Temperature for Williamson County, Tennessee, Showing a +0.4°F Increase per Decade Since 1961.

(Source: NOAA NCEI, Climate at a Glance: County Time Series)

### Williamson County, Tennessee Average Temperature

January-December

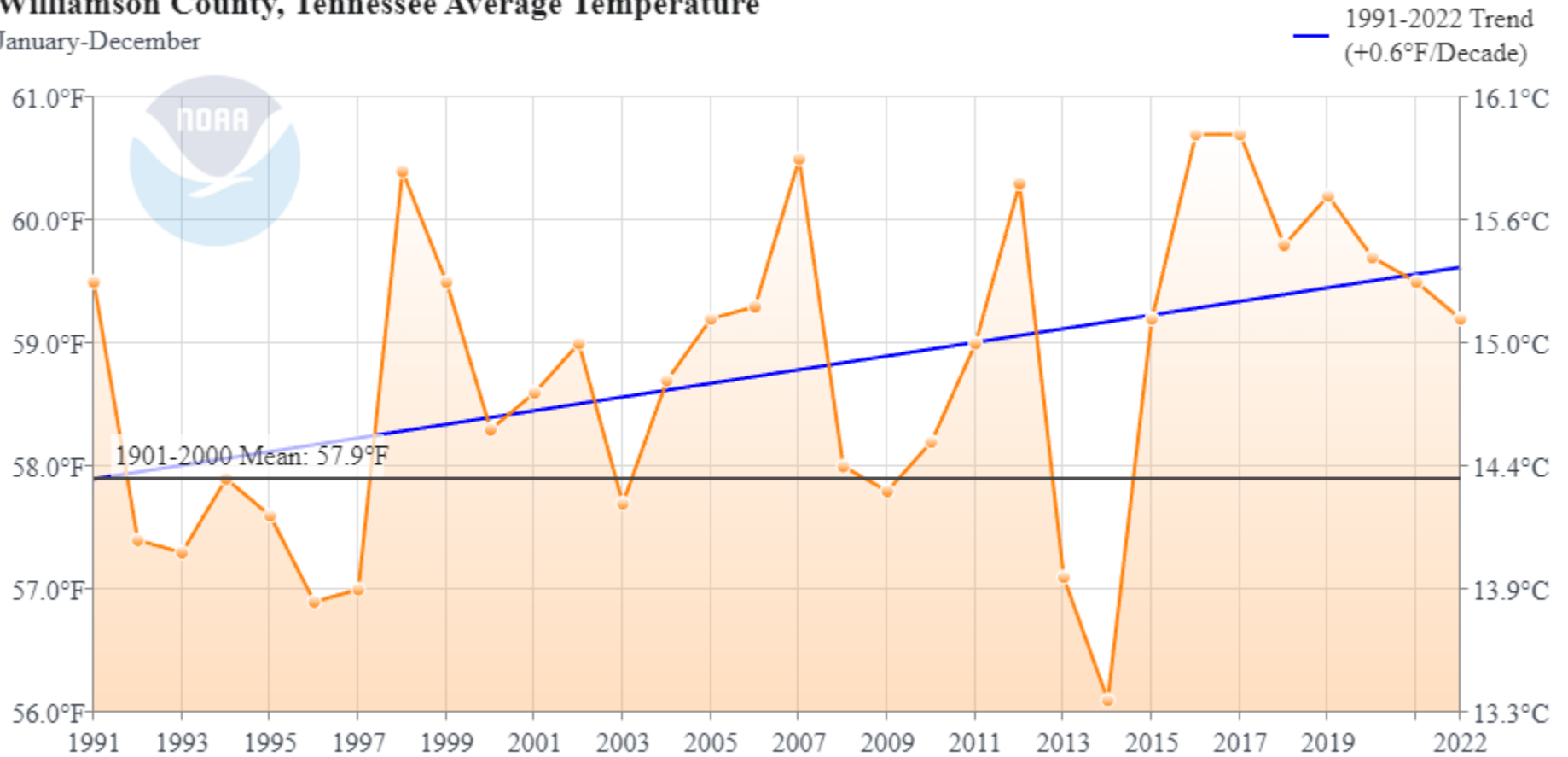
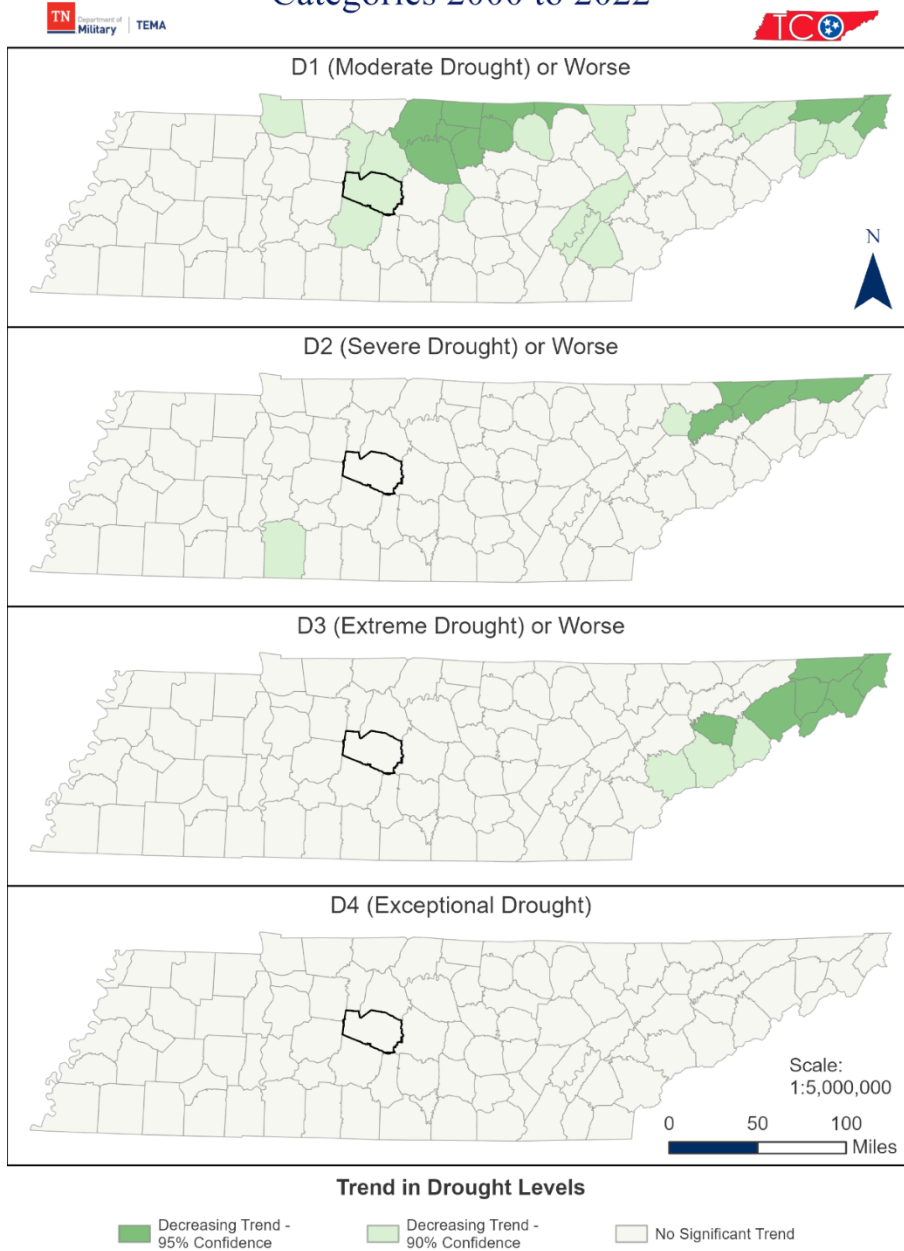


Figure 34: Annual Average Temperature for Williamson County, Tennessee, Showing a +0.6°F Increase per Decade Since 1991.

(Source: NOAA NCEI, Climate at a Glance: County Time Series)

The Tennessee Climate Office (TCO) analyzed trends in the U.S. Drought Monitor (USDM) throughout Tennessee from 2000 to 2021. County-level trends were developed based on the amount of each county that was covered in D0 (Abnormally Dry) conditions or worse, D1 (Moderate Drought) or worse, D2 (Severe Drought) or worse, D3 (Extreme Drought) or worse, and D4 (Exceptional Drought) each week. Trends were assessed using space-time cube analysis tools in ArcGIS Pro, with the results shown in the following figure. There was a significant decreasing trend in the amount of time that Williamson County spent in D1-D4 drought conditions over this period, but there was no significant trend in amount of time that Williamson County spent in the higher levels of drought D2 or worse, D3 or worse, or D4.

### Trend Analysis of U.S. Drought Monitor Drought Categories 2000 to 2022



**Figure 35: Trend Analysis of U.S. Drought Monitor from 2000 – 2021, Williamson County Outlined in Bold.**

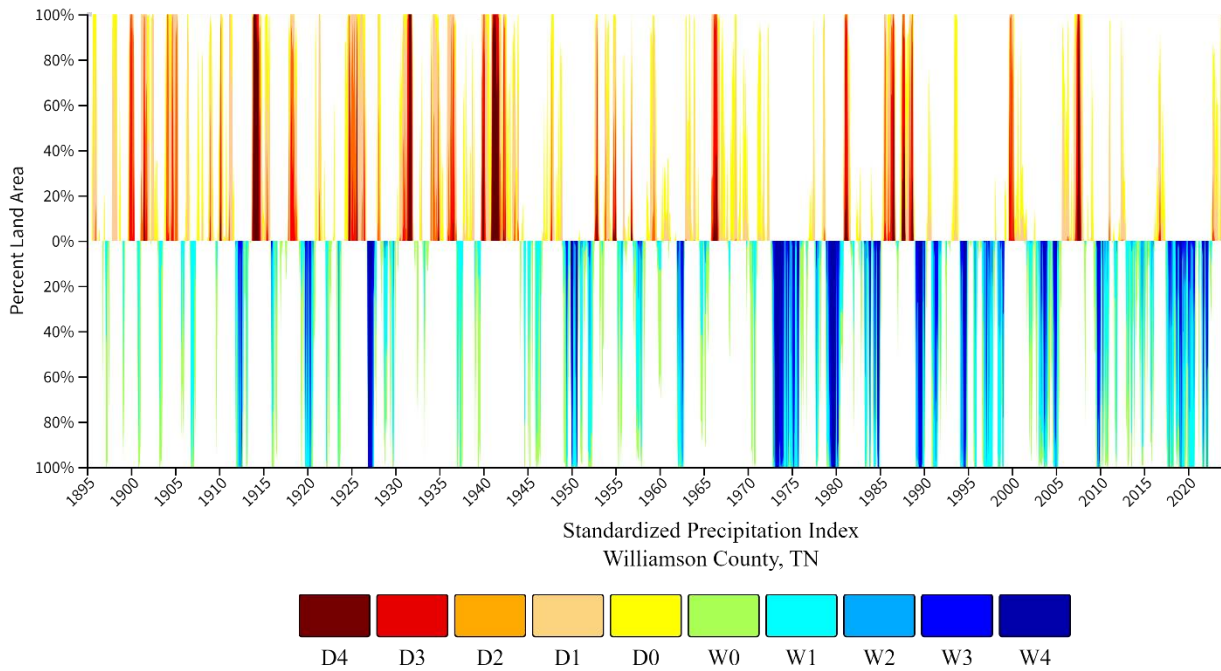
Since the USDM only dates back to 2000, other metrics must be used to examine longer trends in drought occurrences. The Standardized Precipitation Index (SPI) is another metric that can be used to quantify drought and periods of wetness by capturing how observed precipitation deviates from the climatological average. Drought.gov provides a timeline of the SPI derived from

the Global Historical Climatology Network (GHCN), with data back to 1895 for the contiguous U.S. Red hues indicate drier conditions, while blue hues indicate wetter conditions. With this longer dataset the cyclical nature of dry and wet periods across Williamson County is even more apparent. It also shows that the shorter and less intense dry periods observed from 2008 to 2022 is one of the longer periods of time with minimal long-term drought impacts for the county.

Looking at the longer-term Standardized Precipitation Index (SPI) from the NCEI nClimGrid-monthly dataset (starting 1895) there is an increasing trend in the 3-month SPI value, indicating an increasing trend in precipitation (averaged over 3-months) across all of Tennessee with a moderate increase in values across Williamson County. A gridded SPI dataset is also available at a 5km resolution from NCEI. This gridded dataset with data from 1895 to 2022 was used to analyze the linear trend in 3-month SPI values (SPI value calculated from the dryness or wetness values of the previous 3 months), shown in the following figure. All areas of Tennessee had an increasing trend in SPI values over this time period, indicating an increasing trend in precipitation that is consistent with other observed records and climate models signifying that Tennessee is seeing a decrease in the risk for longer-term droughts. The overall trend in increasing wetness will not prevent future periods of drought, especially short-duration high-intensity Flash Droughts.

**Table 2: SPI Category and Value Definitions.**

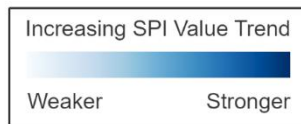
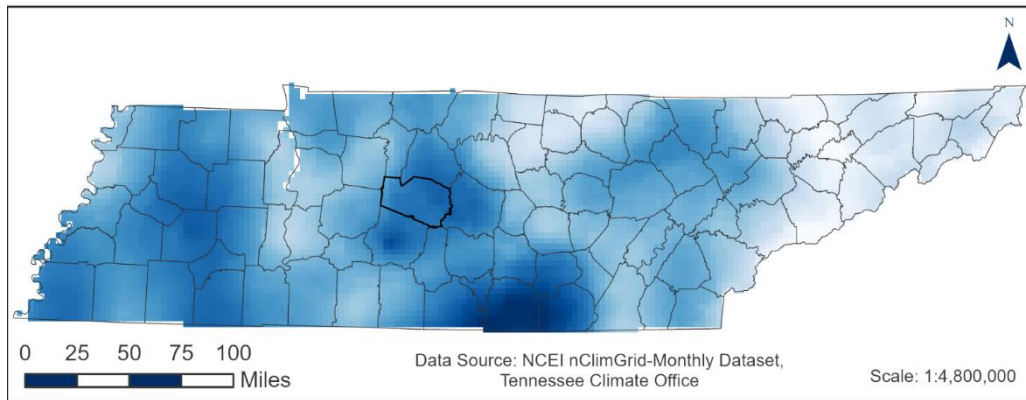
SPI Category	SPI Value	Description
D4	≤ -2	Exceptionally Dry
D3	-1.6 to -1.9	Extremely Dry
D2	-1.3 to -1.5	Severely Dry
D1	-0.8 to -1.2	Moderately Dry
D0	-0.5 to -0.7	Abnormally Dry
W0	+0.5 to + 0.7	Abnormally Wet
W1	+0.8 to +1.2	Moderately Wet
W2	+1.3 to +1.5	Severely Wet
W3	+1.6 to +1.9	Extremely Wet
W4	≥ 2.0	Exceptionally Wet



**Figure 36: Periods of Drought and Wetness in Williamson County, Tennessee from 1895 to 2022.**

**(Source: Drought.gov)**

**3-Month SPI Value Trend from 1895-2022**



**Figure 37: SPI Value Trend for 3-Months from 1895 to 2022, Williamson County Outlined in Bold.**

The previous trends are based on observed historical data, but the Climate Mapping for Resilience and Adaptation (CMRA) Assessment tool provides county-level output from future climate projections. Data from this tool indicates Williamson County could expect an increase in the number of dry days per year due to climate variability. However, the tool provides a range of possible outcomes, with higher and lower greenhouse gas emission scenarios, for Early-Century (2015-2044), Mid-Century (2035-2064), and Late Century (2070-2099) time periods, and maximum, minimum, and mean projected values. The following table shows the projected change in the number of dry days per year for Williamson County. The Early-, Mid-, and Late-Century values represent the increase (positive values) or decrease (negative values) in dry days per year compared to the number of dry days per year from modeled history. In the mean projection, Williamson County could see an increase of 3.2 to 4.4 dry days per year by Mid-Century and an increase of 3.8 to 7.1 dry days per year by Late-Century.

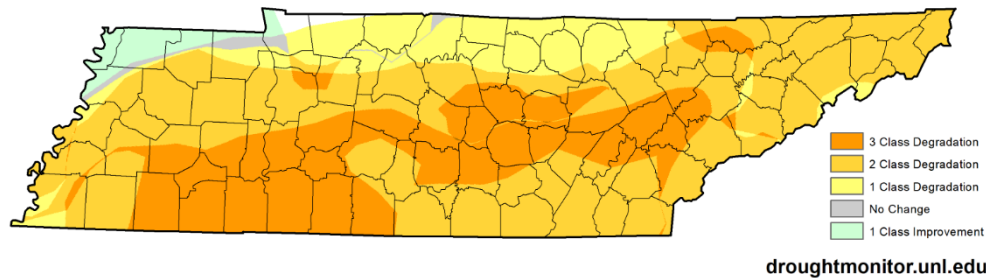
**Table 3: Possible Change in the Number of Dry Days per Year for Williamson County, Tennessee.**

High Emissions Scenario	Modeled History (1976-2005)	Early Century (2015-2044)	Mid Century (2035-2064)	Late Century (2070-2099)
Driest Projection	183	+16	+21.3	+41.9
Mean Projection	179.4	+2.9	+4.4	+7.1
Wettest Projection	172.2	-1.0	-3.0	-7.7
Low Emissions Scenario	Modeled History (1976-2005)	Early Century (2015-2044)	Mid Century (2035-2064)	Late Century (2070-2099)
Driest Projection	183	+10.6	+16.7	+14.1
Mean Projection	179.4	+2.2	+3.2	+3.8
Wettest Projection	172.2	-1.3	-2.8	-3.6

The projected increase in high-heat days and the intensification of the hydrologic cycle will likely lead to an increasing number of Flash Droughts, which are defined by the rapid onset or intensification of drought conditions. Flash Droughts in the southeastern United States are often connected to short periods of time (a couple of weeks or months) with much higher-than-normal temperatures and much lower-than-normal precipitation leading to the rapid depletion of soil moisture and streamflow. September 2019 and October 2023 are prime examples of a Flash Drought in Tennessee, and more broadly across the Southeast. During the 2023 fall flash drought Williamson County went from 0% of the county in drought conditions (D1-4) on the October 3<sup>rd</sup> release of the U.S. Drought Monitor to 100% of the county being in at least Severe Drought (D2) conditions and about half of the county in Extreme Drought (D3) on the October 31<sup>st</sup> release of the US Drought Monitor.

October 31, 2023  
compared to  
October 3, 2023

**U.S. Drought Monitor Class Change - Tennessee**  
4 Week

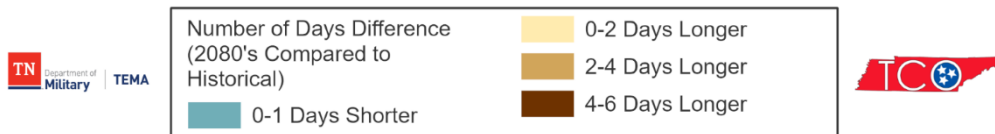
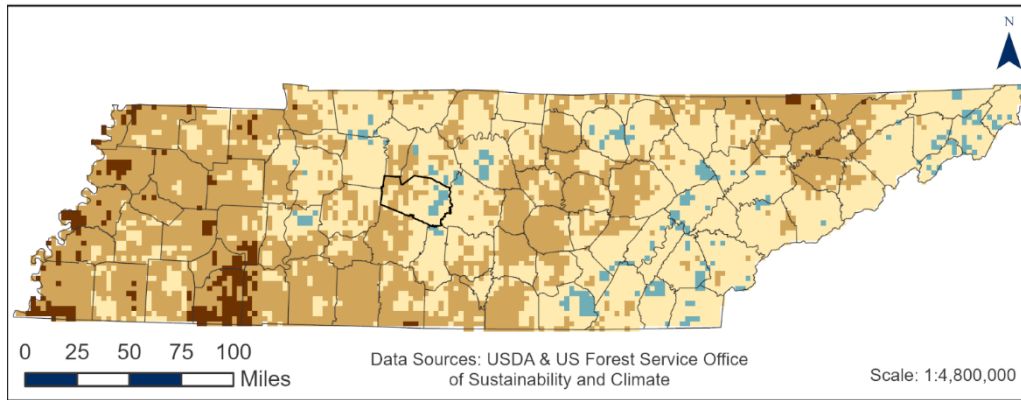


**Figure 38: U.S. Drought Monitor Four Week Class Change in the State of Tennessee from October 3, 2023 to October 31, 2023.**

**(Source: National Drought Mitigation Center)**

A study conducted by the U.S. Department of Agriculture (USDA) and U.S. Forest Service Office of Sustainability and Climate compared the length of a 10-year Drought, defined as a once in a decade drought as measured by the number of consecutive dry days (days with less than 0.1 inches of rain) during the summer season (May – September) between historical data and future climate models. For this study, the historical period was based on observed data from 1975 to 2005, and the future scenario was for the 2080’s based on the RCP8.5 (higher emissions) ensemble mean of 20 global climate models from the CMIP5 experiment. The output of this study, shown in the following figure, indicates that most areas of Tennessee could expect a 10-year Drought (10% annual probability of occurrence) to maintain its current length or increase by as much as 6 days in the 2080’s compared to a 1-year Drought from 1975-2005. In Williamson County, a 10-year drought could decrease in length by up to 1 day in the eastern part of the county and increase in length from 0.1 to 4 days in the central and western parts of the county compared to the modeled history. This demonstrates that although the average annual precipitation amount may increase in Tennessee, periods between precipitation events could get longer, leading to flash droughts or shorter-term drought periods.

Change in the Length of a 10-Year Summer Drought



**Figure 39: Change in the Length of a 10-Year (10% Annual Probability of Occurrence) Drought from Historical Data (1975-2005) to a 10-Year Drought in the 2080s (RCP8.5 Scenario), Williamson County Outlined in Bold.**

In addition to the variable climate, population growth and development in Tennessee means that the state will be at a higher risk for hydrological and socioeconomic droughts in the future as water demand increases.

**Local Threat and Hazard Data Collected During THIRA Process:**



To view the additional hazard data as provided by NOAA, double click on the Excel icon above. If unable to view the data, please contact the WCEMA.

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## Appendix D: HAZUS/FIRM Panels

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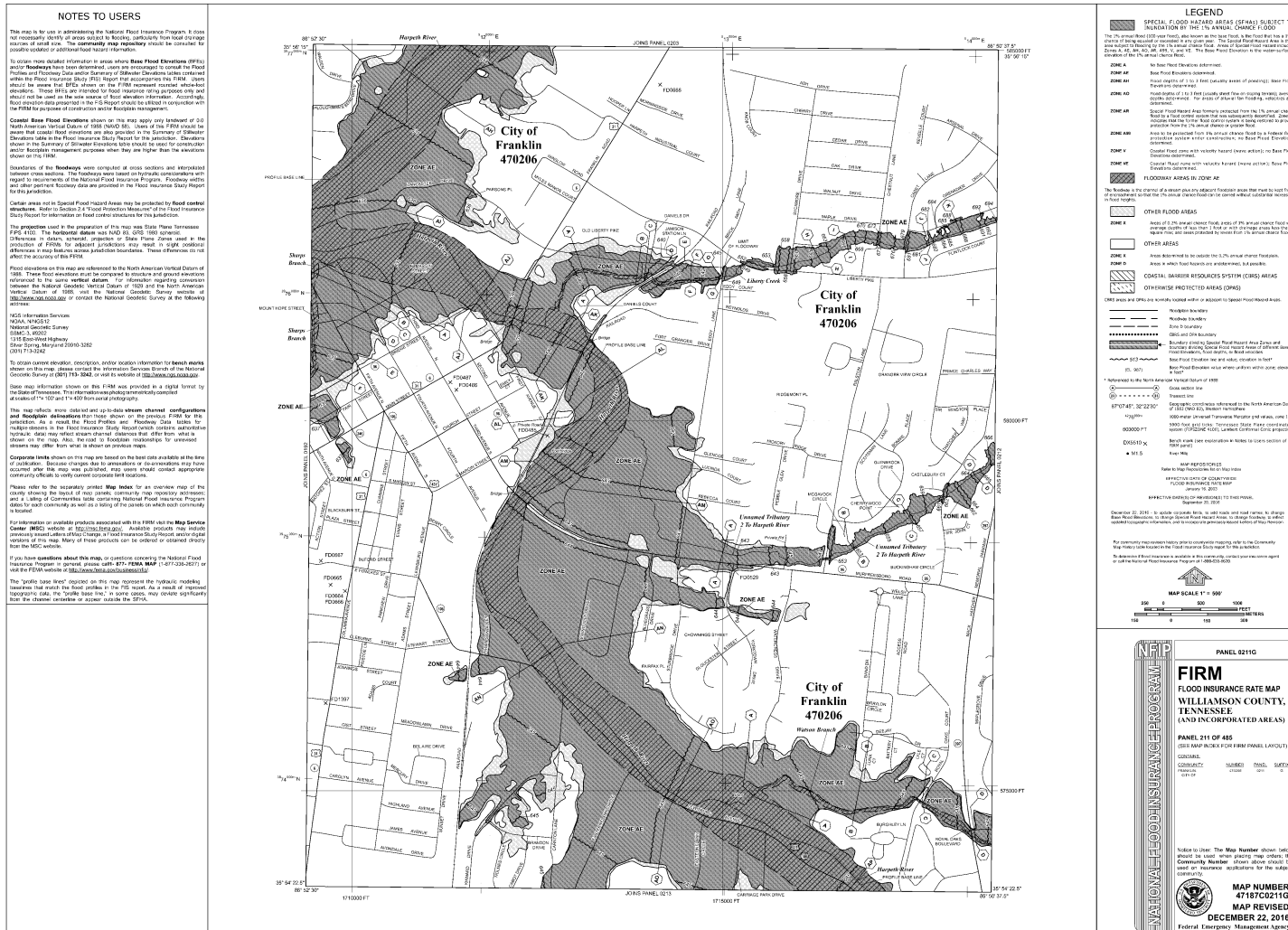
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### **Sample FIRM Panels in Williamson County:**

All FIRM panels attached in this appendix were obtained through the FEMA Flood Map Service Center and are consistently available. The attached images below are samples of FIRM panels for each of the participating municipalities.

To access this site, go to: <https://msc.fema.gov/portal/home>

City of Franklin:





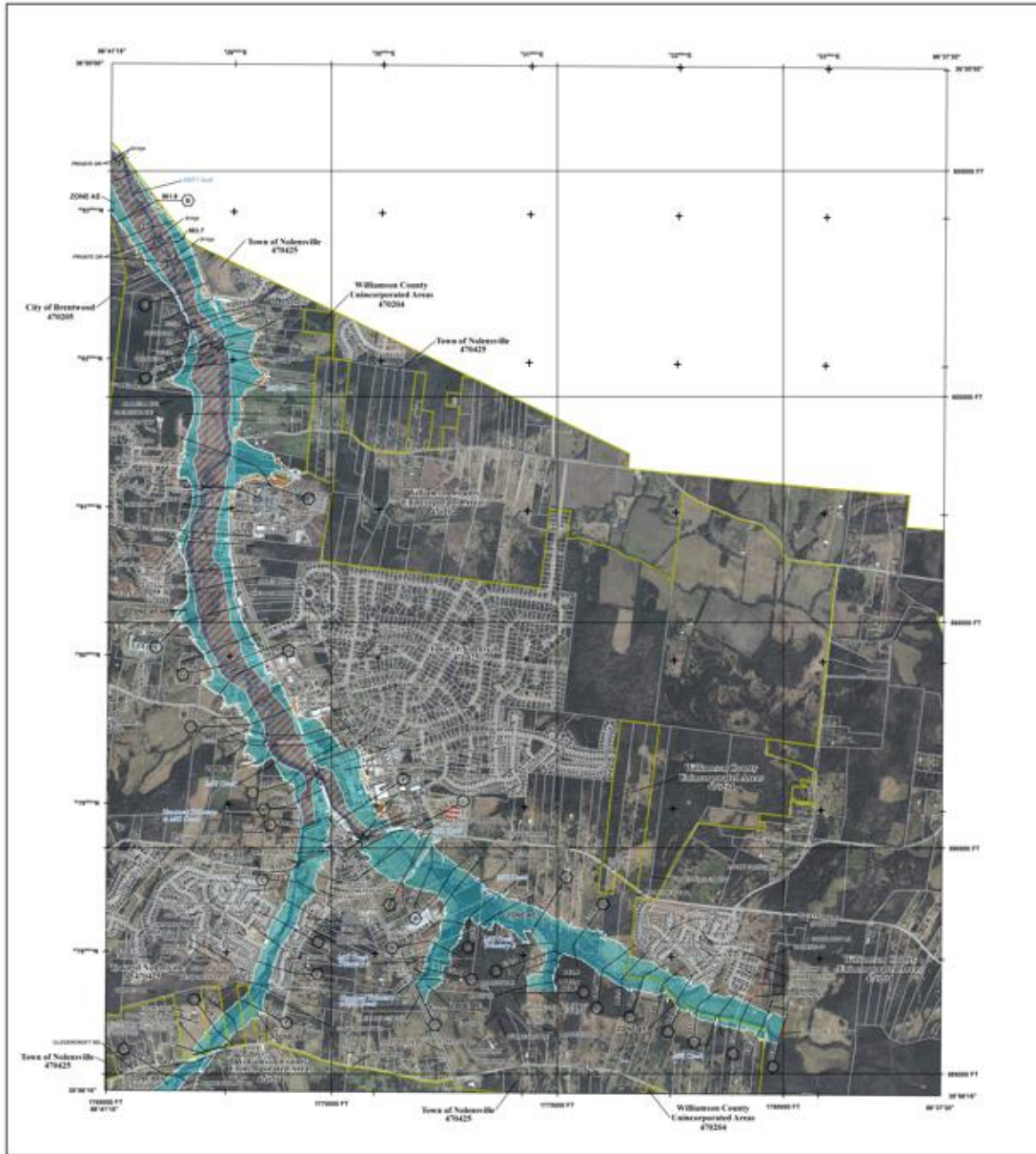








Town of Nolensville:



FLOOD HAZARD INFORMATION

SEE THIS REPORT FOR DETAILS (ISSUED FOR PUBLIC USE ONLY) FOR THE INFORMATION EXPECTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT: [HTTPS://MSC.FEMA.GOV](https://msc.fema.gov)

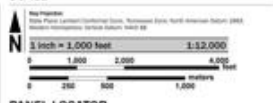
- SPECIAL FLOOD HAZARD AREAS**
  - Without Base Flood Elevation (BFE) (Areas 1, 2)
  - With BFE or Depth (Areas 3, 4, 5, 6, 7, 8)
  - Regulatory Floodwater (Area 9)
  - 0.2% Annual Chance Flood Hazard, Areas of 1% Annual Chance Flood with average depth less than one foot or with drainage areas of less than one square mile (Area 10)
  - Future Conditions 1% Annual Chance Flood Hazard (Area 11)
  - Area with Reduced Flood Risk due to Levees (See Notes, Area 12)
  - Area with Flood Risk due to Levees (Area 13)
- OTHER AREAS OF FLOOD HAZARD**
  - Area of Minimal Flood Hazard (Area 14)
  - Area of Undetermined Flood Hazard (Area 15)
- OTHER AREAS**
  - Channel, Culvert, or Stream Levee
  - Levee, Dike, or Floodwall
- GENERAL STRUCTURES**
  - Cross Sections with 1% Annual Chance Mean Surface Elevation
  - Coastal Trench
  - Coastal Trench Baseline
  - Public Baseline
  - Hydrographic Feature
  - Base Flood Elevation Line (BFE)
  - Limit of Study
  - Jurisdiction Boundary
- OTHER FEATURES**

NOTES TO USERS

For information and assistance about the Flood Insurance Rate Map (FIRM) products provided with the FIRM, including limited liability, the user may wish to visit FEMA's website at [www.fema.gov](http://www.fema.gov). The information on this map was derived from the National Flood Insurance Program (NFIP) data as of the date of the map. The information on this map is for informational purposes only and does not constitute a contract. The user should consult the National Flood Insurance Program (NFIP) policy for more information. The user should also consult the National Flood Insurance Program (NFIP) policy for more information. The user should also consult the National Flood Insurance Program (NFIP) policy for more information.



SCALE



PANEL LOCATOR



**FEMA**  
National Flood Insurance Program

**NATIONAL FLOOD INSURANCE PROGRAM**  
FLOOD INSURANCE RATE MAP  
WILLIAMSON COUNTY, TENNESSEE  
Map No. 235 of 485

Version Number: 2.4.3.6  
Map Number: 47187022346  
Map Revised: FEBRUARY 26, 2021

City of Brentwood Flood Inundation Map:



**100-Year Flood Global Risk Report (HAZUS):**



**Hazus: Flood Global Risk Report**

<b>Region Name:</b>	Williamson_100yr
<b>Flood Scenario:</b>	Williamson_100yr
<b>Print Date:</b>	Tuesday, March 7, 2023

**Disclaimer:**

Totals only reflect data for those census tracts/blocks included in the user's study region.

The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific Flood. These results can be improved by using enhanced inventory data and flood hazard information.



**FEMA**

**RiskMAP**  
Increasing Resilience Together



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## General Description of the Region

Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences (NIBS). The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The flood loss estimates provided in this report were based on a region that included 1 county(ies) from the following state(s):

- Tennessee

**Note:**

Appendix A contains a complete listing of the counties contained in the region.

The geographical size of the region is approximately 68 square miles and contains 3,458 census blocks. The region contains over 87 thousand households and has a total population of 247,523 people. The distribution of population by State and County for the study region is provided in Appendix B.

There are an estimated 63,263 buildings in the region with a total building replacement value (excluding contents) of 54,685 million dollars. Approximately 84.68% of the buildings (and 71.30% of the building value) are associated with residential housing.



**FEMA**

Flood Global Risk Report

**RiskMAP**  
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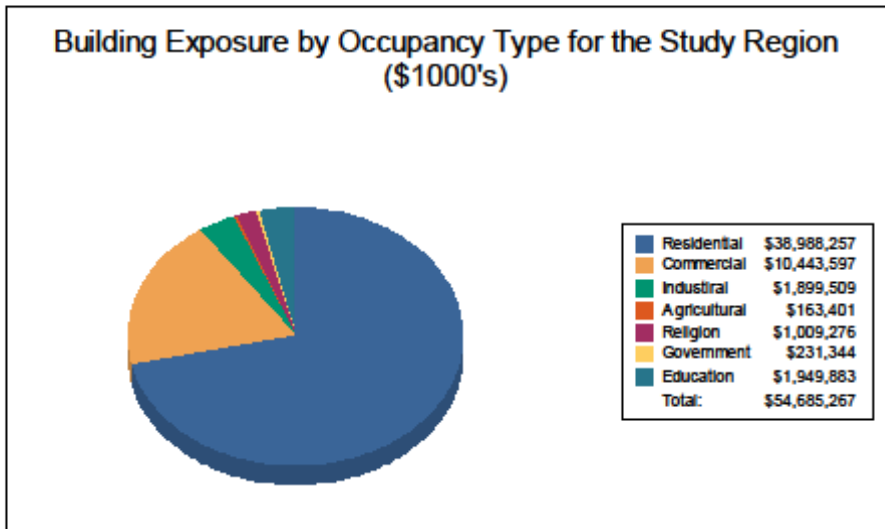
**Building Inventory**

**General Building Stock**

Hazus estimates that there are 63,263 buildings in the region which have an aggregate total replacement value of 54,685 million dollars. Table 1 and Table 2 present the relative distribution of the value with respect to the general occupancies by Study Region and Scenario respectively. Appendix B provides a general distribution of the building value by State and County.

**Table 1  
Building Exposure by Occupancy Type for the Study Region**

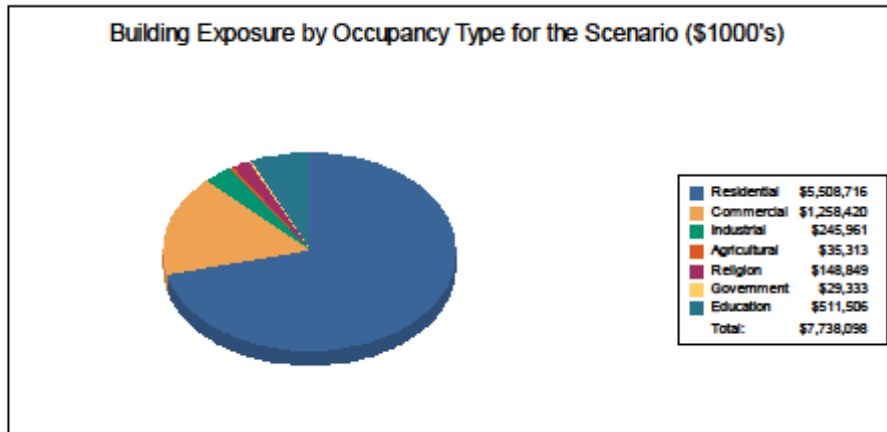
Occupancy	Exposure (\$1000)	Percent of Total
Residential	38,988,257	71.3%
Commercial	10,443,597	19.1%
Industrial	1,899,509	3.5%
Agricultural	163,401	0.3%
Religion	1,009,276	1.8%
Government	231,344	0.4%
Education	1,949,883	3.6%
<b>Total</b>	<b>54,685,267</b>	<b>100%</b>





**Table 2**  
**Building Exposure by Occupancy Type for the Scenario**

Occupancy	Exposure (\$1000)	Percent of Total
Residential	5,508,716	71.2%
Commercial	1,258,420	16.3%
Industrial	245,961	3.2%
Agricultural	35,313	0.5%
Religion	148,849	1.9%
Government	29,333	0.4%
Education	511,506	6.6%
<b>Total</b>	<b>7,738,098</b>	<b>100%</b>



**Essential Facility Inventory**

For essential facilities, there are 2 hospitals in the region with a total bed capacity of 225 beds. There are 77 schools, 21 fire stations, 5 police stations and 1 emergency operation center.





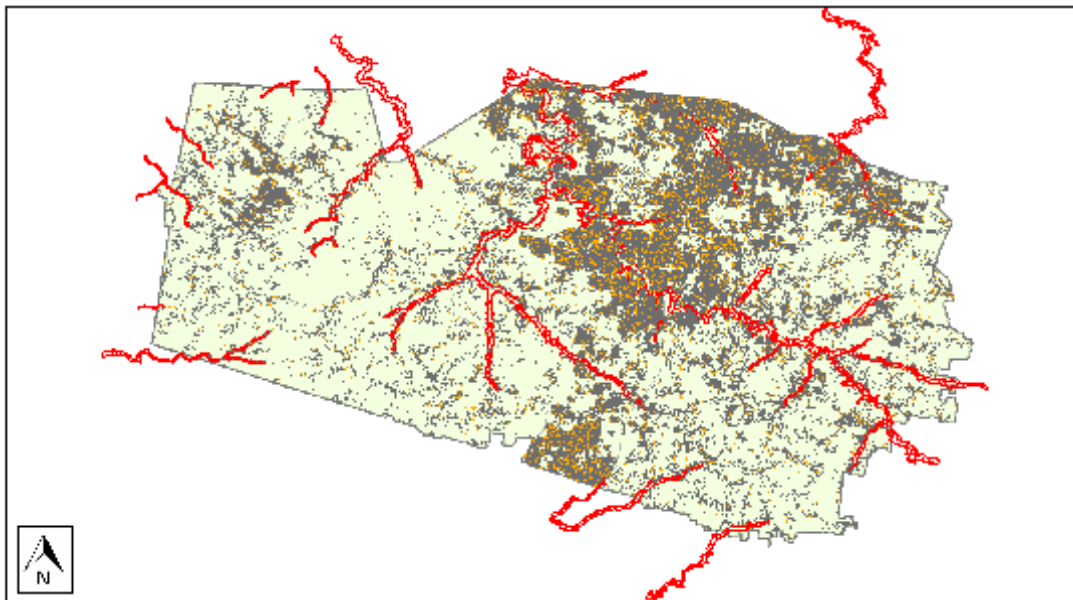
### Flood Scenario Parameters

Hazus used the following set of information to define the flood parameters for the flood loss estimate provided in this report.

<b>Study Region Name:</b>	Williamson_100yr
<b>Scenario Name:</b>	Williamson_100yr
<b>Return Period Analyzed:</b>	100
<b>Analysis Options Analyzed:</b>	No What-ifs

### Study Region Overview Map

Illustrating scenario flood extent, as well as exposed essential facilities and total exposure



Flood Global Risk Report



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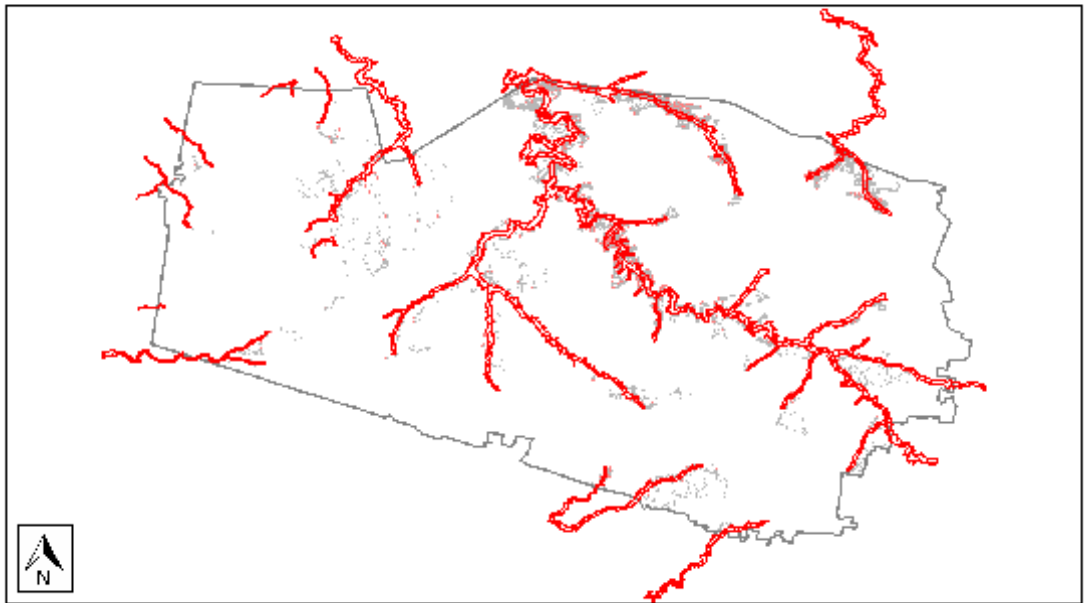


**Building Damage**

**General Building Stock Damage**

Hazus estimates that about 314 buildings will be at least moderately damaged. This is over 47% of the total number of buildings in the scenario. There are an estimated 56 buildings that will be completely destroyed. The definition of the 'damage states' is provided in the Hazus Flood Technical Manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 summarizes the expected damage by general building type.

Total Economic Loss (1 dot = \$300K) Overview Map



Flood Global Risk Report



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Table 3: Expected Building Damage by Occupancy

Occupancy	1-10		11-20		21-30		31-40		41-50		>50	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	7	23	6	19	4	13	5	16	7	23	2	6
Education	0	0	0	0	0	0	0	0	0	0	0	0
Government	0	0	0	0	0	0	0	0	0	0	0	0
Industrial	0	0	0	0	0	0	0	0	0	0	0	0
Religion	0	0	1	100	0	0	0	0	0	0	0	0
Residential	35	11	77	24	60	19	52	16	46	14	54	17
<b>Total</b>	<b>42</b>		<b>84</b>		<b>64</b>		<b>57</b>		<b>53</b>		<b>56</b>	

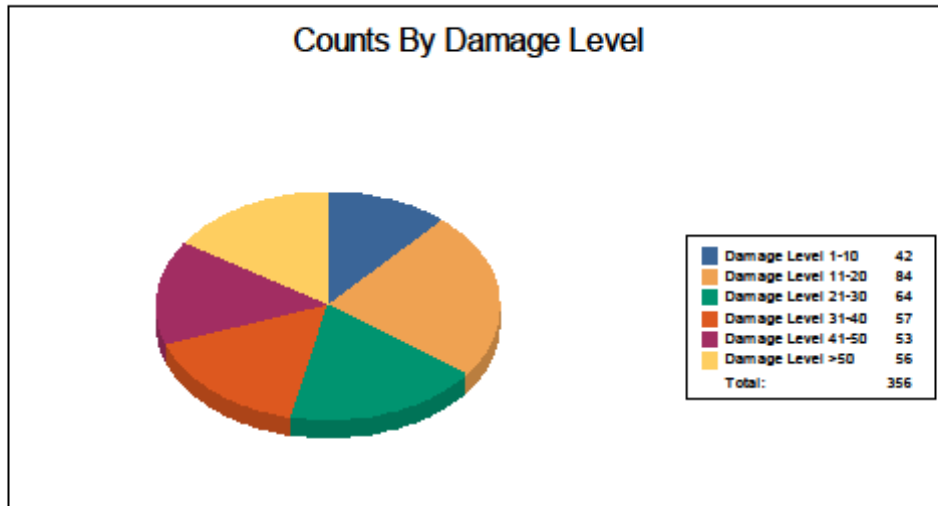




Table 4: Expected Building Damage by Building Type

Building Type	1-10		11-20		21-30		31-40		41-50		>50	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Concrete	0	0	0	0	0	0	0	0	0	0	0	0
Manuf-Housing	0	0	0	0	0	0	0	0	0	0	0	0
Masonry	2	11	4	22	3	17	3	17	5	28	1	6
Steel	1	14	2	29	1	14	1	14	2	29	0	0
Wood	36	11	78	24	60	18	52	16	45	14	54	17





**Essential Facility Damage**

Before the flood analyzed in this scenario, the region had 225 hospital beds available for use. On the day of the scenario flood event, the model estimates that 225 hospital beds are available in the region.

Table 5: Expected Damage to Essential Facilities

Classification	Total	# Facilities		
		At Least Moderate	At Least Substantial	Loss of Use
Emergency Operation Centers	1	0	0	0
Fire Stations	21	0	0	0
Hospitals	2	0	0	0
Police Stations	5	0	0	0
Schools	77	0	0	0

If this report displays all zeros or is blank, two possibilities can explain this.

- (1) None of your facilities were flooded. This can be checked by mapping the inventory data on the depth grid.
- (2) The analysis was not run. This can be tested by checking the run box on the Analysis Menu and seeing if a message box asks you to replace the existing results.

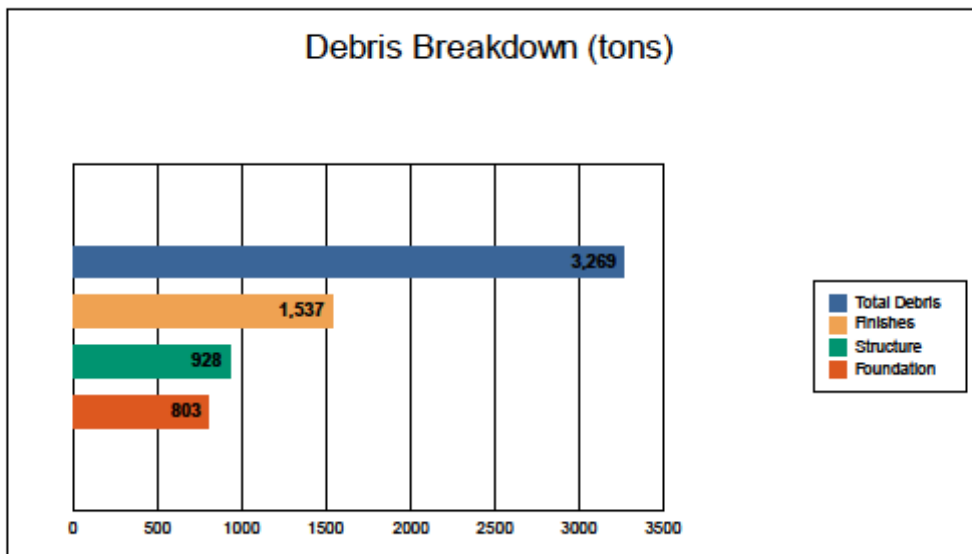




**Induced Flood Damage**

**Debris Generation**

Hazus estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories: 1) Finishes (dry wall, insulation, etc.), 2) Structural (wood, brick, etc.) and 3) Foundations (concrete slab, concrete block, rebar, etc.). This distinction is made because of the different types of material handling equipment required to handle the debris.



The model estimates that a total of 3,269 tons of debris will be generated. Of the total amount, Finishes comprises 47% of the total, Structure comprises 28% of the total, and Foundation comprises 25%. If the debris tonnage is converted into an estimated number of truckloads, it will require 131 truckloads (@25 tons/truck) to remove the debris generated by the flood.

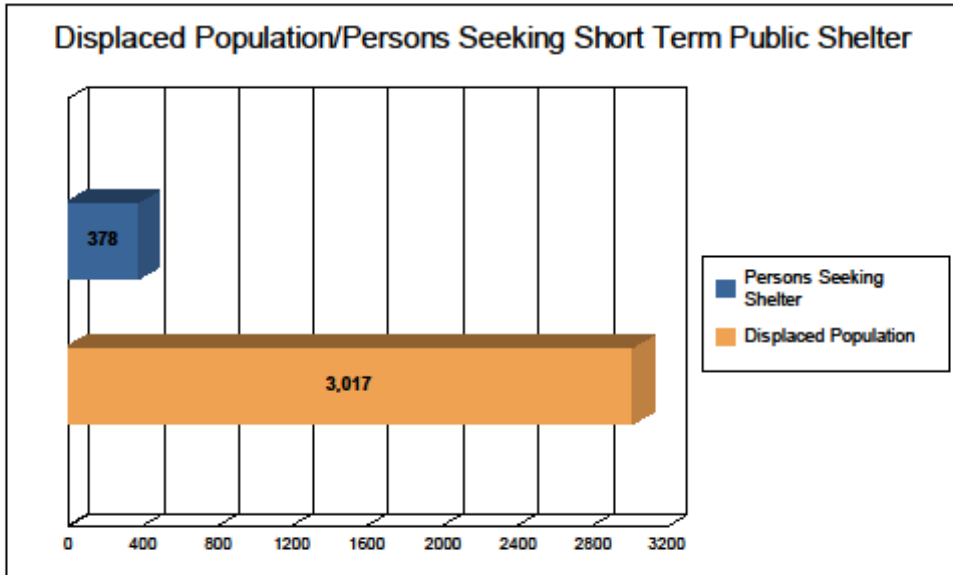




**Social Impact**

**Shelter Requirements**

Hazus estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. Hazus also estimates those displaced people that will require accommodations in temporary public shelters. The model estimates 1,006 households (or 3,017 of people) will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 378 people (out of a total population of 247,523) will seek temporary shelter in public shelters.





## Economic Loss

The total economic loss estimated for the flood is 828.83 million dollars, which represents 10.71 % of the total replacement value of the scenario buildings.

### Building-Related Losses

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the flood. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the flood.

The total building-related losses were 503.78 million dollars. 39% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 41.60% of the total loss. Table 6 below provides a summary of the losses associated with the building damage.



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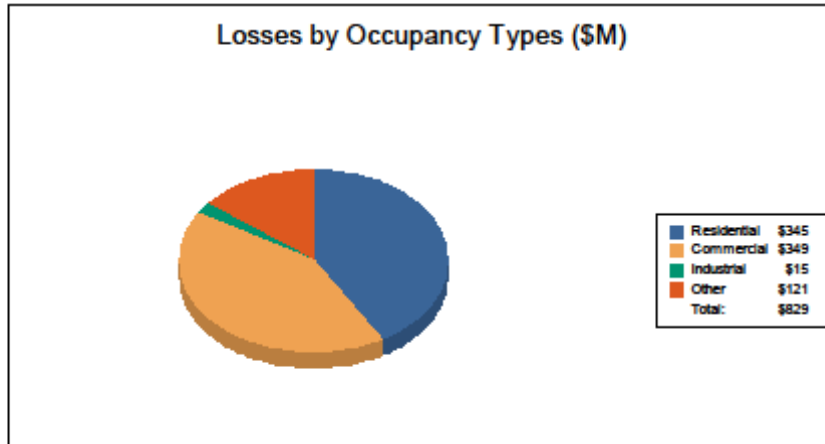
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**Table 6: Building-Related Economic Loss Estimates**  
(Millions of dollars)

Category	Area	Residential	Commercial	Industrial	Others	Total
<b>Building Loss</b>						
	Building	189.84	38.06	3.57	7.34	238.81
	Content	97.02	106.56	8.67	32.35	244.59
	Inventory	0.00	15.39	1.54	3.45	20.38
	<b>Subtotal</b>	<b>286.86</b>	<b>160.00</b>	<b>13.77</b>	<b>43.16</b>	<b>603.78</b>
<b>Business Interruption</b>						
	Income	1.41	73.75	0.23	12.16	87.54
	Relocation	38.81	19.78	0.21	6.62	65.43
	Rental Income	14.36	13.75	0.04	0.51	28.68
	Wage	3.33	81.58	0.38	58.11	143.40
	<b>Subtotal</b>	<b>67.91</b>	<b>188.88</b>	<b>0.86</b>	<b>77.40</b>	<b>326.06</b>
<b>ALL</b>	<b>Total</b>	<b>344.77</b>	<b>348.88</b>	<b>14.63</b>	<b>120.64</b>	<b>828.83</b>





**Appendix A: County Listing for the Region**

- Tennessee
  - Williamson



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**Appendix B: Regional Population and Building Value Data**

	Population	Building Value (thousands of dollars)		
		Residential	Non-Residential	Total
<b>Tennessee</b>				
Williamson	247,523	38,988,257	15,697,010	54,685,267
<b>Total</b>	<b>247,523</b>	<b>38,988,257</b>	<b>15,697,010</b>	<b>54,685,267</b>
<b>Total Study Region</b>	<b>247,523</b>	<b>38,988,257</b>	<b>15,697,010</b>	<b>54,685,267</b>



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**500-Year Flood Global Risk Report (HAZUS):**



**Hazus: Flood Global Risk Report**

**Region Name:** Williamson\_500yr

**Flood Scenario:** Williamson\_500yr

**Print Date:** Wednesday, March 8, 2023

**Disclaimer:**

*Totals only reflect data for those census tracts/blocks included in the user's study region.*

*The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific Flood. These results can be improved by using enhanced inventory data and flood hazard information.*



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## General Description of the Region

Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences (NIBS). The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The flood loss estimates provided in this report were based on a region that included 1 county(ies) from the following state(s):

- Tennessee

**Note:**

Appendix A contains a complete listing of the counties contained in the region.

The geographical size of the region is approximately 68 square miles and contains 3,458 census blocks. The region contains over 87 thousand households and has a total population of 247,523 people. The distribution of population by State and County for the study region is provided in Appendix B.

There are an estimated 63,263 buildings in the region with a total building replacement value (excluding contents) of 54,685 million dollars. Approximately 84.68% of the buildings (and 71.30% of the building value) are associated with residential housing.



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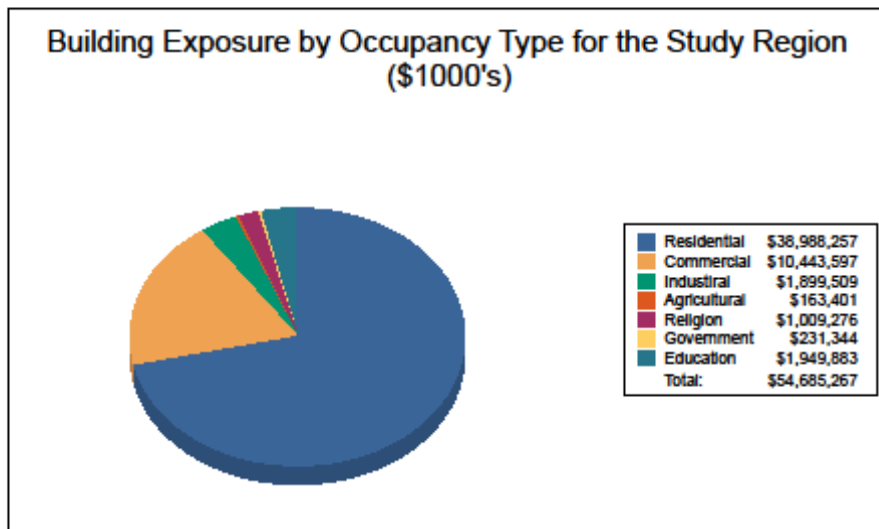
**Building Inventory**

**General Building Stock**

Hazus estimates that there are 63,263 buildings in the region which have an aggregate total replacement value of 54,685 million dollars. Table 1 and Table 2 present the relative distribution of the value with respect to the general occupancies by Study Region and Scenario respectively. Appendix B provides a general distribution of the building value by State and County.

**Table 1  
Building Exposure by Occupancy Type for the Study Region**

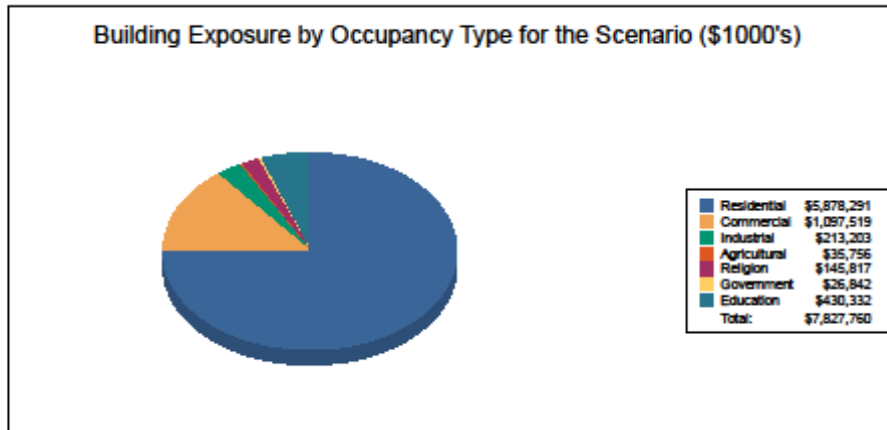
Occupancy	Exposure (\$1000)	Percent of Total
Residential	38,988,257	71.3%
Commercial	10,443,597	19.1%
Industrial	1,899,509	3.5%
Agricultural	163,401	0.3%
Religion	1,009,276	1.8%
Government	231,344	0.4%
Education	1,949,883	3.6%
<b>Total</b>	<b>54,685,267</b>	<b>100%</b>





**Table 2  
Building Exposure by Occupancy Type for the Scenario**

Occupancy	Exposure (\$1000)	Percent of Total
Residential	5,878,291	75.1%
Commercial	1,097,519	14.0%
Industrial	213,203	2.7%
Agricultural	35,756	0.5%
Religion	145,817	1.9%
Government	28,842	0.3%
Education	430,332	5.5%
<b>Total</b>	<b>7,827,760</b>	<b>100%</b>



**Essential Facility Inventory**

For essential facilities, there are 2 hospitals in the region with a total bed capacity of 225 beds. There are 77 schools, 21 fire stations, 5 police stations and 1 emergency operation center.





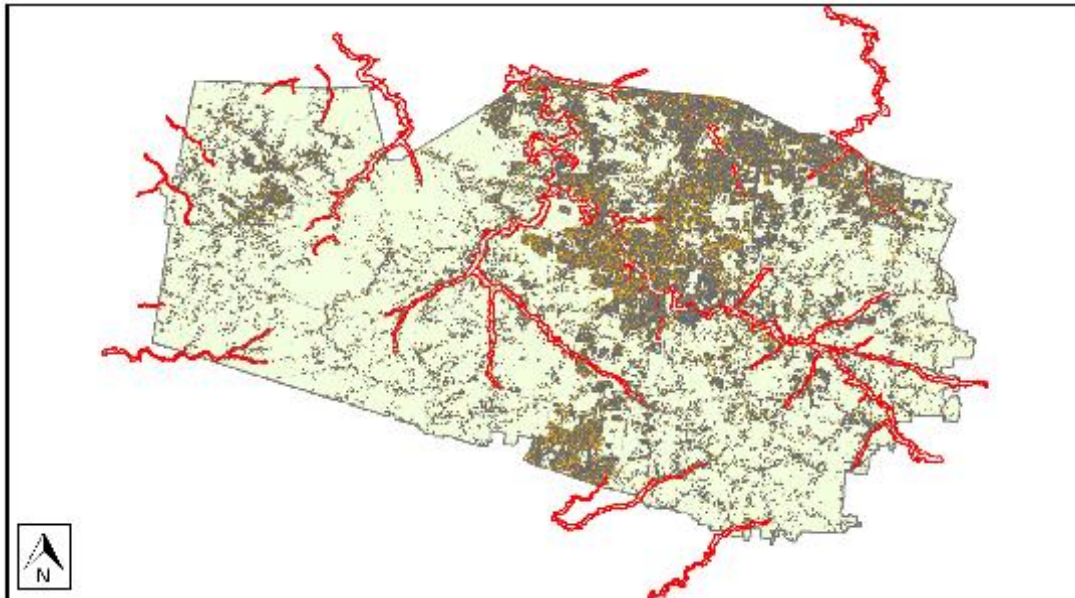
### Flood Scenario Parameters

Hazus used the following set of information to define the flood parameters for the flood loss estimate provided in this report.

<b>Study Region Name:</b>	Williamson_500yr
<b>Scenario Name:</b>	Williamson_500yr
<b>Return Period Analyzed:</b>	500
<b>Analysis Options Analyzed:</b>	No What-ifs

### Study Region Overview Map

Illustrating scenario flood extent, as well as exposed essential facilities and total exposure



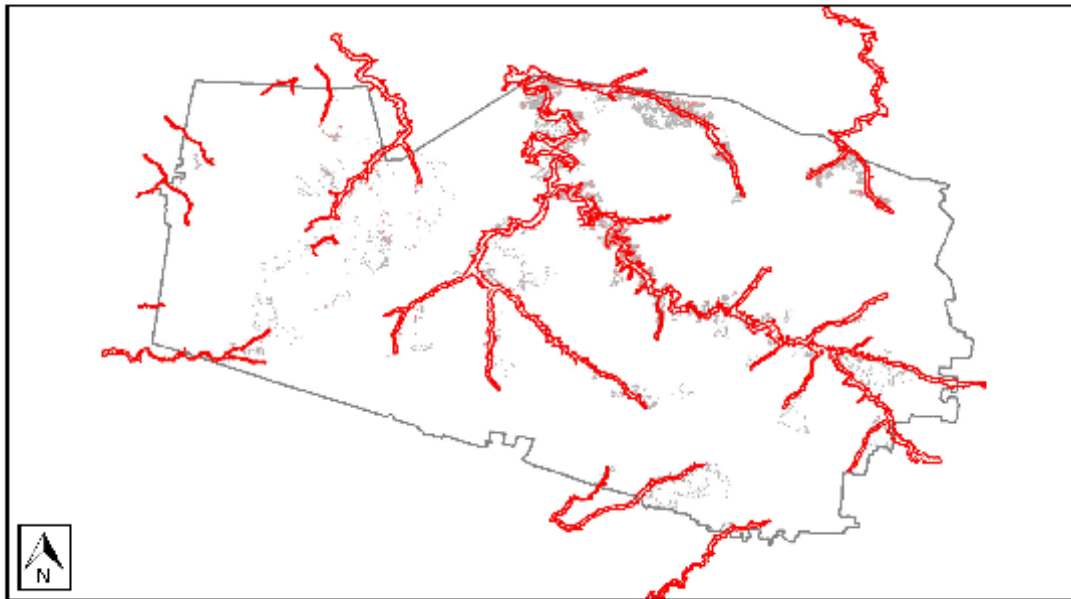


**Building Damage**

**General Building Stock Damage**

Hazus estimates that about 292 buildings will be at least moderately damaged. This is over 50% of the total number of buildings in the scenario. There are an estimated 50 buildings that will be completely destroyed. The definition of the 'damage states' is provided in the Hazus Flood Technical Manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 summarizes the expected damage by general building type.

**Total Economic Loss (1 dot = \$300K) Overview Map**



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Table 3: Expected Building Damage by Occupancy

Occupancy	1-10		11-20		21-30		31-40		41-50		>50	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	6	18	9	27	3	9	5	15	5	15	5	15
Education	0	0	0	0	0	0	0	0	0	0	0	0
Government	0	0	0	0	0	0	0	0	0	0	0	0
Industrial	0	0	0	0	0	0	0	0	0	0	0	0
Religion	0	0	3	100	0	0	0	0	0	0	0	0
Residential	36	12	79	27	51	17	51	17	38	12	45	15
<b>Total</b>	<b>42</b>		<b>91</b>		<b>54</b>		<b>56</b>		<b>41</b>		<b>50</b>	

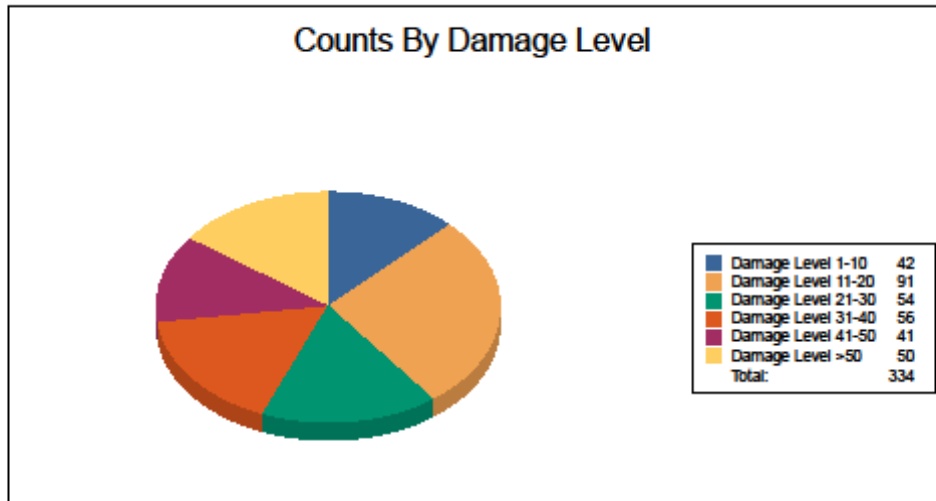




Table 4: Expected Building Damage by Building Type

Building Type	1-10		11-20		21-30		31-40		41-50		>50	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Concrete	0	0	0	0	0	0	0	0	0	0	0	0
Manuf/Housing	0	0	0	0	0	0	0	0	0	0	0	0
Masonry	2	11	8	42	2	11	1	5	4	21	2	11
Steel	1	11	3	33	1	11	1	11	2	22	1	11
Wood	37	12	82	27	51	17	52	17	38	12	48	15



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**Essential Facility Damage**

Before the flood analyzed in this scenario, the region had 225 hospital beds available for use. On the day of the scenario flood event, the model estimates that 225 hospital beds are available in the region.

**Table 5: Expected Damage to Essential Facilities**

Classification	Total	# Facilities		
		At Least Moderate	At Least Substantial	Loss of Use
Emergency Operation Centers	1	0	0	0
Fire Stations	21	0	0	0
Hospitals	2	0	0	0
Police Stations	5	0	0	0
Schools	77	0	0	0

If this report displays all zeros or is blank, two possibilities can explain this.

- (1) None of your facilities were flooded. This can be checked by mapping the inventory data on the depth grid.
- (2) The analysis was not run. This can be tested by checking the run box on the Analysis Menu and seeing if a message box asks you to replace the existing results.

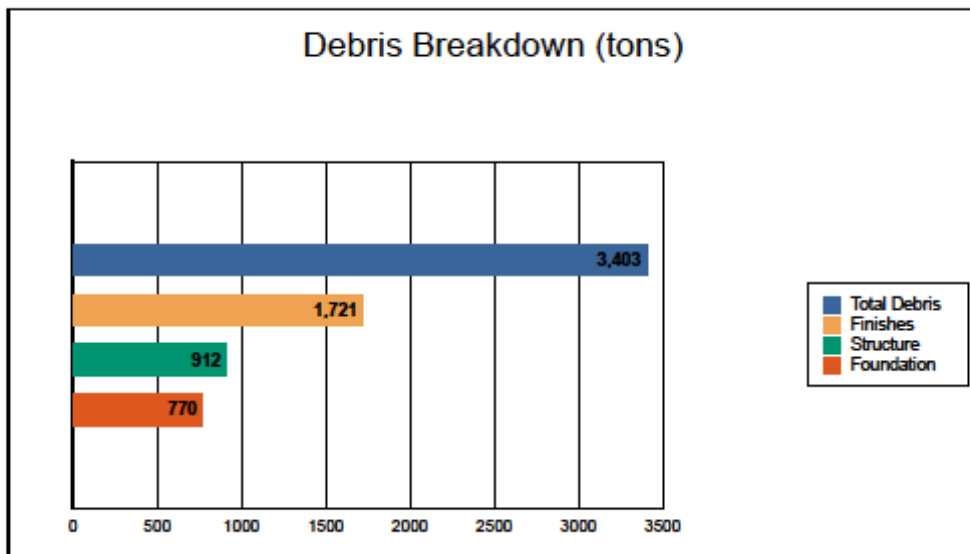




**Induced Flood Damage**

**Debris Generation**

Hazus estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories: 1) Finishes (dry wall, insulation, etc.), 2) Structural (wood, brick, etc.) and 3) Foundations (concrete slab, concrete block, rebar, etc.). This distinction is made because of the different types of material handling equipment required to handle the debris.



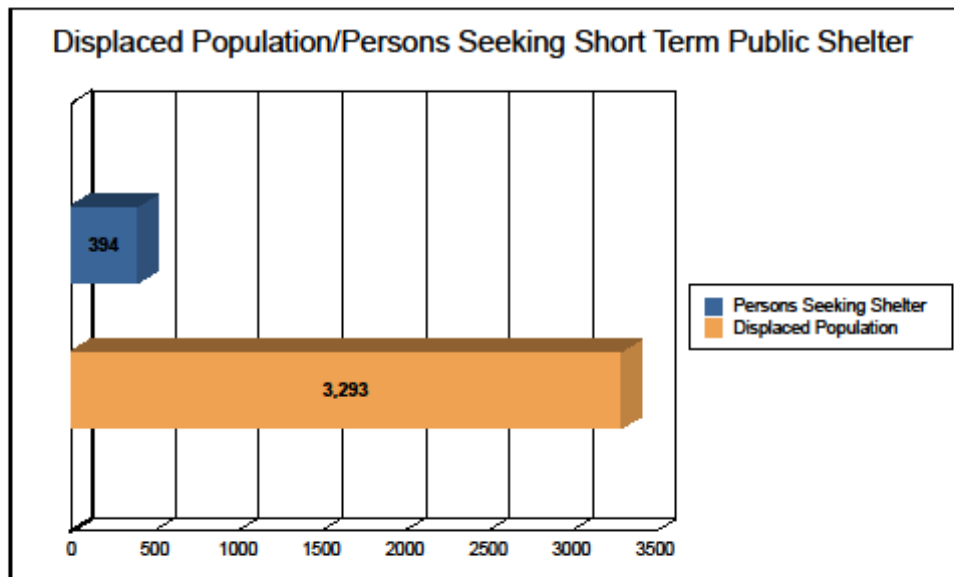
The model estimates that a total of 3,403 tons of debris will be generated. Of the total amount, Finishes comprises 51% of the total, Structure comprises 27% of the total, and Foundation comprises 23%. If the debris tonnage is converted into an estimated number of truckloads, it will require 137 truckloads (@25 tons/truck) to remove the debris generated by the flood.



## Social Impact

### Shelter Requirements

Hazus estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. Hazus also estimates those displaced people that will require accommodations in temporary public shelters. The model estimates 1,098 households (or 3,293 of people) will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 394 people (out of a total population of 247,523) will seek temporary shelter in public shelters.



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## Economic Loss

The total economic loss estimated for the flood is 880.86 million dollars, which represents 11.25 % of the total replacement value of the scenario buildings.

### Building-Related Losses

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the flood. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the flood.

The total building-related losses were 544.77 million dollars. 38% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 39.97% of the total loss. Table 6 below provides a summary of the losses associated with the building damage.



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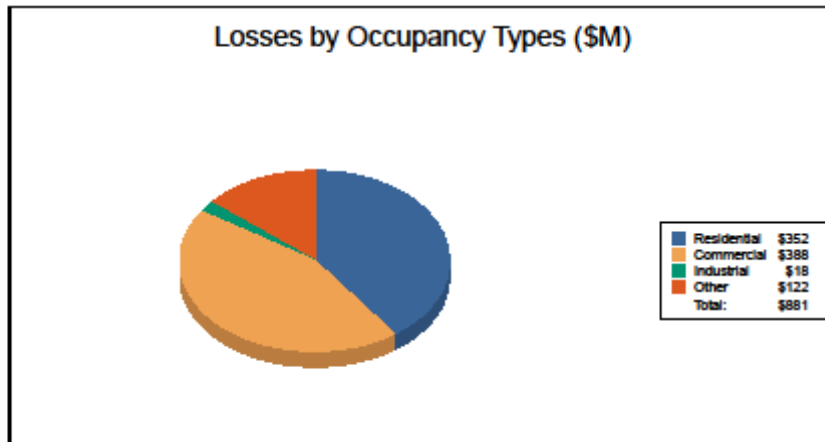
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**Table 6: Building-Related Economic Loss Estimates**  
(Millions of dollars)

Category	Area	Residential	Commercial	Industrial	Others	Total
<b>Building Loss</b>						
	Building	192.82	42.62	4.22	8.51	248.17
	Content	98.88	125.39	10.79	40.20	275.26
	Inventory	0.00	16.19	2.02	3.13	21.34
	<b>Subtotal</b>	<b>291.69</b>	<b>184.20</b>	<b>17.03</b>	<b>51.84</b>	<b>544.77</b>
<b>Business Interruption</b>						
	Income	2.08	81.40	0.35	13.99	97.82
	Relocation	38.63	21.96	0.37	7.51	68.48
	Rental Income	14.82	14.88	0.09	0.61	30.39
	Wage	4.90	85.86	0.58	48.06	139.40
	<b>Subtotal</b>	<b>60.43</b>	<b>204.09</b>	<b>1.39</b>	<b>70.18</b>	<b>336.09</b>
<b>ALL</b>	<b>Total</b>	<b>352.12</b>	<b>388.29</b>	<b>18.43</b>	<b>122.02</b>	<b>880.86</b>





**Appendix A: County Listing for the Region**

- Tennessee
- Williamson



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**Appendix B: Regional Population and Building Value Data**

	Population	Building Value (thousands of dollars)		
		Residential	Non-Residential	Total
<b>Tennessee</b>				
Williamson	247,523	38,988,257	15,697,010	54,685,267
<b>Total</b>	<b>247,523</b>	<b>38,988,257</b>	<b>15,697,010</b>	<b>54,685,267</b>
<b>Total Study Region</b>	<b>247,523</b>	<b>38,988,257</b>	<b>15,697,010</b>	<b>54,685,267</b>



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## Appendix E: County Dam Data/Map

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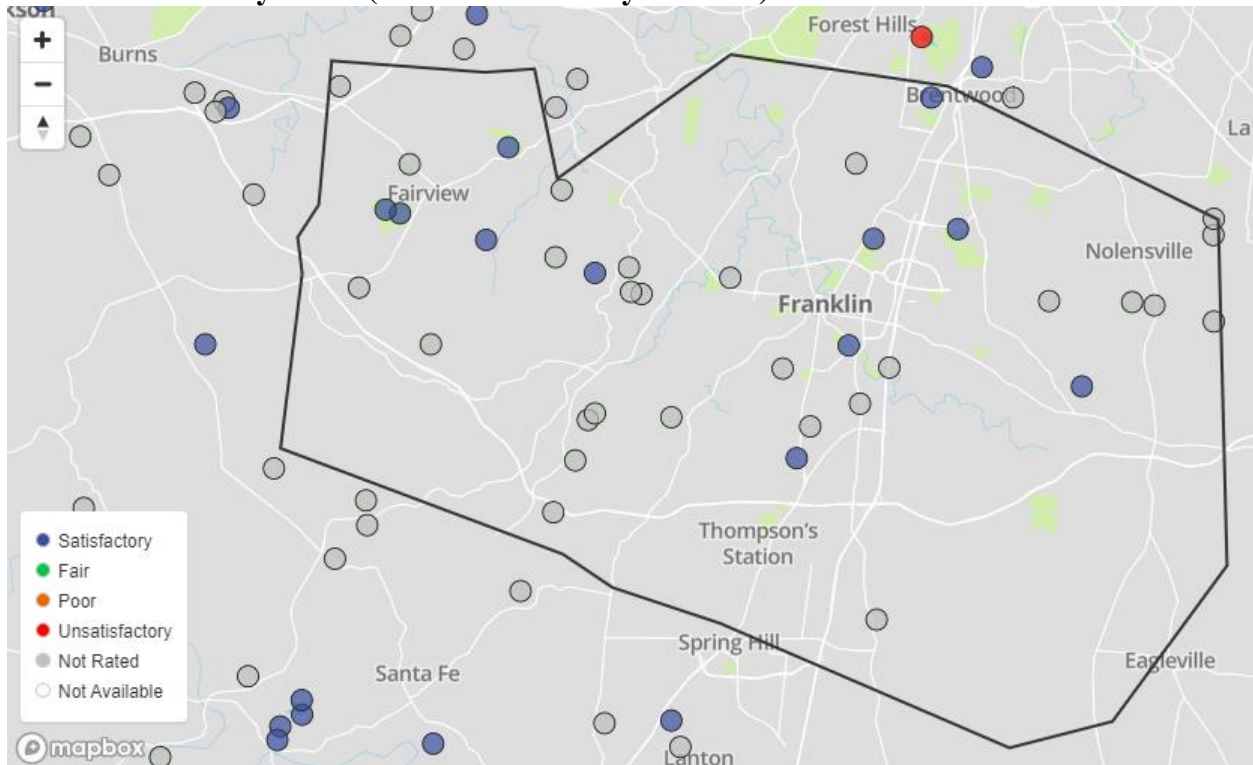
### Williamson County Dam Data:



National Inventory  
of Dams.xlsx

To view the additional hazard data, double click on the Excel icon above. If unable to view the data, please contact the WCEMA.

### Williamson County Dams (National Inventory of Dams):



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## Appendix F: References

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- Centers for Disease Control
- Centers for Disease Control Social Vulnerability Index (CDC SVI)
- Central United States Earthquake Consortium (CUSEC)
- City University of New York
- Critical2TN Critical Infrastructure Database
- Comprehensive Preparedness Guide (CPG) 201
- Williamson County Computer Aided Dispatch (CAD)
- Emergency Management Accreditation Program (EMAP)
- East Tennessee State University Geoinformatics and Disaster Science Lab
- Federal Emergency Management Agency (FEMA)
- FEMA National Risk Index
- FEMA Resilience Analysis and Planning Tool (RAPT)
- Hazard Mitigation Planning Committee (HMPC)
- London School of Economics
- Mississippi State University
- National Centers for Environmental Information (NCEI)
- National Institute of Building Sciences (NIBS)
- National Integrated Drought Information System (NIDIS)
- National Oceanic and Atmospheric Administration (NOAA)
- National Weather Service (NWS)
- NWS National Operational Hydrologic Remote Sensing Center (NOHRSC)
- National Wildfire Coordinating Group (NWCG)
- Southern Group of State Foresters (SGSF)
- Tennessee Department of Health (TDOH)
- Tennessee Division of Forestry
- Tennessee Emergency Management Agency (TEMA)
- Tennessee Hazard Mitigation Plan
- United States Census Bureau
- United States Geological Survey (USGS)
- University of Wisconsin SILVIS Lab Wildland Urban Interface (WUI)
- WAKM Radio
- Williamson County Emergency Operations Plan (EOP)
- Williamson County Geographic Information Systems (GIS)
- Williamson County Threat and Hazard Identification and Risk Assessment (THIRA)
- Williamson County WebEOC
- WKRN News 2

# CRYE-LEIKE<sup>®</sup>, REALTORS<sup>®</sup>

## LOT/LAND PURCHASE AND SALE AGREEMENT

1 **1. Purchase and Sale.** For and in consideration of the mutual covenants herein and other good and valuable consideration,  
 2 the receipt and sufficiency of which is hereby acknowledged, the undersigned buyer  
 3 DeFatta Custom Homes (“Buyer”) agrees to buy and  
 4 the undersigned seller Franklin Special School District (“Seller”)  
 5 agrees to sell all that tract or parcel of land, with such improvements as are located thereon, described as follows:  
 6 All that tract of land known as: 319, 401, & 403 Battle Avenue  
 7 (Address) Franklin (City), Tennessee, 37064 (Zip), as  
 8 recorded in Williamson County Register of Deeds Office,  
 9 73 deed book(s), 452 page(s), and/or Block A instrument number and as further described  
 10 as: Tax/Parcel IDs: 0780 A 001.02000 (Lot 10); 0780 A 001.03000 (Lot 11); 0780 A 001.04000 (Lot 12)  
 11 together with all fixtures, landscaping, improvements, and appurtenances, all being hereinafter collectively referred to as  
 12 the “Property.”

13  **This box must be checked to be part of this Agreement.** The full and legal description of said Property is as described  
 14 in the attached “Legal Description Exhibit.”

15 **A. LEASED ITEMS.** Leased items that remain with the Property (e.g. billboards, irrigation systems, fuel tank, etc.)  
 16 \_\_\_\_\_ Buyer shall assume any and all lease payments as of Closing. If leases are not  
 17 assumable, the balance shall be paid in full by Seller at or before Closing.

18  Buyer does not wish to assume a leased item. **(THIS BOX MUST BE CHECKED IN ORDER FOR**  
 19 **IT TO BE A PART OF THIS AGREEMENT.)**

20 Buyer does not wish to assume Seller's current lease of \_\_\_\_\_; therefore,  
 21 Seller shall have said lease cancelled and leased items removed from Property prior to Closing.

22 **B. FUEL.** Fuel, if any, shall be adjusted and charged to Buyer and credited to Seller at Closing at current market prices.

23 **2. Purchase Price, Method of Payment and Closing Expenses.** Buyer warrants that, except as may be otherwise  
 24 provided herein, Buyer shall at Closing have sufficient cash to complete the purchase of the Property under the terms of  
 25 this Lot/Land Purchase and Sale Agreement (hereinafter “Purchase and Sale Agreement” or “Agreement”). The  
 26 purchase price to be paid is: \$ 1,725,000.00,  
 27 One Million Seven Hundred Twenty-Five Thousand U.S. Dollars,  
 28 (“Purchase Price”) which shall be disbursed to Seller or Seller’s Closing Agency by one of the following methods:  
 29 i. a Federal Reserve Bank wire transfer;  
 30 ii. a Cashier’s Check issued by a financial institution as defined in 12 CFR § 229.2(i); OR  
 31 iii. other such form as is approved in writing by Seller.

32 This price is based (**Select one. The sections not checked are not a part of this Agreement.**):  
 33  for entire Property as a tract, and not by the acre **OR**  
 34  per acre with the Purchase Price to be determined by the actual amount of acreage of the Property, \$ \_\_\_\_\_ per  
 35 acre based on a current or mutually acceptable survey **OR**  
 36  for entire Property as a tract but with the Purchase Price to be adjusted upward or downward at \$ \_\_\_\_\_ per  
 37 acre in the event the actual amount of acreage of the Property based on a current or mutually acceptable survey should  
 38 vary more or less than \_\_\_\_\_ acre(s) from the \_\_\_\_\_ estimated acreage.

39 **A. Appraisal (Select either 1 or 2 below. The sections not checked are not a part of this Agreement).**  
 40  **1.** This Agreement **IS NOT** contingent upon the appraised value either equaling or exceeding the  
 41 agreed upon Purchase Price.  
 42  **2.** This Agreement **IS CONTINGENT** upon the appraised value either equaling or exceeding the agreed  
 43 upon Purchase Price If appraised value is equal to or exceeds the Purchase Price, this contingency is satisfied.  
 44 In consideration of Buyer having conducted an appraisal, the sufficiency of such consideration being hereby  
 45 acknowledged, if the appraised value of the Property does not equal or exceed the Purchase Price, Buyer

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46 shall promptly notify the Seller via the Notification Form or equivalent written notice. Buyer shall then have  
47 3 days to either:  
48 1. waive the appraisal contingency via the Notification Form or equivalent written notice  
49 **OR**  
50 2. terminate the Agreement by giving notice to Seller via the Notification Form or equivalent written  
51 notice. Upon timely termination, Buyer is entitled to a refund of the Earnest Money/Trust Money.

52 In the event Buyer fails to either waive the appraisal contingency or terminate the Agreement as set forth  
53 above, this contingency is deemed satisfied. Thereafter, failure to appraise shall not be used as the basis for  
54 loan denial or termination of Agreement. Seller shall have the right to request any supporting documentation  
55 showing appraised value did not equal or exceed the agreed upon Purchase Price.

56 **B. Closing Expenses.**

57 1. **Seller Expenses.** Seller shall pay all existing loans affecting the Property, including all penalties, release  
58 preparation costs, and applicable recording costs; any accrued and/or outstanding association dues or fees; fee (if  
59 any) to obtain lien payoff/estoppel letters/statement of accounts from any and all associations, property  
60 management companies, mortgage holders or other liens affecting the Property; Seller’s Closing fee, document  
61 preparation fee and/or attorney’s fees; fee for preparation of deed; notary fee on deed; and financial institution  
62 (Bank, Credit Union, etc.) wire transfer fee or commercial courier service fee related to the disbursement of any  
63 lien payoff(s). Seller additionally agrees to permit any withholdings and/or to pay any additional sum due as is  
64 required under the Foreign Investment in Real Property Tax Act. Failure to do so shall constitute a default by  
65 Seller.

66 **In the event Seller is subject to Tax Withholding as required by the Foreign Investment in Real Property**  
67 **Tax Act, (hereinafter “FIRPTA”), Seller additionally agrees that such Tax Withholding must be collected**  
68 **from Seller by Buyer’s Closing Agent at the time of Closing.** In the event Seller is not subject to FIRPTA,  
69 Seller shall be required as a condition of Closing to sign appropriate affidavits certifying that Seller is not subject  
70 to FIRPTA. *It is Seller’s responsibility to seek independent tax advice or counsel prior to the Closing Date*  
71 *regarding such tax matters.*

72 2. **Buyer Expenses.** Buyer shall pay all transfer taxes and recording fees on deed of conveyance and deed of trust;  
73 Buyer’s Closing fee, document preparation fee and/or attorney’s fees; preparation of note, deed of trust, and other  
74 loan documents; mortgage loan inspection or boundary line survey; credit report; required premiums for private  
75 mortgage, hazard and flood insurance; required reserved deposits for insurance premiums and taxes; prepaid  
76 interest; re-inspection fees pursuant to appraisal; and any costs incident to obtaining and closing a loan, including  
77 but not limited to: appraisal, origination, discount points, application, commitment, underwriting, document  
78 review, courier, assignment, photo, tax service notary fees, and any wire fee or other charge imposed for the  
79 disbursement of the Seller’s proceeds according to the terms of this Agreement.

80 3. **Title Expenses.** Cost of title search, mortgagee’s policy and owner’s policy (rates to be as filed with the  
81 Tennessee Department of Commerce and Insurance) shall be paid as follows:  
82 **Buyer to pay title expenses** \_\_\_\_\_  
83 Simultaneous issue rates shall apply. It is the Buyer’s responsibility to seek independent advice or counsel prior  
84 to Closing from Buyer’s Closing Agency regarding the availability and coverage provided under and American  
85 Land Title Association Standard Owner’s Insurance Policy and, if available, an Extended Owner’s Insurance  
86 Policy.

87 **Not all of the above items (Seller Expenses, Buyer Expenses and Title Expenses) are applicable to every**  
88 **Transaction and may be modified as follows:**

89 \_\_\_\_\_  
90 \_\_\_\_\_  
91 **Closing Agency for Buyer & Contact Information:** Mid-State Title & Escrow Yvette Meldrum  
92 128 Holiday CT #125, Franklin TN 37067 yvette@midstatetn.com  
93 **Closing Agency for Seller & Contact Information:** Attorneys Title Company, John Cook, Esq.  
94 2927 Berry Hill Dr., Nashville TN 37024, 615-385-5502, jtc@atctn.com

95 **C. Financial Contingency – Loan(s) To Be Obtained:** This Agreement is conditioned upon Buyer’s ability to obtain  
96 a loan(s) in the principal amount up to 95 % of the Purchase Price listed above to be secured by a deed of  
97 trust on the Property. “Ability to obtain” as used herein means that Buyer is qualified to receive the loan described  
98 herein based upon Lender’s customary and standard underwriting criteria. In consideration of Buyer, having acted in

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99 good faith and in accordance with the terms below, being unable to obtain financing by the Closing Date, the  
100 sufficiency of such consideration being hereby acknowledged, Buyer may terminate this Agreement by providing  
101 written notice via the Notification form or equivalent written notice. Seller shall have the right to request any  
102 supporting documentation regarding loan denial. Upon termination, Buyer is entitled to a refund of the Earnest  
103 Money/Trust Money. Lender is defined herein as the financial institution funding the loan.

104 The loan shall be of the type selected below (**Select the appropriate boxes. Unselected items shall not be part of**  
105 **this Agreement**):

- 106  Conventional Loan     Rural Development/USDA
- 107  Other \_\_\_\_\_

108 Buyer may apply for a loan with different terms and conditions and also Close the transaction provided all other terms  
109 and conditions of this Agreement are fulfilled and the new loan does not increase any costs charged to Seller. Buyer  
110 shall be obligated to Close this transaction if Buyer has the ability to obtain a loan with terms as described herein  
111 and/or any other loan for which Buyer has applied and been approved.

112 **Loan Obligations: The Buyer agrees and/or certifies as follows:**

- 113 (1) Within three (3) days after the Binding Agreement Date, Buyer shall make application for the loan and shall  
114 pay for credit report. Buyer shall immediately notify Seller or Seller’s representative of having applied for  
115 the loan and provide Lender’s name and contact information, and that Buyer has instructed Lender to order  
116 credit report. Such certifications shall be made via the Notification form or equivalent written notice;
- 117 (2) Within fourteen (14) days after the Binding Agreement Date, Buyer shall warrant and represent to Seller via  
118 the Notification form or equivalent written notice that:
  - 119 a. Buyer has notified Lender of an Intent to Proceed and has available funds to Close per the signed  
120 Loan Estimate; and
  - 121 b. Buyer has requested that the appraisal be ordered and affirms that the appraisal fee has been paid.
- 122 (3) Buyer shall pursue qualification for and approval of the loan diligently and in good faith;
- 123 (4) Buyer shall continually and immediately provide requested documentation to Lender and/or loan originator;
- 124 (5) Unless otherwise stated in this Agreement, Buyer represents that this loan is not contingent upon the lease or  
125 sale of any other real property and the same shall not be used as the basis for loan denial; and
- 126 (6) Buyer shall not intentionally make any material changes in Buyer’s financial condition which would  
127 adversely affect Buyer’s ability to obtain the Primary Loan or any other loan referenced herein.

128 Should Buyer fail to timely comply with 2.C.(1) and/or 2.C.(2) above and provide notice as required, Seller may make  
129 written demand for compliance via the Notification form or equivalent written notice. If Buyer does not furnish Seller  
130 the requested documentation within two (2) days after such demand for compliance, Buyer shall be considered in  
131 default and Seller’s obligation to sell is terminated.

132 **THIS BOX MUST BE CHECKED IN ORDER FOR IT TO BE A PART OF THIS AGREEMENT.**

- 133  **Financing Contingency Waived** (e.g. “All Cash”, etc.):  
134 Buyer’s obligation to Close shall not be subject to any financial contingency. Buyer reserves the right to obtain a  
135 loan. Buyer shall furnish proof of available funds to close in the following manner: \_\_\_\_\_  
136 (e.g. bank statement, Lender’s commitment letter) within five (5) days after Binding Agreement Date. Should Buyer  
137 fail to do so, Seller may make written demand for compliance via the Notification form or equivalent written notice.  
138 If Buyer does not furnish Seller with the requested notice within two (2) days after such demand for compliance,  
139 Buyer shall be considered in default and Seller’s obligation to sell is terminated. Failure to Close due to lack of funds  
140 shall be considered default by Buyer.

141 In the event that this Agreement is contingent upon an appraisal, Buyer must order the appraisal and provide Seller  
142 with the name and telephone number of the appraisal company and proof that appraisal was ordered within five (5)  
143 days of the Binding Agreement Date. Should Buyer fail to do so, Seller may make written demand for compliance  
144 via the Notification form or equivalent written notice. If Buyer does not furnish Seller with the requested notice within  
145 two (2) days after such demand for compliance, Buyer shall be considered in default and Seller’s obligation is  
146 terminated.

147 **3. Earnest Money/Trust Money.** Buyer has paid or shall pay within   3   days after the Binding Agreement Date to  
148 \_\_\_\_\_ **Attorneys Title Company** \_\_\_\_\_ (name of Holder) (“Holder”)

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149 located at 2927 Berry Hill Dr Nashville TN 37024 615-385-5502 (address of Holder), an  
 150 Earnest Money/Trust Money deposit of \$ 86,250.00 by check (OR  
 151 WIRE) (“Earnest Money/Trust Money”).

152 **A. Failure to Receive Earnest Money/Trust Money.** In the event Earnest Money/Trust Money (if applicable) is not  
 153 timely received by Holder or Earnest Money/Trust Money check or other instrument is not honored, for any reason  
 154 by the bank upon which it is drawn, Holder shall promptly notify Buyer and Seller of the Buyer’s failure to deposit  
 155 the agreed upon Earnest Money/Trust Money. Buyer shall then have one (1) day to deliver Earnest Money/Trust  
 156 Money in immediately available funds to Holder. In the event Buyer does not deliver such funds, Buyer is in default  
 157 and Seller shall have the right to terminate this Agreement by delivering to Buyer or Buyer’s representative written  
 158 notice via the Notification form or equivalent written notice. In the event Buyer delivers the Earnest Money/Trust  
 159 Money in immediately available funds in the form of a wire transfer or cashier’s check to Holder before Seller elects  
 160 to terminate, Seller shall be deemed to have waived Seller’s right to terminate, and the Agreement shall remain in full  
 161 force and effect.

162 **B. Handling of Earnest Money/Trust Money upon Receipt by Holder.** Earnest Money/Trust Money (if applicable) is  
 163 to be deposited promptly after the Binding Agreement Date or the agreed upon delivery date in this Earnest  
 164 Money/Trust Money section or as specified in the Special Stipulations section contained herein. Holder shall disburse  
 165 Earnest Money/Trust Money only as follows:

- 166 (a) at Closing to be applied as a credit toward Buyer’s Purchase Price;  
 167 (b) upon a written agreement signed by all parties having an interest in the funds;  
 168 (c) upon order of a court or arbitrator having jurisdiction over any dispute involving the Earnest  
 169 Money/Trust Money;  
 170 (d) upon a reasonable interpretation of the Agreement; or  
 171 (e) upon the filing of an interpleader action with payment to be made to the clerk of the court having  
 172 jurisdiction over the matter.

173 Holder shall be reimbursed for, and may deduct from any funds interpleaded, its costs and expenses, including reasonable  
 174 attorney’s fees. The prevailing party in the interpleader action shall be entitled to collect from the other party the costs  
 175 and expenses reimbursed to Holder. No party shall seek damages from Holder (nor shall Holder be liable for the same)  
 176 for any matter arising out of or related to the performance of Holder’s duties under this Earnest Money/Trust Money  
 177 section. Earnest Money/Trust Money shall not be disbursed prior to fourteen (14) days after deposit unless written evidence  
 178 of clearance by bank is provided.

179 **4. Closing, Prorations, Special Assessments and Association Fees.**

180 **A. Closing Date.** This transaction shall be closed (“Closed”) (evidenced by delivery of warranty deed and payment of  
 181 Purchase Price, the “Closing”), and this Agreement shall expire at 11:59 p.m. local time on the 27th day of  
 182 November, 2024 (“Closing Date”), or on such earlier date as may be agreed to by the  
 183 parties in writing. Such expiration does not extinguish a party’s right to pursue remedies in the event of default. Any  
 184 extension of this date must be agreed to by the parties in writing via the Closing Date/Possession Date Amendment or  
 185 equivalent written agreement.

186 **1. Possession.** Possession of the Property is to be given (**Select the appropriate boxes below. Unselected items**  
 187 **shall not be part of this Agreement**):

188  at closing as evidenced by delivery of warranty deed and payment of Purchase Price;

189 **OR**

190  as agreed in the attached and incorporated Temporary Occupancy Agreement;

191 **B. Prorations.** Real estate taxes, rents, dues, maintenance fees, and association fees on said Property for the calendar  
 192 year in which the sale is Closed shall be prorated as of the Closing Date. In the event of a change or reassessment of  
 193 taxes for the calendar year after Closing, the parties agree to pay their recalculated share. Real estate taxes, rents,  
 194 dues, maintenance fees, and association fees for prior years and rollback taxes, if any, shall be paid by Seller.

195 **C. Greenbelt.** If property is currently classified by the property tax assessor as “Greenbelt” (minimum of 15 acres or  
 196 otherwise qualifies), does the Buyer intend to keep the property in the Greenbelt? (**Select the appropriate boxes**  
 197 **below. Unselected items shall not be part of this Agreement**):

198  Buyer intends to maintain the property’s Greenbelt classification and acknowledges that it is Buyer’s  
 199 responsibility to make timely and proper application to insure such status. Buyer’s failure to timely and

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200 properly make application shall result in the assessment of rollback taxes for which Buyer shall be obligated to  
 201 pay. Buyer should consult the tax assessor for the county where the property is located prior to making this  
 202 offer to verify that their intended use shall qualify for Greenbelt classification.  
 203  Buyer does not intend to maintain the property’s Greenbelt status and rollback taxes shall be payable by the  
 204 Seller at time of closing.

205 **D. Special Assessments.** Special Assessments approved or levied prior to the Closing Date shall be paid by Seller at or  
 206 prior to Closing unless otherwise agreed as follows:  
 207 \_\_\_\_\_.

208 **E. Association Fees.** Buyer shall be responsible for all homeowner or condominium association transfer fees, related  
 209 administration fees (not including statement of accounts), capital expenditures/contributions incurred due to the  
 210 transfer of the Property and/or like expenses which are required by the association, property management company  
 211 and/or the bylaws, declarations or covenants for the Property (unless otherwise specifically addressed herein and/or  
 212 unless specifically chargeable to Seller under applicable bylaws, declarations, and/or neighborhood covenants).

213 **5. Title and Conveyance.**

214 **A.** Seller warrants that at the time of Closing, Seller shall convey or cause to be conveyed to Buyer or Buyer’s assign(s)  
 215 good and marketable title to said Property by general warranty deed, subject only to:

- 216 (1) Zoning;
- 217 (2) Setback requirements and general utility, sewer, and drainage easements of record on the Binding Agreement  
 218 Date upon which the improvements do not encroach;
- 219 (3) Subdivision and/or condominium declarations, covenants, restrictions, and easements of record on the  
 220 Binding Agreement Date; and
- 221 (4) Leases and other encumbrances specified in this Agreement.

222 If title examination, closing or loan survey pursuant to Tenn. Code Ann. § 62-18-126, boundary line survey, or other  
 223 information discloses material defects, Buyer may, at Buyer’s discretion:

- 224 (1) accept the Property with the defects **OR**
- 225 (2) require Seller to remedy such defects prior to the Closing Date. Buyer shall provide Seller with written notice  
 226 of such defects via the Notification form or equivalent written notice. If defects are not remedied prior to the  
 227 Closing Date, Buyer may elect to extend the Closing Date by mutual written agreement evidenced by the  
 228 Closing Date/Possession Amendment form or other written equivalent. If defects are not remedied by the  
 229 Closing Date or any mutually agreed upon extension thereof, this Agreement shall terminate, and Buyer shall  
 230 be entitled to a refund of Earnest Money/Trust Money.

231 Good and marketable title as used herein shall mean title which a title insurance company licensed to do business in  
 232 Tennessee shall insure at its regular rates, subject only to standard exceptions. The title search or abstract used for the  
 233 purpose of evidencing good and marketable title must be acceptable to the title insurance agent and the issuing title  
 234 insurance company. Seller agrees to execute such appropriate affidavits and instruments as may be required by the  
 235 issuing title insurance company.

236 **B.** Buyer warrants Buyer is not a sanctioned nonresident alien, sanctioned foreign business, or sanctioned foreign  
 237 government or an agent, trustee, or fiduciary thereof and therefore is not precluded from purchasing Property pursuant  
 238 to Tenn. Code Ann. §66-2-301, et seq.

239 **C. Deed.** Name(s) on Deed to be: DeFatta Custom Homes  
 240 It is the Buyer’s responsibility to consult the closing agency or attorney prior to Closing as to the manner in which  
 241 Buyer holds title.

242 **6. Inspections and other requirements made a part of this Agreement.**

243 **ALL INSPECTIONS ARE TO BE MADE AT BUYER’S EXPENSE.** Buyer, its inspectors and/or representatives shall  
 244 have the right and responsibility to enter the Property during normal business hours for the purpose of making inspections  
 245 and/or tests. Buyer agrees to indemnify Seller for the acts of themselves, their inspectors and/or representatives in  
 246 exercising their rights under this section. Buyer’s obligations to indemnify Seller shall also survive the termination of this  
 247 Agreement by either party, which shall remain enforceable. Buyer shall make such inspections as indicated in this section  
 248 and either accept the Property in its present condition by written notice to Seller or terminate the Agreement as provided  
 249 for in each section marked below.

250 **[Select any or all of the following stipulations. Unselected items are not a part of this Agreement.]**

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- 251      □ **A. Feasibility Study.** Buyer shall have the right to review all aspects of the Property, including but not limited to,  
 252      all governmental, zoning, soil and utility service matters related thereto. In consideration of Buyer having conducted  
 253      Buyer's good faith review as provided for herein, the sufficiency of such consideration being hereby acknowledged,  
 254      Buyer shall provide written notification to Seller and/or Seller's Broker within \_\_\_\_\_ days after Binding  
 255      Agreement Date that Buyer is not satisfied with the results of such review, and this Agreement shall automatically  
 256      terminate and Broker shall promptly refund the Earnest Money/Trust Money to Buyer. If Buyer fails to provide notice,  
 257      then this contingency shall be deemed to have been waived by Buyer. Seller acknowledges and agrees that Buyer  
 258      and/or Buyer's agents and employees may have free access during normal business hours to visit the Property for the  
 259      purpose of (1) inspection thereof and (2) conducting such soil and other tests thereon as are deemed reasonably  
 260      necessary by Buyer. Buyer hereby agrees to indemnify and hold Seller, Broker, and Broker's Affiliated Licensees  
 261      harmless from and against any and all loss, injury, cost, or expense associated with Buyer's inspection of and entry  
 262      upon Property.
- 263      □ **B. Building Permit.** This Agreement is contingent upon Buyer's ability to acquire all required licenses and permits  
 264      from the appropriate governmental authority to make specific improvements on the Property. In consideration of  
 265      Buyer, having acted in good faith, being unable to acquire all required licenses and permits from the appropriate  
 266      governmental authority to make specific improvements to the Property, the sufficiency of such consideration hereby  
 267      being acknowledged, Buyer may terminate this agreement by providing written notification to Seller and/or Seller's  
 268      Broker within \_\_\_\_\_ days after the Binding Agreement Date. Upon termination, holder shall promptly refund the  
 269      Earnest Money/Trust Money to Buyer. If Buyer fails to provide said notice, then this contingency shall be deemed to  
 270      have been waived by Buyer.
- 271      □ **C. Permit for Sanitary Septic Disposal System.** This Agreement is contingent upon the Buyer's ability to obtain  
 272      a permit for a sanitary septic disposal system from the respective Tennessee Ground Water Protection Office for the  
 273      county in which the Property is located (generally, located at the local Health Department) to be placed on the Property  
 274      in a location consistent with Buyer's planned improvements. In consideration of Buyer, having acted in good faith,  
 275      being unable to meet this condition, the sufficiency of such consideration being hereby acknowledged, Buyer must  
 276      notify Seller and/or Seller's Broker in writing within \_\_\_\_\_ days after the Binding Agreement Date. With proper  
 277      notice, the Agreement is voidable by Buyer and Earnest Money/Trust Money refunded. If Buyer fails to provide said  
 278      notice, this contingency shall be deemed to have been waived by Buyer.
- 279      □ **D. Rezoning.** This Agreement is contingent upon the Property being rezoned to \_\_\_\_\_  
 280      by the appropriate governmental authorities on or before \_\_\_\_\_. (Buyer or Seller)  
 281      \_\_\_\_\_ shall be responsible for pursuing such rezoning, and paying all associated cost. All  
 282      rezoning applications shall be submitted to Seller for Seller's approval prior to filing, which approval shall not be  
 283      unreasonably withheld. All parties agree to cooperate, to sign the necessary documentation and to support the rezoning  
 284      application. In consideration of Buyer having acted in good faith, Buyer may provide notification to Seller and/or  
 285      Seller's Broker within 48 hours after the above date that the Property cannot be so zoned, the sufficiency of such  
 286      consideration being hereby acknowledged, and this Agreement shall automatically terminate. Upon termination,  
 287      holder shall promptly refund the Earnest Money/Trust Money to Buyer. If Buyer fails to provide said notice, then this  
 288      contingency shall be deemed to have been waived by Buyer.
- 289      □ **E. Well Test.** This Agreement is contingent upon the well water serving the Property passing testing for suitability  
 290      for drinking as performed by a testing laboratory selected by Buyer, or required by Buyer's Lender, prior to Closing.  
 291      Buyer shall be responsible for ordering, supervising and paying for any such well water sample test. This Agreement  
 292      shall also be contingent upon said well providing an adequate quantity of water to serve Buyer's intended purpose  
 293      for the Property. In consideration of Buyer, having conducted a well test as provided for herein, the sufficiency of  
 294      such consideration being hereby acknowledged, Buyer may provide written notification to Seller and/or Seller's  
 295      Broker within \_\_\_\_\_ days after the Binding Agreement Date that test results are unacceptable, and in such event this  
 296      Agreement shall automatically terminate, and Holder shall promptly refund the Earnest Money/Trust Money to Buyer.  
 297      If Buyer fails to provide said notice, then this contingency shall be deemed to have been waived by Buyer.
- 298      ✕ **F. Other Inspections.** See Special Stipulations for additional inspections required by Buyer.
- 299      □ **G. No Inspection Contingencies.** Buyer accepts the Property in its present condition. All parties acknowledge  
 300      and agree that the Property is being sold "AS IS" with any and all faults.
- 301      7. **Final Inspection.** Buyer and/or Buyer's inspectors/representatives shall have the right to conduct a final inspection of  
 302      Property on the Closing Date or within 1 day(s) prior to Closing Date only to confirm Property is in the same or better

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- 303 condition as it was on the Binding Agreement Date, normal wear and tear excepted, and to determine that all  
 304 repairs/replacements have been completed. Property shall remain in such condition until the Closing Date at Seller's  
 305 expense. Closing of this sale constitutes acceptance of Property in its condition as of the time of Closing, unless otherwise  
 306 noted in writing.
- 307 **8. Buyer's Additional Due Diligence Options.** If any of the matters below are of concern to Buyer, Buyer should address  
 308 the concern by specific contingency in the Special Stipulations section of this Agreement.
- 309 **A. Survey and Flood Certification.** Survey Work and Flood Certifications are the best means of identifying boundary  
 310 lines and/or encroachments and easements or flood zone classifications. Buyer may obtain a survey, closing loan  
 311 survey or Boundary Line Survey and Flood Zone Certifications.
- 312 **B. Insurability.** Many different issues can affect the insurability and the rates of insurance for property. These include  
 313 factors such as changes in the Flood Zone Certifications, changes to the earthquake zones maps, the insurability of the  
 314 buyer, and previous claims made on the Property. It is the right and responsibility of Buyer to determine the  
 315 insurability, coverage and the cost of insuring the Property. It is also the responsibility of Buyer to determine whether  
 316 any exclusions shall apply to the insurability of said Property.
- 317 **C. Water Supply.** The system may or may not meet state and local requirements. It is the right and responsibility of  
 318 Buyer to determine the compliance of the system with state and local requirements. [For additional information on  
 319 this subject, request the "Water Supply and Waste Disposal Notification" form.]
- 320 **D. Waste Disposal.** The system may or may not meet state and local requirements. It is the right and responsibility of  
 321 Buyer to determine the compliance of the system with state and local requirements. In addition, Buyer may, for a fee,  
 322 obtain a septic system inspection letter from the Tennessee Department of Environment and Conservation, Division  
 323 of Ground Water Protection. [For additional information on this subject, request the "Water Supply and Waste  
 324 Disposal Notification" form.]
- 325 **E. Title Exceptions.** At Closing, the general warranty deed shall be subject to subdivision and/or condominium  
 326 declarations, covenants, restrictions and easements of record, which may impose obligations and may limit the use of  
 327 the Property by Buyer, including the property being part of a Planned Unit Development (PUD). There may also be  
 328 fees and assessments connected with these exceptions.
- 329 **F. Toxic/Foreign Substances.** Testing (including but not limited to a Phase 1 study) may be performed to determine the  
 330 presence of radon or other potentially toxic substances. Buyer may wish to inquire or have the property inspected  
 331 for underground tanks, tires, appliances, garbage, foreign and/or unnatural materials, asbestos, polychlorinated  
 332 biphenyl (PCB's), ureaformaldehyde, methane gas, radioactive material, or methamphetamine production.
- 333 **G. Land Issues.** Buyer may be interested in learning more about the presence of any fill, mine shaft, well, diseased or  
 334 dead trees or private or non-dedicated roadways on the Property as well as any sliding, settling, earth movement,  
 335 upheaval or earth stability problems detected through inspections or evaluations previously performed on property or  
 336 to be performed.
- 337 **H. Rights and Licenses.** Certain Property may contain mineral, oil and timber rights which may or may not transfer with  
 338 the Property. It is possible licenses or usage permits were granted for crops, mineral, water, grazing, timber, hunting  
 339 or fishing, including a Crop Rotation Program. Buyers should consult their closing agency for questions regarding any  
 340 leases which may be in the chain of title.
- 341 **9. Disclaimer.** It is understood and agreed that the real estate firms and real estate licensee(s) representing or assisting Seller  
 342 and/or Buyer and their brokers (collectively referred to as "Brokers") are not parties to this Agreement and do not have or  
 343 assume liability for the performance or nonperformance of Seller or Buyer. Buyer and Seller agree that Brokers shall not  
 344 be responsible for any of the following, including but not limited to, those matters which could have been revealed through  
 345 a survey, flood certification, title search or inspection of the Property; the insurability of the Property or cost to insure the  
 346 Property; for the condition of the Property, any portion thereof, or any item therein; for building products and construction  
 347 techniques; for any geological issues present on the Property; for any issues arising out of the failure to physically inspect  
 348 the Property prior to entering into this Agreement and/or Closing; for the necessity or cost of any repairs to the Property;  
 349 for hazardous or toxic materials; for the tax or legal consequences of this transaction; for the availability, capability, and/or  
 350 cost of utility, sewer, septic, or community amenities; for any proposed or pending condemnation actions involving the  
 351 Property; for acreage or square footage; for applicable boundaries of school districts or other school information; for the  
 352 appraised or future value of the Property; for any condition(s) existing off the Property which may affect the Property; for  
 353 the terms, conditions, and availability of financing; and for the uses and zoning of the Property whether permitted or  
 354 proposed. Buyer and Seller acknowledge that Brokers are not experts with respect to the above matters and that they have  
 355 not relied upon any advice, representations or statements of Brokers (including their firms and affiliated licensees) and

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356 waive and shall not assert any claims against Brokers (including their firms and affiliated licensees) involving same. Buyer  
 357 and Seller understand that it has been strongly recommended that if any of these or any other matters concerning the  
 358 Property are of concern to them, that they secure the services of appropriately credentialed experts and professionals of  
 359 Buyer's or Seller's choice for the independent expert advice and counsel relative thereto. Buyer and Seller acknowledge  
 360 that photographs, marketing materials, and digital media used in the marketing of the property may continue to remain in  
 361 publication after Closing. Buyer and Seller agree that Brokers shall not be liable for any uses of photographs, marketing  
 362 materials or digital media which the Broker is not in control.

363 **10. Brokerage.** As specified by separate agreement(s), the parties agree and acknowledge that the Brokers involved in this  
 364 transaction may receive compensation for their services; the compensation may come from more than one party. All  
 365 parties to this Agreement agree and acknowledge that any real estate firm involved in this transaction shall be deemed a  
 366 third party beneficiary only for the purposes of enforcing their compensation rights, and as such shall have the right to  
 367 maintain an action on this Agreement for any and all compensations due and any reasonable attorney's fees and court  
 368 costs. **Broker compensation is not set by law and compensation rates are fully negotiable.**

369 **11. Default.** Should Buyer default hereunder, the Earnest Money/Trust Money shall be forfeited as damages to Seller and  
 370 shall be applied as a credit against Seller's damages. Seller may elect to sue, in contract or tort, for additional damages or  
 371 specific performance of the Agreement, or both. Should Seller default, Buyer's Earnest Money/Trust Money shall be  
 372 refunded to Buyer. In addition, Buyer may elect to sue, in contract or tort, for damages or specific performance of this  
 373 Agreement, or both. In the event that any party hereto shall file suit for breach or enforcement of this Agreement (including  
 374 suits filed after Closing which are based on or related to the Agreement), the prevailing party shall be entitled to recover  
 375 all costs of such enforcement, including reasonable attorney's fees. In the event that any party exercises its right to  
 376 terminate due to the default of the other pursuant to the terms of this Agreement, the terminating party retains the right to  
 377 pursue any and all legal rights and remedies against the defaulting party following termination. The parties hereby agree  
 378 that all remedies are fair and equitable and neither party shall assert the lack of mutuality of remedies, rights and/or  
 379 obligations as a defense in the event of a dispute.

380 **12. Non-Assignability.** This Purchase and Sale Agreement shall not be assignable by the Buyer without prior written  
 381 consent by the Seller.

382 **13. Other Provisions.**

383 **A. Binding Effect, Entire Agreement, Modification, Assignment, and Binding Agreement Date.** This Agreement  
 384 shall be for the benefit of, and be binding upon, the parties hereto, their heirs, successors, legal representatives and  
 385 approved assigns. This Agreement constitutes the sole and entire agreement between the parties hereto and no  
 386 modification of this Agreement shall be binding unless signed by all parties or approved assigns to this Agreement.  
 387 No representation, promise, or inducement not included in this Agreement shall be binding upon any party hereto. It  
 388 is hereby agreed by both Buyer and Seller that any real estate agent working with or representing either party shall not  
 389 have the authority to bind the Buyer, Seller, or any assignee to any contractual agreement unless specifically authorized  
 390 in writing within this Agreement. Any approved assignee shall fulfill all the terms and conditions of this Agreement.  
 391 The parties hereby authorize either licensee to insert the time and date of receipt of the notice of acceptance of the  
 392 final offer. The foregoing time and date shall be referred to for convenience as the Binding Agreement Date for  
 393 purposes of establishing performance deadlines.

394 **B. Survival Clause.** Any provision contained herein, which by its nature and effect is required to be performed after  
 395 Closing shall survive the Closing and delivery of the deed, and shall remain binding upon the parties to this Agreement  
 396 and shall be fully enforceable thereafter.

397 **C. Governing Law and Venue.** This Agreement is intended as a contract for the purchase and sale of real property and  
 398 shall be interpreted in accordance with the laws and in the courts of the State of Tennessee.

399 **D. Time of Essence.** Time is of the essence in this Agreement.

400 **E. Terminology.** As the context may require in this Agreement: (1) the singular shall mean the plural and vice versa;  
 401 (2) all pronouns shall mean and include the person, entity, firm or corporation to which they relate; (3) the masculine  
 402 shall mean the feminine and vice versa; and (4) the term day(s) used throughout this Agreement shall be deemed to  
 403 be calendar day(s) ending at 11:59 p.m. local time unless otherwise specified in this Agreement. Local time shall be  
 404 determined by the location of Property. **In the event a performance deadline**, other than the Closing Date (as defined  
 405 herein), Date of Possession (as defined herein), and Offer Expiration Date (as defined in Time Limit of Offer Section),  
 406 occurs on a Saturday, Sunday or legal holiday, the performance deadline shall extend to the next following business  
 407 day. Holidays as used herein are those days deemed federal holidays pursuant to 5 U.S.C. § 6103. In calculating any  
 408 time period under this Agreement, the commencement day shall be the day following the initial date (e.g. Binding  
 409 Agreement Date).

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- 410 **F. Responsibility to Cooperate.** Buyer and Seller agree to timely take such actions and produce, execute, and/or deliver  
 411 such information and documentation as is reasonably necessary to carry out the responsibilities and obligations of this  
 412 Agreement. Except as to matters which are occasioned by clerical errors or omissions or erroneous information, the  
 413 approval of the closing documents by the parties shall constitute their approval of any differences between this  
 414 Agreement and the Closing. Buyer and Seller agree that if requested after Closing, they shall correct any documents  
 415 and pay any amounts due where such corrections or payments are appropriate by reason of mistake, clerical errors or  
 416 omissions, or the result of erroneous information.
- 417 **G. Notices.** Except as otherwise provided herein, all notices and demands required or permitted hereunder shall be in  
 418 writing and delivered either (1) in person; (2) by a prepaid overnight delivery service; (3) by facsimile transmission  
 419 (FAX); (4) by the United States Postal Service, postage prepaid, registered or certified, return receipt requested; or (5)  
 420 Email. **NOTICE** shall be deemed to have been given as of the date and time it is actually received. Receipt of notice  
 421 by the real estate licensee or the Broker assisting a party as a client or customer shall be deemed to be notice to that  
 422 party for all purposes under this Agreement as may be amended, unless otherwise provided in writing.
- 423 **H. Risk of Loss.** The risk of hazard or casualty loss or damage to the Property shall be borne by Seller until transfer of  
 424 title. If casualty loss prior to Closing exceeds 10% of the Purchase Price, Seller or Buyer may elect to terminate this  
 425 Agreement with a refund of Earnest Money/Trust Money to Buyer.
- 426 **I. Equal Housing.** This Property is being sold without regard to race, creed, color, sex, religion, handicap, familial  
 427 status, or national origin.
- 428 **J. Severability.** If any portion or provision of this Agreement is held or adjudicated to be invalid or unenforceable for  
 429 any reason, each such portion or provision shall be severed from the remaining portions or provisions of this  
 430 Agreement, and the remaining portions or provisions shall be unaffected and remain in full force and effect. In the  
 431 event that the contract fails due to the severed provisions, then the offending language shall be amended to be in  
 432 conformity with state and federal law.
- 433 **K. Alternative Dispute Resolution.** In the event the parties elect to utilize Alternative Dispute Resolution,  
 434 incorporate "Resolution of Disputes by Mediation Addendum/Amendment" (RF629).
- 435 **L. Contract Construction.** This Agreement or any uncertainty or ambiguity herein shall not be construed against any  
 436 party but shall be construed as if all parties to this Agreement jointly prepared this Agreement.
- 437 **M. Section Headings.** The Section Headings as used herein are for reference only and shall not be deemed to vary the  
 438 content of this Agreement or limit the scope of any Section.
- 439 **14. Method of Execution.** The parties agree that signatures and initials transmitted by facsimile, other photocopy transmittal,  
 440 or by transmittal of digital signature as defined by the applicable State or Federal law shall be acceptable and may be  
 441 treated as originals and that the final Lot/Land Purchase and Sale Agreement containing all signatures and initials may be  
 442 executed partially by original signature and partially on facsimile, other photocopy documents, or by digital signature as  
 443 defined by the applicable State or Federal law.
- 444 **15. Exhibits and Addenda.** All exhibits and/or addenda attached hereto, listed below, or referenced herein are made a part  
 445 of this Agreement:  
 446  
 447  
 448
- 449 **16. Special Stipulations.** The following Special Stipulations, if conflicting with any preceding section, shall control:  
 450 1. Buyer is unrepresented with no buyer's agent.  
 451 2. Buyer to have a due diligence period of 14 days from Binding Agreement Date.  
 452 3. Offer contingent upon Buyer's findings during Due Diligence Period with City of  
 453 Franklin, TN on major utilities to properties (electric, water, sewer) as well as zoning  
 454 set back  
 455 4. Buyer has first right of refusal to purchase Lot 13, 405 Battle Ave, Franklin, TN.  
 456 Buyer will put Lot 13 under contract for \$575,000 once the lawsuit is resolved and will  
 457 close within 30 days of FSSD getting the property re-zoned to R4 Zoning.  
 458 5. Offer contingent upon approval by the Franklin Special School District's Real Estate  
 459 Committee and Legal Counsel and the final approval by the Board of the Franklin Special  
 460 School District. Board's Meeting date to be determined via Notification Form which could  
 461 affect the proposed closing date. Buyer will be notified by Seller via Notification Form  
 of Board approval.

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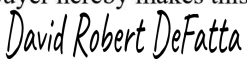

462 17. **Time Limit of Offer.** This Offer may be withdrawn at any time before acceptance with Notice. Offer terminates if not  
463 countered or accepted by 5 o'clock  a.m./  p.m. on the 1st day of November, 2024.

464 **LEGAL DOCUMENTS: This is an important legal document creating valuable rights and obligations. If you have any**  
465 **questions about it, you should review it with your attorney. Neither the Broker nor any Agent or Facilitator is**  
466 **authorized or qualified to give you any advice about the advisability or legal effect of its provisions.**

467 **NOTE: Any provisions of this Agreement which are preceded by a box "☐" must be marked to be a part of this**  
468 **Agreement. Any blank herein that is not otherwise completed shall be deemed to be zero or not applicable.**

469 **WIRE FRAUD WARNING: Never trust wiring instructions sent via email. Cyber criminals are hacking email accounts**  
470 **and sending emails with fake wiring instructions. These emails are convincing and sophisticated. Always independently**  
471 **confirm wiring instructions in person or via a telephone call to a trusted and verified phone number. Never wire money**  
472 **without double-checking that the wiring instructions are correct. NEVER ACCEPT WIRING INSTRUCTIONS FROM**  
473 **YOUR AGENT OR BROKER.**

475 **BY AFFIXING YOUR SIGNATURE BELOW, YOU ACKNOWLEDGE THAT YOU HAVE REVIEWED AND**  
476 **UNDERSTAND ALL TERMS OF THIS AGREEMENT.**

477	Buyer hereby makes this offer.		
478			10/23/24
479	<b>BUYER</b> David Robert DeFatta Partner	<b>BUYER</b> Joseph DeFatta Partner	
480	10/23/24 at 8:29 AM o'clock <input type="checkbox"/> am/ <input type="checkbox"/> pm	10/23/24 at 8:31 AM o'clock <input type="checkbox"/> am/ <input type="checkbox"/> pm	
481	<b>Offer Date</b>	<b>Offer Date</b>	

482 Seller hereby:

483  **ACCEPTS** – accepts this offer.

484  **COUNTERS** – accepts this offer subject to the attached Counter Offer(s).

485  **REJECTS** – rejects this offer and makes no counter offer.

486	<b>SELLER</b> David L. Snowden	<b>SELLER</b> Director of Schools
487		
488	_____ at _____ o'clock <input type="checkbox"/> am/ <input type="checkbox"/> pm	_____ at _____ o'clock <input type="checkbox"/> am/ <input type="checkbox"/> pm
489	<b>Date</b>	<b>Date</b>

490 **Acknowledgement of Receipt.** \_\_\_\_\_ hereby acknowledges receipt of the final accepted offer  
491 on \_\_\_\_\_ at \_\_\_\_\_ o'clock  am/  pm, and this shall be referred to as the Binding Agreement Date for  
492 purposes of establishing performance deadlines as set forth in the Agreement.

**For Information Purposes Only:**

Listing Company: <u>Crye-Leike/Magli Realty</u>	Selling Company: <u>Crye-Leike/Magli Realty</u>
Listing Firm Address: <u>206A Cool Springs Blvd Franklin TN</u>	Selling Firm Address: <u>206A Cool Springs Blvd Franklin TN</u>
Firm License No.: <u>00216697/9351</u>	Firm License No.: <u>00216697/9351</u>
Firm Telephone No.: <u>615-771-6620/7949220</u>	Firm Telephone No.: <u>615-771-6620/7949220</u>
Listing Licensee: <u>Joyce Friedman/Tom Magli</u>	Selling Licensee: <u>Joyce Friedman/Tom Magli</u>
Licensee License Number: <u>TN 322945/9351</u>	Licensee License Number: <u>TN 322945/9351</u>
Licensee Email: <u>joyce@joycefriedmanproperties.com</u>	Licensee Email: <u>joyce@joycefriedmanproperties.com</u>
Licensee Cellphone No.: <u>615-714-1666/7949220</u>	Licensee Cellphone No.: <u>615-714-1666/7949220</u>

Home Owner's / Condominium Association ("HOA/COA") / Property Management Company: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

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# CRYE-LEIKE, REALTORS®

## CONFIRMATION OF AGENCY STATUS

Every real estate licensee is required to disclose licensee's agency status in a real estate transaction to any buyer or seller who is not represented by an agent and with whom the Licensee is working directly in the transaction. The purpose of this Confirmation of Agency Status is to acknowledge that this disclosure occurred. Copies of this confirmation must be provided to any signatory thereof. As used below, "Seller" includes sellers and landlords; "Buyer" includes buyers and tenants. Notice is hereby given that the agency status of this Licensee (or Licensee's company) is as follows in this transaction:

The real estate transaction involving the property located at:

319 & 401 & 403 Battle Ave

Franklin

TN 37064

### PROPERTY ADDRESS

**SELLER NAME:** Franklin Special School District  
**LICENSEE NAME:** Joyce Friedman/Tom Magli

**BUYER NAME:** DeFatta Custom Homes  
**LICENSEE NAME:**

in this consumer's current or prospective transaction is serving as:

- Transaction Broker or Facilitator. (not an agent for either party).
- Seller is Unrepresented.
- Agent for the Seller.
- Designated Agent for the Seller.
- Disclosed Dual Agent (for both parties), with the consent of both the Buyer and the Seller in this transaction.

in this consumer's current or prospective transaction is serving as:

- Transaction Broker or Facilitator. (not an agent for either party).
- Buyer is Unrepresented.
- Agent for the Buyer.
- Designated Agent for the Buyer.
- Disclosed Dual Agent (for both parties), with the consent of both the Buyer and the Seller in this transaction.

This form was delivered in writing, as prescribed by law, to any unrepresented buyer prior to the preparation of any offer to purchase, OR to any unrepresented seller prior to presentation of an offer to purchase; OR (if the Licensee is listing a property without an agency agreement) prior to execution of that listing agreement. This document also serves as confirmation that the Licensee's Agency or Transaction Broker status was communicated orally before any real estate services were provided and also serves as a statement acknowledging that the buyer or seller, as applicable, was informed that any complaints alleging a violation or violations of Tenn. Code Ann. § 62-13-312 must be filed within the applicable statute of limitations for such violation set out in Tenn. Code Ann. § 62-13-313(e) with the Tennessee Real Estate Commission, 710 James Robertson Parkway, 3<sup>rd</sup> Floor, Nashville, TN 37232, PH: (615) 741-2273. This notice by itself, however, does not constitute an agency agreement or establish any agency relationship.

### **BROKER COMPENSATION IS NOT SET BY LAW AND COMPENSATION RATES ARE FULLY NEGOTIABLE.**

By signing below, parties acknowledge receipt of Confirmation of Agency relationship disclosure by Realtor® acting as Agent/Broker OR other status of Seller/Landlord and/or Buyer/Tenant pursuant to the National Association of Realtors® Code of Ethics and Standards of Practice.

Seller Signature David L Snowden Date \_\_\_\_\_

Buyer Signature David Robert DeFatta Date 10/23/24

Seller Signature Joyce Friedman Date \_\_\_\_\_  
Selling Licensee Tom Magli Date \_\_\_\_\_

Buyer Signature Joseph DeFatta Date 10/23/24

Buyer Signature Buyer Unrepresented Date 10/23/24

Listing Licensee Joyce Friedman/Tom Magli Date 10/22/24

Selling Licensee Buyer Unrepresented Date 10/23/24

Listing Company Crye-Leike/ Magli Realty

Selling Company Buyer Unrepresented

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# CRYE-LEIKE, REALTORS®

## WORKING WITH A REAL ESTATE PROFESSIONAL

**Pursuant to the Tennessee Real Estate Broker License Act, every Real Estate Licensee owes the following duties to every Buyer and Seller, Tenant and Landlord (collectively “Buyers” and “Sellers”):**

1. To diligently exercise reasonable skill and care in providing services to all parties to the transaction;
2. To disclose to each party to the transaction any Adverse Facts of which Licensee has actual notice or knowledge;
3. To maintain for each party in a transaction the confidentiality of any information obtained by a Licensee prior to disclosure to all parties of a written agency agreement entered into by the Licensee to represent either or both parties in the transaction. This duty of confidentiality extends to any information which the party would reasonably expect to be held in confidence, except for any information required by law to be disclosed. This duty survives both the subsequent establishment of an agency relationship and the closing of the transaction;
4. To provide services to each party to the transaction with honesty and good faith;
5. To disclose to each party to the transaction timely and accurate information regarding market conditions that might affect such transaction only when such information is available through public records and when such information is requested by a party;
6. To give timely account for earnest money deposits and all other property received from any party to a transaction; and
7. A) To refrain from engaging in self-dealing or acting on behalf of Licensee’s immediate family, or on behalf of any other individual, organization or business entity in which Licensee has a personal interest without prior disclosure of such personal interest and the timely written consent of all parties to the transaction; and  
 B) To refrain from recommending to any party to the transaction the use of services of another individual, organization or business entity in which the Licensee has an interest or from whom the Licensee may receive a referral fee or other compensation for the referral, other than referrals to other Licensees to provide real estate services, without timely disclosure to the party who receives the referral, the Licensee’s interest in such a referral or the fact that a referral fee may be received.

**In addition to the above, the Licensee has the following duties to Client if the Licensee has become an Agent or Designated Agent in a transaction:**

8. Obey all lawful instructions of the client when such instructions are within the scope of the agency agreement between the Licensee and Licensee’s client;
9. Be loyal to the interests of the client. Licensee must place the interests of the client before all others in negotiation of a transaction and in other activities, except where such loyalty/duty would violate Licensee’s duties to a customer in the transaction; and
10. Unless the following duties are specifically and individually waived in writing by a client, Licensee shall assist the client by:
  - A) Scheduling all property showings on behalf of the client;
  - B) Receiving all offers and counter offers and forwarding them promptly to the client;
  - C) Answering any questions that the client may have in negotiation of a successful purchase agreement within the scope of the Licensee’s expertise; and
  - D) Advising the client as to whatever forms, procedures and steps are needed after execution of the purchase agreement for a successful closing of the transaction.

Upon waiver of any of the above duties contained in 10. above, a consumer must be advised in writing by such consumer’s agent that the consumer may not expect or seek assistance from any other licensees in the transaction for the performance of said duties.

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41 **Responsibilities of Sellers and Buyers regarding presence of Recording Devices:**

42 Seller is responsible for compliance with state or federal law regarding usage of video or audio recording devices  
43 while marketing or showing the property. Seller should seek legal advice regarding their rights or limitations related  
44 to their actions.

45 Buyer is advised of the possibility that some properties may utilize security devices that record physical movements  
46 or audio conversations. Therefore, Buyers should limit making comments concerning the value, features, or condition  
47 while viewing any property.

**AN EXPLANATION OF TERMS**

48 **Facilitator/Transaction Broker (not an agent for either party).** The Licensee is not working as an agent for either party in  
49 this consumer’s prospective transaction. A Facilitator may advise either or both of the parties to a transaction but cannot be  
50 considered a representative or advocate of either party. “Transaction Broker” may be used synonymously with, or in lieu of,  
51 “Facilitator” as used in any disclosures, forms or agreements. [By law, any licensee or company who has not entered into a  
52 written agency agreement with either party in the transaction is considered a Facilitator or Transaction Broker until such time  
53 as an agency agreement is established.]

54 **Agent for the Seller.** The Licensee’s company is working as an agent for the property seller and owes primary loyalty to the  
55 seller. Even if the Licensee is working with a prospective buyer to locate property for sale, rent, or lease, the Licensee and  
56 licensee’s company are legally bound to work in the best interests of any property owners whose property is shown to this  
57 prospective buyer. An agency relationship of this type cannot, by law, be established without a written agency agreement.

58 **Agent for the Buyer.** The Licensee’s company is working as an agent for the prospective buyer, owes primary loyalty to the  
59 buyer, and shall work as an advocate for the best interests of the buyer. An agency relationship of this type cannot, by law, be  
60 established without a written buyer agency agreement.







61 **Disclosed Dual Agent (for both parties).** Refers to a situation in which the Licensee has agreements to provide services as  
62 an agent to more than one party in a specific transaction and in which the interests of such parties are adverse. This agency  
63 status may only be employed upon full disclosure to each party and with each party’s informed consent.

64 **Designated Agent for the Seller.** The individual Licensee that has been assigned by the Managing Broker and is working as  
65 an agent for the Seller or property owner in this consumer’s prospective transaction, to the exclusion of all other licensees in  
66 licensee’s company. Even if someone else in the Licensee’s company represents a possible buyer for this Seller’s property, the  
67 Designated Agent for the Seller shall continue to work as an advocate for the best interests of the Seller or property owner. An  
68 agency relationship of this type cannot, by law, be established without a written agency agreement.

69 **Designated Agent for the Buyer.** The individual Licensee that has been assigned by the Managing Broker and is working as  
70 an agent for the Buyer in this consumer’s prospective transaction, to the exclusion of all other licensees in the company. Even  
71 if someone else in the Licensee’s company represents a seller in whose property the Buyer is interested, the Designated Agent  
72 for the Buyer shall continue to work as an advocate for the best interests of the Buyer. An agency relationship of this type  
73 cannot, by law, be established without a written agency agreement.

74 **Adverse Facts.** “Adverse Facts” means conditions or occurrences generally recognized by competent licensees that have a  
75 negative impact on the value of the real estate, significantly reduce the structural integrity of improvements to real property or  
76 present a significant health risk to occupants of the property.

77 **Confidentiality.** By law, every licensee is obligated to protect some information as confidential. This includes any information  
78 revealed by a consumer which may be helpful to the other party IF it was revealed by the consumer BEFORE the Licensee  
79 disclosed an agency relationship with that other party. AFTER the Licensee discloses that licensee has an agency relationship  
80 with another party, any such information which the consumer THEN reveals must be passed on by the Licensee to that other  
81 party.

<p>82  10/23/24</p> <hr/> <p>83 <input checked="" type="checkbox"/> BUYER / <input type="checkbox"/> SELLER  Date</p> <p>84 <b>Buyer Unrepresented</b>  10/23/24</p> <hr/> <p>85 Real Estate Licensee <b>Buyer Unrepresented</b> Date</p>	<p>82  10/23/24</p> <hr/> <p>83 <input checked="" type="checkbox"/> BUYER / <input type="checkbox"/> SELLER  Date</p> <p>84 <b>Buyer Unrepresented</b>  10/23/24</p> <hr/> <p>85 Real Estate Company <b>Buyer Unrepresented</b> Date</p>
--	--

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**LEASE AGREEMENT  
COF Contract No. 2024-0315**

**THIS LEASE AGREEMENT** made and entered into as of the \_\_\_\_ day of \_\_\_\_\_, 2024, by and between **FRANKLIN SPECIAL SCHOOL DISTRICT**, or assigns (referred to as “Landlord”), and **THE CITY OF FRANKLIN, TENNESSEE** (referred to as “Tenant”);

**W I T N E S S E T H:**

1. **Premises:** Landlord hereby leases Premises to Tenant, and Tenant leases and accepts, certain Premises located at 507 New Highway 96 West, Franklin, Tennessee 37064, more particularly described on Exhibit A, attached hereto and made a part hereof (the “Premises” or the “Demised Premises”) , together with such furniture, fixtures and equipment as may be in the Premises on the Commencement Date, hereinafter defined. Tenant has inspected the Premises and accepts the Premises “AS IS.” Tenant hereby acknowledges that Landlord has made no representations regarding the compliance of the Premises with any applicable codes and ordinances.

2. **Term:** The original term of this Lease shall be for a period of two-years (twenty-four (24) months) (the “Base Term”) with an additional month-by-month option for an additional one-year (twelve (12) months) from the Commencement Date. The City is expected to occupy the Premises through June 30, 2027, according to the development schedule. The Base Term is expected to commence on or about February 1, 2025, following the Landlord relocating their administrative office operations in their new building located on Eddy Lane and, having vacated the Premises. Said “Commencement Date” of the Lease Agreement shall be at the sole discretion of the Landlord.

3. **Minimum Rent:** Beginning on the Commencement Date, Tenant shall pay to the Landlord as Minimum Rent the amounts specified in the Rent Addendum attached hereto and made a part hereof, without notice, set-off or demand.

4. **Real Estate Taxes, Insurance Premiums and Maintenance Expenses:** Beginning on the Commencement Date, Tenant shall be responsible for the real estate taxes (if any), insurance premiums, and maintenance expenses incurred in connection with the occupancy and operation of the Premises as specifically set forth herein.

The term “real estate taxes” shall mean all taxes and assessments (special or otherwise) levied, accrued or assessed during Tenant’s occupancy against the Premises (land, buildings and improvements). Tenant shall pay real estate taxes on or before that date which is sixty (60) days after receipt of the tax invoices from Landlord, but in all events on or before that date upon which the taxes would be delinquent.

In addition to Tenant's share of real estate taxes, Tenant shall pay any and all sales, excise, gross receipts, and other taxes (not including, however, Landlord's income taxes) levied, imposed, accrued or assessed against Tenant and Tenant’s business during Tenant’s occupancy, if any.

The term "insurance premiums" shall mean the premiums charged for fire and extended coverage insurance, for rent insurance, and for premiums charged for liability insurance on the Premises as more fully described in Paragraph 11 hereof.

The term "maintenance expenses" shall mean the total cost and expense incurred in operating, maintaining, cleaning, and repairing the Premises including, without limitation, landscaping, maintenance, repair and replacement of the lighting, sanitary control, removal of snow, trash, rubbish and garbage, and maintenance, repair and replacement of the heating, ventilation and air conditioning system ("HVAC"), roof, parking lots and drive aisles, electrical and plumbing systems.

5. **Tenant's Use and Operation:** The Demised Premises shall be used and occupied by Tenant solely as municipal offices and related incidental uses, and for no other use whatsoever without Landlord's prior written consent, which may be withheld in Landlord's sole discretion. Tenant shall comply with all rules, regulations, and laws of any governmental authority with respect to use and occupancy of the Premises.

Tenant shall not suffer, allow, or permit any vibration, noise, light, noxious odor or other negative effect to emanate from the Premises that would be considered a nuisance. Tenant shall not use or occupy the Premises or do or permit anything to be done which shall prevent Landlord from obtaining at standard rates any insurance required or desired. Smoking is not permitted on the Demised Premises.

6. **Utilities:** Tenant shall pay promptly, as and when the same shall become due and payable, all charges for electricity, gas, heat, water and sewer, air conditioning, ventilating, lighting systems, sprinkling systems, internet, and other utilities supplying the Premises. Tenant shall not be allowed access to the Premises until all utilities are transferred to the Tenant, in Tenant's name.

7. **Signs:** Tenant shall not place on any exterior door, wall, or window of the Premises any sign or advertising matter without first obtaining Landlord's written approval and consent, which may be withheld in Landlord's commercially reasonable discretion. Tenant agrees to maintain such signs or advertising matter as approved by Landlord in good condition and repair. All signs shall comply with applicable ordinances or other governmental restrictions and the determination of such requirements, and the prompt compliance therewith, shall be the responsibility of the Tenant.

8. **Tenant's Duty to Repair; Alterations:** Except for the obligation of the Landlord to maintain the buildings mechanical systems and the building envelope in good working order and weathertight for the duration of this Lease Agreement, the Tenant shall keep and maintain the Premises in good order, clean and sanitary condition, and repair inclusive of yard and landscaping. The Tenant shall not make any alteration to or of, or addition or improvement to, the Premises, nor permanently affix any materials to the walls or floors, without securing the Landlord's prior written consent, which may be withheld in Landlord's sole discretion. Tenant shall save Landlord harmless on account of claims for mechanics', materialmen or other liens in connection with any work by Tenant, and any such liens shall exist only against Tenant's leasehold interest and shall be discharged, by bond or otherwise, within thirty (30) days after filing. Tenant shall keep and maintain the Premises in accordance with all directions, rules, and regulations of the proper officials of the

government agencies having jurisdiction, at the sole cost and expense of Tenant, and Tenant shall comply with all requirements of law, by statute, ordinance or otherwise, affecting the Premises and all appurtenances thereto.

9. **Surrender of Premises:** At the termination of the Base Term, or any renewal term thereof, the Tenant does agree to deliver the Premises in the same condition as at the Commencement Date (subject to the removals hereinafter required), reasonable wear and tear excepted, and shall surrender all keys for the Premises to Landlord at the place then fixed for the payment of Minimum Rent and shall inform Landlord of all combination locks, safes and vaults, if any, in the Premises. Tenant, during the last thirty (30) days of such term, shall remove all its trade fixtures, and, to the extent required by Landlord by written notice, any other installations, alterations, or improvements, before surrendering the Premises as aforesaid and shall repair any damage to the Premises caused by removal of such items. Tenant's obligation to observe or perform this covenant shall survive the expiration or other termination of the lease term. Any items remaining in the Premises on the termination date of this Lease shall be deemed abandoned for all purposes and shall become the property of Landlord and the latter may dispose of the same without liability of any type or nature.

10. **Landlord's Duty to Repair:** The Landlord shall maintain the Premises in good tenable condition and shall be responsible for the repairs not due to the fault or negligence of the Tenant. Any fixtures or appliances provided "as is" need not be maintained by the Landlord.

11. **Insurance:** Without limiting its liability under this Lease Agreement, Tenant shall procure and maintain at its expense during the life of the Lease Agreement insurance of the types and in the minimum amounts stated as follows:

- (I) Commercial General Liability Coverage
- \$1,000,000 Each Occurrence
- \$2,000,000 General Aggregate
- \$1,000,000 Personal and Advertising Injury
- \$2,000,000 Products-Completed Operations Aggregate
- \$500,000 Damage to Rented Premises (each occurrence)
- \$5,000 Medical Expense (any one person)

Certificate of Insurance shall include the Franklin Special School District, its board, and its employees as Additional Insured with the attachment of the Additional Insured Endorsement. Coverage shall indicate that this coverage applies on a Primary and Noncontributory Basis.

Worker Compensation Statutory Limits

Certificate of Insurance shall include Franklin Special School District as a Certificate Holder for proof of insurance coverage.

- Employers Liability
- \$1,000,000 Bodily Injury Each Accident

\$1,000,000 Policy Limit Bodily Injury by Disease  
\$1,000,000 Each Employee Bodily Injury by Disease

Certificate of Insurance shall include Franklin Special School District as a Certificate Holder for proof of insurance coverage.

Umbrella or Excess Liability  
\$1,000,000 Each Occurrence and \$1,000,000 Aggregate

Certificate of Insurance shall include Franklin Special School District, its board, and its employees as Additional Insured.

Property  
\$1,360,000 Building Coverage and \$98,639 Contents Coverage with Replacement Cost and Special Cause of Loss Form, including Earthquake, Flood, and Equipment Breakdown coverage.

Property Certificate of Insurance shall include Franklin Special School District as Loss Payee.

Tenant agrees to provide a Waiver of Subrogation on the General Liability, Umbrella, Workers Compensation, and Employers Liability provided by the tenant's insurance company within these policies. Tenant shall furnish a copy of the Property and Liability Certificates of Insurance to Landlord upon occupancy and annually thereafter. Tenant's insurance coverage will be written by an insurance company licensed to do business in the State of Tennessee with an AM Best rating of A- or better and that is satisfactory to Landlord. All Tenant insurance outlined in this section shall have a 30 day Notice of Cancellation or Alteration clause within the insurance policies and evidenced by the insurance company on the Certificate of Insurance.

12. **Damage or Destruction by Fire or Other Casualty:** If at any time, the Premises become totally untenantable by reason of damage or loss by fire or other casualty and such fire or other casualty shall not have been caused by the negligence or wrongful act or omission of Tenant, Tenant's servants, agents, licensees, or invitees, the rent shall abate until the Premises shall have been restored to tenantable condition, but nothing herein is to be construed as requiring Landlord to restore or rebuild the Premises. If the Premises are so damaged, but not to the extent that they are totally untenantable, Tenant shall continue to occupy same or the tenantable portion thereof, and the rent shall abate proportionately in the ratio that the unusable portion bears to the entire Premises. In the event of a loss from fire or other casualty, Landlord shall have an election not to rebuild or recondition the Premises, which election shall be exercised by written notice thereof to Tenant, given within sixty (60) days from date of said loss. If Landlord exercises such election, this Lease shall cease and terminate, effective on the date of such loss, and Tenant shall pay the accrued Minimum Rent up to the date of such loss, or Landlord, if the Minimum Rent has been paid beyond such date, will refund to Tenant the proportionate part of any such Minimum Rent prepaid, and thereupon this Lease shall become null and void, with no further obligation on the part of either party hereto, even though the building may at a later date be rebuilt, restored or reconditioned. No damage or

destruction shall allow Tenant to surrender possession of the Premises, nor affect Tenant's liability for the payment of Minimum Rent, except as specifically provided in this Lease.

13. **Tenant Assignment and Subletting:** Neither Tenant nor any court or officer thereof nor any receiver or trustee in bankruptcy shall assign or transfer this Lease or any part thereof, or interest therein, or sublet the Premises or any part thereof without Landlord's prior written consent, which may be withheld in Landlord's sole discretion. Tenant shall always remain liable for any default of any assignee, transferee, or subtenant.

14. **Default and Remedies:**

(i) **Events of Default.** The occurrence of any of the following shall be an Event of Default:

a. Failure by Tenant to pay in full any Minimum Rent payment or other sum payable hereunder within three (3) days of the due date;

b. Failure by Tenant to perform any of the terms or conditions of this Lease, other than the payment of money, for a period of thirty (30) days after notice thereof to Tenant by Landlord; provided, however, if Tenant is diligently pursuing a cure, Tenant shall have forty-five (45) days after notice to cure;

c. The insolvency of Tenant or the filing by Tenant of a voluntary petition in bankruptcy or for any other relief under the Bankruptcy Act, as amended, or under any other insolvency act, law, rule or regulation, state or federal, now or hereafter existing; the application by Tenant for, or the appointment with Tenant's consent or acquiescence of, a receiver or trustee of Tenant, or for all or a substantial part of the property of Tenant; the making by Tenant of any general assignment for the benefit of creditors of Tenant; or the inability of Tenant, or the admission of Tenant of the inability thereof, to pay the debts of Tenant as such mature;

d. The filing of any involuntary petition against Tenant in bankruptcy or for any other relief under the Bankruptcy Act, as amended, or under any other insolvency act, law, rule or regulation, state or federal, now or hereafter existing; the involuntary appointment of a receiver or trustee of Tenant or for all or for a substantial part of the property of Tenant; or the issuance of attachment, execution or other similar process against any substantial part of the property of Tenant, and the continuation of any of the foregoing for a period of forty-five (45) days undismissed, unbonded, or undischarged; or

e. The abandonment of the Premises as a going business by Tenant for any period exceeding twenty-one (21) consecutive days, regardless of whether Tenant continues to pay all rent.

(ii) **Remedies.** Whenever any Event of Default shall have occurred, Landlord may, to the extent permitted by law, take any one or more of the following remedial steps.

a. Landlord may, at its option, declare all installments of Minimum Rent for

the remainder of this Lease to be immediately due and payable, whereupon the same shall become immediately due and payable.

b. Landlord may re-enter and take possession of the Premises without terminating this Lease, and sublease the Premises for the account of Tenant, holding Tenant liable for the difference in the rent and other amounts actually paid by the sublessee and the rents and other amounts payable by Tenant hereunder.

c. Landlord may terminate this Lease, exclude Tenant from possession of the Premises and lease the same to another, holding Tenant liable for all rent and other amounts payable by Tenant hereunder.

d. Landlord may take whatever action is available to Landlord at law or in equity, and in connection with such actions, recover any and all damages to Landlord for Tenant's violation or breach of this Lease.

No remedy herein conferred upon or reserved to Landlord is intended to be exclusive of any other available remedy or remedies, but each and every such remedy shall be cumulative, and shall be in addition to every other remedy given under this Agreement or now or hereafter existing at law or in equity or by statute. No delay or omission by Landlord to exercise any right or power accruing upon any default of Tenant shall impair any such right or power or shall be construed to be a waiver thereof, but any such right and power may be exercised by Landlord at any time, from time to time and as often as may be deemed expedient. In order to entitle Landlord to exercise any remedy reserved to it hereunder, it shall not be necessary to give any notice, other than such notice as is expressly required by this Agreement.

15. **Condemnation:** If a portion of the Demised Premises shall be taken, as herein provided, for public improvements or otherwise, under the exercise of the right of eminent domain and the Premises shall continue to be reasonably suitable for the use which is herein authorized, then the Minimum Rent herein provided shall be reduced from the date of such taking in direct proportion to the reduction of the Premises.

If the real estate hereby leased, or a part thereof sufficient to render the Demised Premises substantially unfit for the use herein authorized, shall be condemned or acquired by grant or otherwise, for the widening of streets or for other public improvements, or shall otherwise be taken in the exercise of the right of eminent domain, Tenant shall have the right, at Tenant's option, to terminate and cancel this Lease on thirty (30) days prior written notice to Landlord, such notice to be given within sixty (60) days of the date of the taking and Tenant shall be liable only for rents and other charges accrued and earned to the date of surrender of possession of the Premises to Landlord and for the performance of other obligations maturing prior to said date.

Tenant shall not be entitled to participate in or receive any part of the damages or award which may be paid to or awarded Landlord by reason of a taking except where said award shall provide for moving or other reimbursable expenses for the Tenant under applicable statute.

16. **Landlord's Right of Entry:** Landlord shall provide Tenant with at least one (1) key to all existing exterior locks of the Premises. Additional keys shall be provided at Tenant's cost. In the event Tenant changes the exterior locks to the Premises at any time during the Base Term and/or any Option Terms, Tenant shall provide Landlord with a working key. Landlord reserves the right at all reasonable times during the term of this Lease for Landlord or Landlord's agents, upon notice to Tenant, to enter the Premises for the purpose of inspecting and examining the same, and to show the same to prospective purchasers or tenants, and to make such repairs, alterations, improvements, or additions as Landlord may deem necessary or desirable, it being acknowledged that Landlord has no obligation to make any repairs. During the term of this Lease or any renewal term, Landlord may exhibit the Premises to prospective tenants or purchasers, and place upon the Premises the usual notices advertising the Premises for sale or lease, as the case may be, which notices Tenant shall permit to remain thereon without molestation. Tenant acknowledges and agrees that Landlord shall have the absolute right to sell the Premises during the term of this Lease, subject to the rights of Tenant to remain in occupancy until this Lease is terminated pursuant to the terms hereof.

17. **Quiet Enjoyment:** Landlord agrees that, if the Minimum Rent is being paid in the manner and at the time prescribed and the covenants and obligations of the Tenant are being all and singularly kept, fulfilled and performed, Tenant shall lawfully and peaceably have, hold, possess, use and occupy and enjoy the Premises so long as this Lease remains in force, without hindrance, disturbance or molestation from Landlord, subject to the specific provisions of this Lease.

18. **Subordination and Attornment:** Tenant hereby subordinates all of its right, title, and interest in and under this Lease to the lien of any mortgage or mortgages, or the lien resulting from any other method of financing or refinancing, now or hereafter in force against the real estate and/or buildings of which the Demised Premises are a part. In the event of a foreclosure under any mortgage or deed of trust affecting the Premises or the building in which the Premises are located, or in the event of the termination of Landlord's interest or the eviction of Tenant under any ground or other underlying lease, the holder of the Note secured by any mortgage or deed of trust encumbering the Premises, or the purchaser at any foreclosure sale, shall have the option to recognize this Lease, in which event this Lease shall continue in full force and effect. In the event of any sale pursuant to any power of sale granted under any mortgage or deed of trust encumbering the Premises, or conveyance of title to the Premises by deed in lieu of foreclosure, the Tenant will attorn to the purchaser of the Premises and its successors and assigns.

19. **Notices:** All notices required or permitted by the terms of this Lease must be in writing addressed to Tenant at the Premises, and addressed to Landlord at:

Franklin Special School District  
205 Eddy Lane  
Franklin, TN 37064

or to such other address as a party may from time to time designate by notice in writing to the other party. Any notice shall be in writing and shall be (i) personally delivered or (ii) sent by overnight courier service or (iii) mailed by first class, registered or certified mail, return receipt requested, postage prepaid. Any such notice, request, consent, or other communication shall be deemed received at such time as it is personally delivered by acknowledged hand or courier delivery

or on the third business day after it is mailed, as the case may be.

20. **Successors:** The provisions, covenants and conditions of this Lease shall bind and inure to the benefit of the legal representatives, successors and assigns of each of the parties, except that no assignment or subletting by Tenant without the prior written consent of Landlord shall vest any right in the assignee or sublessee of Tenant. Landlord may withhold its consent to an assignment in Landlord's sole discretion. Tenant shall attorn to any successor to Landlord.

21. **Governing Law:** This Lease shall be governed by, and construed in accordance with, the laws of the State of Tennessee.

22. **Landlord's Exculpatory Clause:** It is specifically understood and agreed that there shall be no personal liability of Landlord in respect to any of the covenants, conditions, or provisions of this Lease. In the event of a breach or default by Landlord of any of its obligations under this Lease, Tenant shall look solely to any right of offset allowed by law against any amounts due hereunder or to the equity of the Landlord in the Premises for the satisfaction of Tenant's remedies, it being understood and agreed that the exculpation of Landlord (and its successors and assigns) shall be absolute.

23. **Entire and Binding Agreement:** This Lease (sometimes referred to herein as this "Agreement") contains all of the agreements between the parties hereto, and it may not be modified in any manner other than by agreement signed by all parties hereto or their successors in interest. The Tenant hereby covenants and agrees not to disclose or discuss with any third party the provisions, covenants, and conditions of this Lease without the prior written consent of the Landlord. In the event Tenant violates this covenant, Landlord reserves the right to either (i) terminate this Lease, or (ii) revoke any rental or other concessions granted hereunder.

24. **Addenda:** The three (3) addenda attached hereto are made a part of this Lease for all purposes.

25. **Documentation:** Tenant does covenant and agree to execute and deliver to Landlord within ten (10) business days from date of request such supplemental documents, including estoppel certificates and financial statements in reasonable form, as may be requested by Landlord. Any such documents may be relied upon by any prospective purchaser or prospective tenant of the Premises, or any lender or prospective lender of the Landlord, or any assignee or prospective assignee of any lender thereof. If Tenant fails or refuses to furnish such documents within the time provided, it will be conclusively presumed that this Lease is in full force and effect in accordance with its terms and the Landlord is not in default.

26. **Re-execution; Acknowledgment:** Tenant agrees that it will, on request of Landlord, re-execute this Lease if necessary to observe any legal formalities (e.g., acknowledgment) required under the laws of the state where the Premises are located.

27. **Late Payments:** If Tenant fails to pay, when due, any sum payable hereunder, interest will accrue from the date such payment is due at the interest rate generally announced in the Wall Street Journal, or similar publication, as the prime rate, plus two (2%) percent, and such interest

together with a late charge of One Hundred Dollars (\$100) to cover the extra expense involved in handling such delinquency (not as a penalty) shall be paid by Tenant to Landlord at the time of payment of the delinquent sum. If there is no term such as prime rate utilized in the Wall Street Journal, or similar publication, then the rate most nearly similar to such shall be utilized.

28. **Provisions Severable:** If any term or provision of this lease or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this lease, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby and each term and provision of this Lease shall be valid and be enforced to the fullest extent permitted by law.

29. **Hazardous Substances:** Tenant shall not generate, store, treat, dispose of, install or otherwise permit any hazardous substances on, in, or under or in any way related to the Premises, or any other portion of the Shopping Center or cause or permit any such generation, storage, treatment, disposal, installation or other use with respect thereto. Tenant shall fully indemnify and hold Landlord harmless from any liability, damage, cost or expense that Landlord might otherwise suffer from Tenant's failure to fully comply with this provision. This indemnity shall survive expiration or other termination of this Lease. "Hazardous Substances" means and includes any of the substances, materials, elements or compounds that are contained in the list of hazardous substances adopted by the United States Congress or the Environmental Protection Agency or any substances, materials, elements or compounds affected by any other federal, state, or local statute, law, ordinance, code, rule, regulation, order or decree now or at any time hereafter in effect, regulating, relating to , or imposing liability or standards of conduct concerning any hazardous, toxic, dangerous, restricted or otherwise regulated waste, substance or material.

IN WITNESS WHEREOF, the parties hereto have executed this Lease as of the day and date first above written.

LANDLORD:

FRANKLIN SPECIAL SCHOOL DISTRICT

By: \_\_\_\_\_


Title: \_\_\_\_\_

Date: \_\_\_\_\_

TENANT:


THE CITY OF FRANKLIN, TENNESSEE

Attest:

Signed by:  
  
By: \_\_\_\_\_  
35908BE720AA461...  
Angie Skarp  
City Recorder

DocuSigned by:  
  
By: \_\_\_\_\_  
B00EBEC7437F46C...  
Dr Ken Moore  
Mayor

Approved as to form by:

DocuSigned by:  
  
\_\_\_\_\_  
5865D136BCE64E0  
Shauna R. Billingsley  
City Attorney

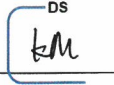


**RENT ADDENDUM (FIXED ESCALATION)**

Commencing on the Commencement Date, the Tenant shall pay the annual rental payment hereunder as follows for Lease Year 1 and again for Lease Year 2 with the Year 1 payment being prior to the Commencement Date and Year 2 one year later. Subsequent payments shall be made monthly thereafter in advance of the first (1<sup>st</sup>) day of the month. Rental is based on thirty (\$32.50) dollars/square foot and the building size is 7776 square feet.:

	<b>Rental per month</b>	<b>Annual Rent</b>
Lease Year 1		\$252,720.00
Lease Year 2		\$257,774.40
Months 25-30	\$21,910.82	\$262,929.89

Together with the payment of Minimum Rent, pursuant to the terms of the Lease to which this Rent Addendum is attached and made a part of as if fully incorporated therein, Tenant shall pay any rental tax, gross receipts tax, or any charge imposed upon Landlord based solely on the receipt or collection of rent. All Minimum Rent shall be paid in advance on the first (1st) day of each month at the address specified for notices to Landlord, such rent to be paid without notice, set-off, or demand.

Landlord \_\_\_\_\_ Tenant  
Initials \_\_\_\_\_ 

### SECURITY DEPOSIT ADDENDUM

As security for the prompt and punctual performance of all obligations required to be performed hereunder by Tenant, the Tenant has deposited with the Landlord the sum of Twenty-Five Thousand Dollars (\$25,000.00), which shall, as provided below, either be applied to rent or held as a security deposit until the expiration of the term. If Tenant is in default under this Lease more than two (2) times within any twelve-month period, irrespective of whether or not such default is cured, then, without limiting Landlord's other rights and remedies provided for in this Lease or at law or in equity, the Security Deposit shall automatically be increased by an amount equal to the greater of: (i) three (3) times the original Security Deposit; or (ii) three (3) months' Minimum Rent, which shall be paid by Tenant forthwith on demand. In the event of any default hereunder by Tenant, Landlord may utilize such deposit to offset either in whole or in part any obligations of the Tenant hereunder. The covenants in the Security Deposit Addendum are personal covenants between Landlord and Tenant and are not covenants running with the land, and in no event will Landlord's mortgagee or any purchaser at a foreclosure sale or a sale in lieu of foreclosure be liable to the Tenant for the return of the security deposit. Tenant shall not assign or encumber the security deposit or its interest therein, and neither Landlord nor its successors and assigns shall be bound by any attempted assignment or encumbrance. Landlord shall not be required to segregate such funds.

Landlord \_\_\_\_\_ Tenant LM  
Initials \_\_\_\_\_

**OPTION TERMS, PARKING, AND RIGHT TO TERMINATE ADDENDUM**

1. **Option Term:** Provided Tenant has not been in default beyond the applicable cure period in the Base Term, Tenant shall have the option to extend the term of this Lease on a month-to-month basis, upon written notice to Landlord of not less than ninety (90) days before the expiration of the Base Term. Tenant may not renew this Lease for more than a total of twelve (12) months. All of the terms of this Lease shall remain the same in the event the month-to-month option to renew is exercised. Notwithstanding anything herein to the contrary, at any time after the end of the Base Term of two and one-half years, Landlord may terminate this Lease on a thirty (30) days' prior written notice to Tenant.

Landlord \_\_\_\_\_ Tenant km  
Initials \_\_\_\_\_

# Tools & Features Demonstration Site

COF CONTRACT NO. 2024-0315  
EXHIBIT A



Legend	
	Parcels
	Parcel Numbers
	Parcel Acreage
	Subdivision Name
	Parcel Dimensions
	Lot Numbers
	Lot Acreage
	Group Corner Annotation
	Control Map
	Notes
	Miscellaneous
	Easement
	Exemptions
	Conflicts
	Lines
	Corporate Limits
	BRENTWOOD
	FAIRVIEW
	FRANKLIN
	NOLENSVILLE
	SPRING HILL
	THOMPSONS STATION
	Parks
	Centerlines
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	INTERSTATE

Notes

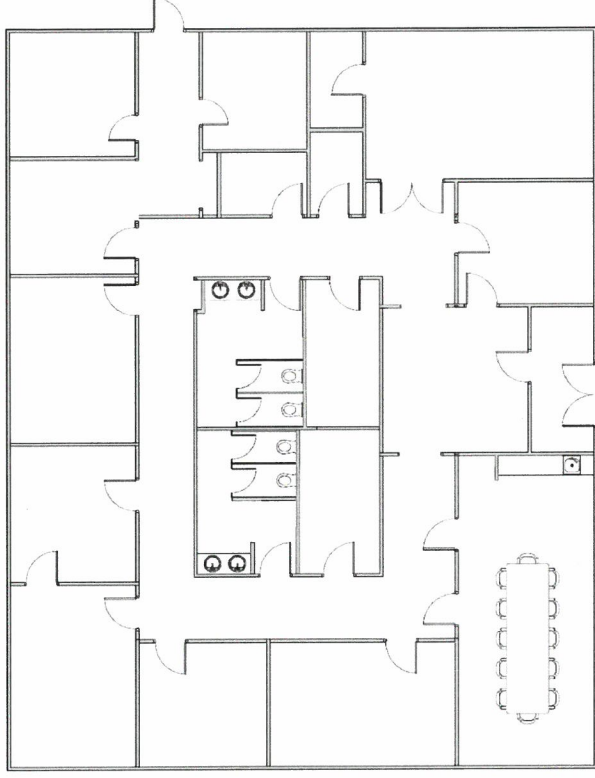
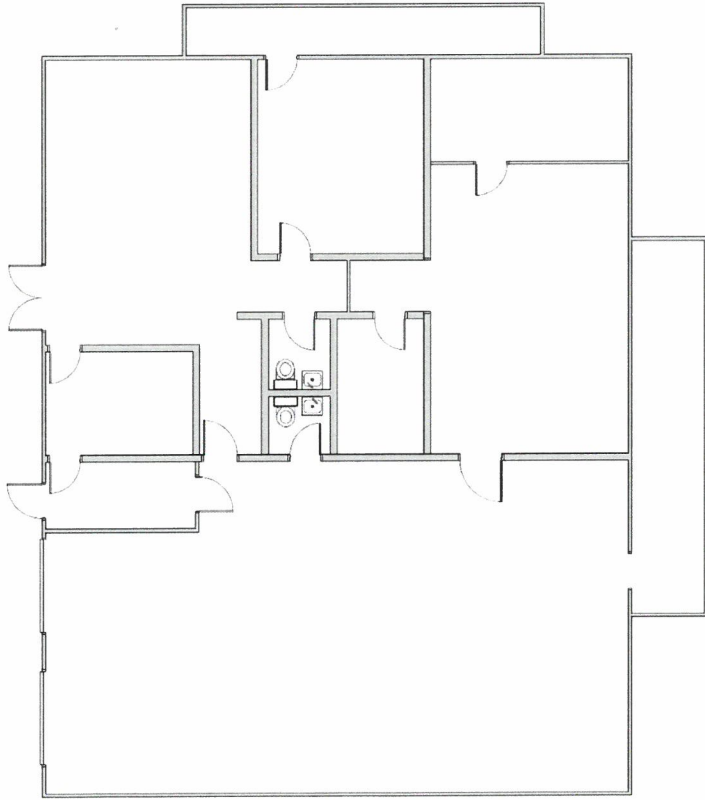
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This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.  
THIS MAP IS NOT TO BE USED FOR NAVIGATION

0.0 0.02 0.0 Miles

NAD\_1983\_StatePlane\_Tennessee\_FIPS\_4100\_Feet  
© Latitude Geographics Group Ltd.





## FSSD Central Office

507 New Highway 96 West  
Franklin, Tennessee 37064



	FES					JES					LES					MES					PGES			
	Female	Male	Teachers	Avg		Female	Male	Teachers	Avg		Female	Male	Teachers	Avg		Female	Male	Teachers	Avg		Female	Male	Teachers	Avg
Pre-Kindergarten (P3)	0	2	2	1.0		1	8	2	4.5		0	3	1	3.0		0	4	1	4.0		0	2	1	0
Pre-Kindergarten (P4)	12	13	1	25.0		7	14	1	21.0		9	11	1	20.0		14	8	1	22.0		10	13	1	23
Kindergarten	26	25	3	17.0		22	26	3	16.0		30	43	4	18.3		48	40	5	17.6		29	29	4	14.5
Pre-First			0	0.0				0	0.0				0	0.0				0	0.0				0	0
Grade 1	24	25	3	16.3		35	25	3	20.0		38	47	5	17.0		41	50	5	18.2		26	30	4	14
Grade 2	45	35	4	20.0		28	23	3	17.0		47	40	5	17.4		52	48	6	16.7		28	34	4	15.5
Grade 3	22	40	4	15.5		28	22	3	16.7		39	37	4	19.0		41	40	4	20.3		31	34	4	16.25
Grade 4	25	27	3	17.3		27	22	3	16.3		53	41	5	18.8		44	49	5	18.6		31	33	3	21.3333
Total Students	154	167		321		148	140		288		216	222		438		240	239		479		155	175		330
American Indian	0		0%			2		1%			2		0%			2		0%			1		0%	
Asian	10		3%			32		12%			22		5%			45		10%			10		3%	
Black or African American	40		14%			68		26%			38		9%			43		9%			24		8%	
Hispanic or Latino	31		11%			73		28%			125		30%			105		23%			131		43%	
Native Hawaiian-Pacific Islander	0		0%			1		0%			0		0%			1		0%			0		0%	
White	213		72%			82		32%			228		55%			257		57%			139		46%	
TOTAL WITHOUT PRE-K	294					258					415					453					305			
	FIS					FMS					Grade					PGMS								
	Female	Male	Teachers	Avg		Female	Male	Teachers	Avg		Grade	Average Size		Female	Male	Teachers	Avg							
Grade 5	120	136	12	21.3							K-3	17.2		28	41	2	34.5							
Grade 6	109	129	12	19.8							4-6	20.9		35	45	4	20							
Grade 7						128	126	12	21.2		7-8	20.8		48	33	4	20.25							
Grade 8						124	133	12	21.4					39	42	4	20.25							
Total Students	229	265		494		252	259		511					150	161		311							
American Indian	4		1%			4		1%		FSSD Demographics - 11/07/2024								3		1%				
Asian	31		6%			18		4%										10		3%				
Black or African American	61		12%			80		16%										24		8%				
Hispanic or Latino	120		24%			149		29%										125		40%				
Native Hawaiian-Pacific Islander	1		0%			2		0%										0		0%				
White	277		56%			258		50%										149		48%				
TOTAL WITHOUT PRE-K	494					511																	311	
TOTAL WITHOUT PRE-K	3041	TOTAL WITH PRE-K			3172	TOTAL PRE-K			131															

FRANKLIN SPECIAL SCHOOL DISTRICT  
Investment Report  
September 30, 2024

Local Government Investment Pool
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Interest Rate for August 5.15%

General Investment Account	
Beginning Balance	\$ 9,306,273.85
Interest	27,991.74
Withdrawals	(3,800,000.00)
Deposits	
Total Invested	\$ 5,534,265.59

Debt Service Investment Account	
Beginning Balance	\$ 1,008,983.50
Interest	4,270.90
Withdrawals	
Deposits	
Total Invested	\$ 1,013,254.40

Capital Projects Investment Account	
Beginning Balance	\$ 2.93
Interest	0.01
Withdrawals	-
Deposits	-
Total Invested	\$ 2.94

Construction Investment Account	
Beginning Balance	\$ 18,132,325.02
Interest	72,031.13
Withdrawals	(1,783,746.00)
Deposits	
Total Invested	\$ 16,420,610.15

FRANKLIN SPECIAL SCHOOL DISTRICT  
Investment Report  
September 30, 2024

First Tennessee Bank
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General Purpose Checking	
Beginning Balance	\$ 996,719.45
Receipts	2,547,921.88
Receipts - Loan from First Horizon (Tax Anticipation)	
Payment of Loan fr Debt Svc.	
Interest	6,178.16
Transfer from LGIP	3,800,000.00
Transfer to LGIP	
Pmt of Tax Anticipation Loan to First Horizon	
RePmt Loan to Debt Svc.	
RePmt of Loan to Capt Svc.	
Disbursements	(5,811,367.47)
Ending Balance	\$ 1,539,452.02
Debt Service Checking	
Beginning Balance	\$ 450,421.45
Receipts	
Receipts - Loan Payment fr Capital	
From Capital Reimb	
Interest	1,256.96
Transfer from Investments	
Transfer to Investments	
Loan to Capital	
Disbursements	
Ending Balance	\$ 451,678.41
Capital Projects Checking	
Beginning Balance	\$ 296,625.98
Receipts	59,007.55
Interest	862.01
Transf Exp from Capital Svc	
Transfer to Deb Loan payment	
Reimb to GP-Exp	
Disbursements	(17,039.19)
Ending Balance	\$ 339,456.35
Construction Checking	
Beginning Balance	\$ 210,088.08
Interest	1,798.79
Transfer fr LGIP	1,826,624.73
Transfer to LGIP	
Transf fr GP (Refund-COF)	
Transf to Capital	
Disbursements	(1,805,947.46)
Ending Balance	\$ 232,564.14

Fnd T Acct	Obj Prj Loc Prg Acct	2024-25	2024-25	2024-25	October 2024-25	2024-25	Uncollected
		Original Budget	Budget Revisions	Revised Budget	Monthly Activity	FYTD Activity	Balance
141	General Purpose						
141 R 40110	--- --- --- --- Current Year Property Tax	13,080,737.00	0.00	13,080,737.00	57,779.73	57,779.73	13,022,957.27
141 R 40115	--- --- --- --- Discount on Property Taxes	0.00	0.00	0.00	0.00	0.00	0.00
141 R 40120	--- --- --- --- Trustee's Collections Prior Ye	80,000.00	0.00	80,000.00	4,310.65	14,541.05	65,458.95
141 R 40130	--- --- --- --- Circuit Clerk/C&m-Prior Year	35,000.00	0.00	35,000.00	5,113.75	11,298.98	23,701.02
141 R 40140	--- --- --- --- Interest & Penalty	25,000.00	0.00	25,000.00	477.15	-330.33	25,330.33
141 R 40161	--- --- --- --- Payments In Lieu Of Taxes-Tva	0.00	0.00	0.00	0.00	0.00	0.00
141 R 40163	--- --- --- --- Payments In Lieu Of Taxes-Othe	80,000.00	0.00	80,000.00	0.00	120.55	79,879.45
141 R 40210	--- --- --- --- Local Option Sales Tax	7,900,000.00	0.00	7,900,000.00	684,030.57	2,035,187.00	5,864,813.00
141 R 40275	--- --- --- --- Mixed Drink Tax (ST)	175,000.00	0.00	175,000.00	28,081.76	46,624.29	128,375.71
141 R 40350	--- --- --- --- Interstate Telecomm Tax	0.00	0.00	0.00	0.00	0.00	0.00
141 R 40610	--- --- --- --- Current Year Property Tax	23,548,564.00	0.00	23,548,564.00	39,584.44	39,584.44	23,508,979.56
141 R 40620	--- --- --- --- Prior Year Property Tax	120,000.00	0.00	120,000.00	5,539.77	7,982.00	112,018.00
141 R 40630	--- --- --- --- Interest & Penalty	32,000.00	0.00	32,000.00	585.05	4,513.95	27,486.05
141 R 40640	--- --- --- --- Pick-Up Taxes	75,000.00	0.00	75,000.00	4,274.45	12,330.92	62,669.08
141 R 41110	--- --- --- --- Licenses & Permits	500.00	0.00	500.00	66.13	128.55	371.45
141 R 43511	--- --- --- --- Tuition-Regular Day Students	115,000.00	0.00	115,000.00	0.00	93,245.00	21,755.00
141 R 43513	--- --- --- --- Tuition-YSI	169,683.00	0.00	169,683.00	0.00	0.00	169,683.00
141 R 43517	--- --- --- --- Tuition-Other	45,000.00	0.00	45,000.00	0.00	38,480.00	6,520.00
141 R 43570	--- --- --- --- Receipts From Individual Schoo	25,000.00	0.00	25,000.00	2,299.33	2,387.08	22,612.92
141 R 43990	--- --- --- --- Other Charges For Services	0.00	0.00	0.00	0.00	0.00	0.00
141 R 44110	--- --- --- --- Interest Earned	500,000.00	0.00	500,000.00	19,254.78	171,572.58	328,427.42
141 R 44120	--- --- --- --- Lease/Rentals	25,000.00	0.00	25,000.00	2,612.50	9,425.00	15,575.00
141 R 44121	--- --- --- --- Event Lease Revenue	125,000.00	0.00	125,000.00	22,287.50	100,162.50	24,837.50
141 R 44122	--- --- --- --- Membership Sales Revenue	0.00	0.00	0.00	0.00	0.00	0.00
141 R 44123	--- --- --- --- Facilities Fee Revenue	4,000.00	0.00	4,000.00	1,800.00	2,600.00	1,400.00
141 R 44124	--- --- --- --- Equipment Rental	0.00	0.00	0.00	0.00	0.00	0.00
141 R 44125	--- --- --- --- Service (Ticket) Fee Revenue	35,000.00	0.00	35,000.00	5,884.00	14,230.00	20,770.00
141 R 44126	--- --- --- --- Service (Facilities) Fee Reven	2,500.00	0.00	2,500.00	1,099.00	1,099.00	1,401.00
141 R 44131	--- --- --- --- Concessions Food	0.00	0.00	0.00	0.00	0.00	0.00
141 R 44132	--- --- --- --- Concessions School Merch/T-Sh	0.00	0.00	0.00	0.00	0.00	0.00
141 R 44133	--- --- --- --- Concessions	0.00	0.00	0.00	0.00	0.00	0.00
141 R 44146	--- --- --- --- E-Rate Funding	25,000.00	0.00	25,000.00	0.00	23,193.71	1,806.29
141 R 44170	--- --- --- --- Miscellaneous Refunds	5,000.00	0.00	5,000.00	0.00	0.00	5,000.00
141 R 44520	--- --- --- --- Insurance Recovery	0.00	0.00	0.00	0.00	0.00	0.00
141 R 44530	--- --- --- --- Sale of Equipment	15,000.00	0.00	15,000.00	17,638.25	20,913.25	-5,913.25
141 R 44540	--- --- --- --- Sale of Property	0.00	0.00	0.00	0.00	0.00	0.00
141 R 44560	--- --- --- --- Damage Recovered from Individu	0.00	0.00	0.00	24.00	324.00	-324.00
141 R 44570	--- --- --- --- Contributions & Gifts	0.00	0.00	0.00	0.00	500.00	-500.00

Fnd T Acct Obj Prj Loc Prg Acct	2024-25	2024-25	2024-25	October 2024-25	2024-25	Uncollected
	Original Budget	Budget Revisions	Revised Budget	Monthly Activity	FYTD Activity	Balance
141	General Purpose					
141 R 44990 --- --- --- --- --- Other Local Revenue	500.00	0.00	500.00	5.94	33.92	466.08
141 R 46510 --- --- --- --- --- TISA	14,374,324.00	0.00	14,374,324.00	1,437,432.42	4,312,297.27	10,062,026.73
141 R 46511 --- --- --- --- --- Basic Education Program	0.00	0.00	0.00	0.00	0.00	0.00
141 R 46513 --- --- --- --- --- TISA On-Behalf Payments	0.00	0.00	0.00	0.00	0.00	0.00
141 R 46515 --- --- --- --- --- Early Childhood Education	307,654.00	0.00	307,654.00	0.00	0.00	307,654.00
141 R 46590 --- --- --- --- --- Other State Education Funds	0.00	0.00	0.00	0.00	0.00	0.00
141 R 46591 --- --- --- --- --- Coordinated School Health	0.00	0.00	0.00	0.00	0.00	0.00
141 R 46592 --- --- --- --- --- Internet Connectivity	0.00	0.00	0.00	0.00	0.00	0.00
141 R 46610 --- --- --- --- --- Career Ladder	40,000.00	0.00	40,000.00	0.00	0.00	40,000.00
141 R 46612 --- --- --- --- --- Extended Contracts	0.00	0.00	0.00	0.00	0.00	0.00
141 R 46790 --- --- --- --- --- Other Vocational	0.00	916,543.67	916,543.67	0.00	0.00	916,543.67
141 R 46850 --- --- --- --- --- Mixed Drink Tax	0.00	0.00	0.00	0.00	0.00	0.00
141 R 46980 --- --- --- --- --- Other State Grants	0.00	0.00	0.00	0.00	0.00	0.00
141 R 46981 --- --- --- --- --- Safe Schools	0.00	0.00	0.00	0.00	0.00	0.00
141 R 46990 --- --- --- --- --- Other State Revenue	0.00	0.00	0.00	0.00	0.00	0.00
141 R 47143 --- --- --- --- --- Ed Of Handicap_IDEA	0.00	0.00	0.00	0.00	0.00	0.00
141 R 47145 --- --- --- --- --- IDEA Preschool	0.00	0.00	0.00	0.00	0.00	0.00
141 R 47304 --- --- --- --- --- Remote Technology Grant	0.00	0.00	0.00	0.00	0.00	0.00
141 R 47590 --- --- --- --- --- Other Federal Through State	0.00	0.00	0.00	2,475.97	5,713.55	-5,713.55
141 R 48130 --- --- --- --- --- CONTRIBUTIONS	0.00	0.00	0.00	0.00	0.00	0.00
141 R 48990 --- --- --- --- --- Other-Citizens Group	65,000.00	0.00	65,000.00	0.00	5,000.00	60,000.00
141 R 49700 --- --- --- --- --- Insurance Recovery	0.00	0.00	0.00	0.00	0.00	0.00
141 R 49800 --- --- --- --- --- Transfers In	40,000.00	0.00	40,000.00	0.00	2,217.97	37,782.03
141 - --- --- --- --- --- General Purpose	61,070,462.00	916,543.67	61,987,005.67	2,342,657.14	7,033,155.96	54,953,849.71

Fnd T Acct Obj Prj Loc Prg Acct	2024-25	2024-25	October 2024-25	2024-25	Encumbered	Unencumbered
	Original Budget	Revised Budget	Monthly Activity	FYTD Activity	Amount	Balance
141	General Purpose					
141 E 11130 --- --- --- --- --- Cash	0.00	0.00	0.00	0.00	0.00	0.00
141 E 71100 --- --- --- --- --- Regular Education Program	29,320,136.00	29,594,500.00	2,345,074.72	6,696,749.88	95,833.01	22,801,917.11
141 E 71150 --- --- --- --- --- Alternative Schools	117,000.00	117,000.00	0.00	55,860.15	0.00	61,139.85
141 E 71200 --- --- --- --- --- Special Education Program	8,136,791.00	8,136,791.00	664,271.51	1,661,552.56	263,130.88	6,212,107.56
141 E 71300 --- --- --- --- --- Vocational Education Program	0.00	364,849.17	2,323.48	18,673.09	10,682.79	335,493.29
141 E 72110 --- --- --- --- --- Attendance	15,700.00	15,700.00	2,596.82	3,096.82	0.00	12,603.18
141 E 72120 --- --- --- --- --- Health Services	855,477.00	855,477.00	72,782.82	186,328.67	1,717.60	667,430.73
141 E 72130 --- --- --- --- --- Other Student Support	1,524,967.00	1,524,967.00	116,756.93	363,958.42	21,021.49	1,139,987.09
141 E 72210 --- --- --- --- --- Regular Instruction Program	3,672,432.00	3,689,762.50	294,894.48	894,525.85	84,196.92	2,711,039.73
141 E 72220 --- --- --- --- --- Special Education Instruction	2,103,890.00	2,103,890.00	153,599.83	455,936.56	89,209.42	1,558,744.02
141 E 72250 --- --- --- --- --- TECHNOLOGY	1,608,276.00	1,808,276.00	162,575.43	682,480.98	8,469.76	1,117,325.26
141 E 72310 --- --- --- --- --- Board Of Education Services	1,563,424.00	1,563,424.00	157,381.49	551,114.02	213,435.32	798,874.66
141 E 72320 --- --- --- --- --- Director of Schools	586,833.00	586,833.00	48,409.59	163,749.30	14,901.65	408,182.05
141 E 72410 --- --- --- --- --- Office Of The Principal	4,153,841.00	4,153,841.00	341,402.37	1,154,443.51	45,939.44	2,953,458.05
141 E 72510 --- --- --- --- --- Fiscal Services	901,838.00	901,838.00	72,165.93	255,458.94	1,869.18	644,509.88
141 E 72520 --- --- --- --- --- Human Resources	438,303.00	438,303.00	34,954.80	121,149.86	11,066.93	306,086.21
141 E 72610 --- --- --- --- --- Operation Of Plant	4,400,859.00	4,400,859.00	345,141.47	1,579,172.50	150,277.74	2,671,408.76
141 E 72620 --- --- --- --- --- Maintenance Of Plant	917,300.00	917,300.00	107,493.00	348,154.34	65,515.91	503,629.75
141 E 72710 --- --- --- --- --- Transportation	2,936,372.00	2,996,372.00	224,147.80	695,842.60	71,503.52	2,229,025.88
141 E 72810 --- --- --- --- --- Central And Other	367,802.00	367,802.00	55,952.99	109,604.44	17,851.22	240,346.34
141 E 73100 --- --- --- --- --- Food Supplies	0.00	0.00	0.00	0.00	0.00	0.00
141 E 73300 --- --- --- --- --- Community Service	187,682.00	187,682.00	3,468.17	8,354.94	4,755.46	174,571.60
141 E 73400 --- --- --- --- --- Early Childhood Education	671,558.00	671,558.00	58,494.99	141,741.72	262.02	529,554.26
141 E 81300 --- --- --- --- --- Education Debt Service	0.00	0.00	0.00	0.00	0.00	0.00
141 E 82130 --- --- --- --- --- Principal	18,688.00	18,688.00	0.00	18,688.00	0.00	0.00
141 E 82230 --- --- --- --- --- Interest	8,014.00	8,014.00	0.00	14.00	0.00	8,000.00
141 E 82330 --- --- --- --- --- Other Debt Service	0.00	0.00	0.00	0.00	0.00	0.00
141 - --- --- --- --- --- General Purpose	64,507,183.00	65,423,726.67	5,263,888.62	16,166,651.15	1,171,640.26	48,085,435.26

Fnd T Acct Obj Prj Loc Prg Acct	2024-25	2024-25	2024-25	October 2024-25	2024-25	Uncollected
	Original Budget	Budget Revisions	Revised Budget	Monthly Activity	FYTD Activity	Balance
142	Federal Programs					
142 R 47141 --- --- --- --- --- Title I Part A	334,249.00	21,002.89	355,251.89	0.00	0.00	355,251.89
142 R 47143 --- --- --- --- --- Ed Of Handicap_IDEA	897,771.00	4,586.38	902,357.38	0.00	0.00	902,357.38
142 R 47145 --- --- --- --- --- IDEA Preschool	26,958.00	0.00	26,958.00	0.00	0.00	26,958.00
142 R 47146 --- --- --- --- --- Title III Part A	46,462.00	5,420.45	51,882.45	0.00	0.00	51,882.45
142 R 47147 --- --- --- --- --- Title IV	26,879.00	-21.69	26,857.31	0.00	0.00	26,857.31
142 R 47149 --- --- --- --- --- Title IX McKinney-Vento	0.00	0.00	0.00	0.00	0.00	0.00
142 R 47189 --- --- --- --- --- Title II Part A	82,409.00	46,568.53	128,977.53	0.00	0.00	128,977.53
142 R 47301 --- --- --- --- --- ESSER Grant	0.00	0.00	0.00	0.00	0.00	0.00
142 R 47303 --- --- --- --- --- LEA Reopening Grant	0.00	0.00	0.00	0.00	0.00	0.00
142 R 47306 --- --- --- --- --- Emergency Loss of Income Grant	0.00	0.00	0.00	0.00	0.00	0.00
142 R 47307 --- --- --- --- --- ESSER 2.0	0.00	0.00	0.00	0.00	0.00	0.00
142 R 47309 --- --- --- --- --- Literacy Training Teacher Stip	0.00	0.00	0.00	0.00	0.00	0.00
142 R 47311 --- --- --- --- --- First To The Top	0.00	0.00	0.00	0.00	0.00	0.00
142 R 47401 --- --- --- --- --- ESSER 3.0	0.00	33,659.70	33,659.70	0.00	0.00	33,659.70
142 R 47402 --- --- --- --- --- ARP IDEA Part B	0.00	0.00	0.00	0.00	0.00	0.00
142 R 47403 --- --- --- --- --- ARP IDEA Preschool	0.00	0.00	0.00	0.00	0.00	0.00
142 R 47404 --- --- --- --- --- ARP Homeless 2.0	0.00	0.00	0.00	0.00	0.00	0.00
142 R 47590 --- --- --- --- --- Other Federal Through State	0.00	0.00	0.00	0.00	0.00	0.00
142 R 47990 --- --- --- --- --- Other Direct Federal Revenue	0.00	0.00	0.00	0.00	0.00	0.00
142 R 49800 --- --- --- --- --- Transfers In	0.00	0.00	0.00	0.00	0.00	0.00
142 - --- --- --- --- --- Federal Programs	1,414,728.00	111,216.26	1,525,944.26	0.00	0.00	1,525,944.26

Fnd T Acct	Obj Prj Loc Prg Acct	2024-25	2024-25	October 2024-25	2024-25	Encumbered	Unencumbered
		Original Budget	Revised Budget	Monthly Activity	FYTD Activity	Amount	Balance
142	Federal Programs						
142 E 71100	--- --- --- Regular Education Program	223,144.00	243,815.17	42,231.93	98,308.21	34,886.77	110,620.19
142 E 71200	--- --- --- Special Education Program	859,294.00	863,880.72	60,919.00	153,297.09	8,931.25	701,652.38
142 E 72110	--- --- --- Attendance	0.00	0.00	0.00	0.00	0.00	0.00
142 E 72120	--- --- --- Health Services	25,000.00	25,000.00	2,049.60	8,198.40	16,801.56	0.04
142 E 72130	--- --- --- Other Student Support	7,867.00	9,389.70	149.96	4,006.59	0.00	5,383.11
142 E 72210	--- --- --- Regular Instruction Program	225,964.00	304,864.12	28,042.36	134,233.47	44,201.53	126,429.12
142 E 72220	--- --- --- Special Education Instruction	0.00	0.00	0.00	0.00	0.00	0.00
142 E 72250	--- --- --- TECHNOLOGY	0.00	0.00	0.00	0.00	0.00	0.00
142 E 72320	--- --- --- Director of Schools	0.00	0.00	0.00	0.00	0.00	0.00
142 E 72410	--- --- --- Office Of The Principal	0.00	0.00	0.00	0.00	0.00	0.00
142 E 72510	--- --- --- Fiscal Services	0.00	0.00	0.00	0.00	0.00	0.00
142 E 72520	--- --- --- Human Resources	0.00	0.00	0.00	0.00	0.00	0.00
142 E 72610	--- --- --- Operation Of Plant	608.00	607.62	0.00	0.00	0.00	607.62
142 E 72620	--- --- --- Maintenance Of Plant	0.00	0.00	0.00	0.00	0.00	0.00
142 E 72710	--- --- --- Transportation	17,415.00	20,835.20	1,829.88	4,195.75	0.00	16,639.45
142 E 73100	--- --- --- Food Supplies	0.00	0.00	0.00	0.00	0.00	0.00
142 E 73300	--- --- --- Community Service	0.00	0.00	0.00	0.00	0.00	0.00
142 E 73400	--- --- --- Early Childhood Education	0.00	0.00	0.00	0.00	0.00	0.00
142 E 76100	--- --- --- Regular Capital Outlay	0.00	0.00	0.00	0.00	0.00	0.00
142 E 99100	--- --- --- Operating Transfer	55,436.00	57,951.73	0.00	2,217.97	0.00	55,733.76
142 -	----- Federal Programs	1,414,728.00	1,526,344.26	135,222.73	404,457.48	104,821.11	1,017,065.67

Fnd T Acct	Obj Prj Loc	Prg Acct	2024-25	2024-25	2024-25	October 2024-25	2024-25	Uncollected
			Original Budget	Budget Revisions	Revised Budget	Monthly Activity	FYTD Activity	Balance
143		Food Service						
143 R 43521	---	---	653,625.00	0.00	653,625.00	62,425.95	184,137.85	469,487.15
143 R 43522	---	---	60,000.00	0.00	60,000.00	5,001.75	15,431.75	44,568.25
143 R 43523	---	---	121,500.00	0.00	121,500.00	11,991.05	34,171.25	87,328.75
143 R 43525	---	---	185,000.00	0.00	185,000.00	23,120.75	71,511.25	113,488.75
143 R 43546	---	---	40,000.00	0.00	40,000.00	4,422.70	11,938.00	28,062.00
143 R 43990	---	---	75,000.00	0.00	75,000.00	6,511.12	19,226.41	55,773.59
143 R 44530	---	---	300.00	0.00	300.00	410.00	410.00	-110.00
143 R 44560	---	---	0.00	0.00	0.00	0.00	0.00	0.00
143 R 44570	---	---	0.00	0.00	0.00	0.00	0.00	0.00
143 R 44990	---	---	0.00	0.00	0.00	2,609.53	7,963.46	-7,963.46
143 R 46520	---	---	16,473.00	0.00	16,473.00	0.00	0.00	16,473.00
143 R 46980	---	---	0.00	0.00	0.00	0.00	0.00	0.00
143 R 47111	---	---	986,125.00	0.00	986,125.00	88,215.03	272,588.67	713,536.33
143 R 47112	---	---	164,868.00	0.00	164,868.00	0.00	0.00	164,868.00
143 R 47113	---	---	306,349.00	0.00	306,349.00	28,614.76	86,955.93	219,393.07
143 R 47114	---	---	140,000.00	0.00	140,000.00	14,577.99	39,820.60	100,179.40
143 R 47115	---	---	0.00	0.00	0.00	0.00	13,695.06	-13,695.06
143 R 47590	---	---	0.00	0.00	0.00	0.00	0.00	0.00
143 -	---	---	2,749,240.00	0.00	2,749,240.00	247,900.63	757,850.23	1,991,389.77

Fnd	T	Acct	Obj	Prj	Loc	Prg	Acct	2024-25	2024-25	October	2024-25	2024-25	Encumbered	Unencumbered
								Original Budget	Revised Budget	Monthly Activity	FYTD Activity	Amount	Balance	
143							Food Service							
143	E	73100	---	---	-----	---	Food Supplies	2,791,184.00	2,791,184.00	251,291.33	726,031.55	752,197.06	1,312,955.39	
143	E	73300	---	---	-----	---	Community Service	0.00	0.00	0.00	0.00	0.00	0.00	
143	-	-----	---	---	-----	---	Food Service	2,791,184.00	2,791,184.00	251,291.33	726,031.55	752,197.06	1,312,955.39	

		2024-25	2024-25	2024-25	October 2024-25	2024-25	Uncollected
		Original Budget	Budget Revisions	Revised Budget	Monthly Activity	FYTD Activity	Balance
146	Community Service (MAC)						
146 R 43581	Community Services Fees	1,626,907.00	0.00	1,626,907.00	106,057.63	407,882.42	1,219,024.58
146 R 43584	Registration Fees-School Year	29,615.00	0.00	29,615.00	595.00	21,670.00	7,945.00
146 R 43585	Registration Fees-Summer	12,125.00	0.00	12,125.00	0.00	0.00	12,125.00
146 R 43990	Other Charges For Services	300.00	0.00	300.00	0.00	3,665.19	-3,365.19
146 R 44120	Lease/Rentals	0.00	0.00	0.00	0.00	0.00	0.00
146 R 44170	Miscellaneous Refunds	47,000.00	0.00	47,000.00	0.00	0.00	47,000.00
146 R 44530	Sale of Equipment	0.00	0.00	0.00	0.00	0.00	0.00
146 R 44570	Contributions & Gifts	0.00	0.00	0.00	0.00	0.00	0.00
146 R 44990	Other Local Revenue	0.00	0.00	0.00	0.00	0.00	0.00
146 R 46590	Other State Education Funds	80,000.00	0.00	80,000.00	0.00	0.00	80,000.00
146 R 47590	Other Federal Through State	0.00	0.00	0.00	0.00	0.00	0.00
146 -	Community Service (MAC)	1,795,947.00	0.00	1,795,947.00	106,652.63	433,217.61	1,362,729.39

Fnd T Acct Obj Prj Loc Prg Acct	2024-25	2024-25	October 2024-25	2024-25	Encumbered	Unencumbered
	<u>Original Budget</u>	<u>Revised Budget</u>	<u>Monthly Activity</u>	<u>FYTD Activity</u>	<u>Amount</u>	<u>Balance</u>
146	Community Service (MAC)					
146 E 73300 --- --- --- --- ---	1,788,487.00	1,788,487.00	166,150.40	528,769.47	14,856.57	1,244,860.96
146 E 99100 --- --- --- --- ---	0.00	0.00	0.00	0.00	0.00	0.00
146 - --- --- --- --- ---	1,788,487.00	1,788,487.00	166,150.40	528,769.47	14,856.57	1,244,860.96

Fnd T Acct Obj Prj Loc Prg Acct	2024-25	2024-25	2024-25	October 2024-25	2024-25	Uncollected
	<u>Original Budget</u>	<u>Budget Revisions</u>	<u>Revised Budget</u>	<u>Monthly Activity</u>	<u>FYTD Activity</u>	<u>Balance</u>
156	Debt Service					
156 R 40610 --- --- --- --- --- Current Year Property Tax	7,861,082.00	0.00	7,861,082.00	13,214.16	13,214.16	7,847,867.84
156 R 40620 --- --- --- --- --- Prior Year Property Tax	45,000.00	0.00	45,000.00	1,849.29	2,320.08	42,679.92
156 R 40630 --- --- --- --- --- Interest & Penalty	10,500.00	0.00	10,500.00	195.30	1,446.27	9,053.73
156 R 40640 --- --- --- --- --- Pick-Up Taxes	25,000.00	0.00	25,000.00	1,426.91	3,989.26	21,010.74
156 R 44110 --- --- --- --- --- Interest Earned	50,000.00	0.00	50,000.00	5,462.07	22,666.76	27,333.24
156 R 44990 --- --- --- --- --- Other Local Revenue	0.00	0.00	0.00	0.00	0.00	0.00
156 R 49800 --- --- --- --- --- Transfers In	0.00	0.00	0.00	0.00	0.00	0.00
156 - --- --- --- --- --- Debt Service	7,991,582.00	0.00	7,991,582.00	22,147.73	43,636.53	7,947,945.47

Fnd T Acct Obj Prj Loc Prg Acct	2024-25	2024-25	October 2024-25	2024-25	Encumbered	Unencumbered
	Original Budget	Revised Budget	Monthly Activity	FYTD Activity	Amount	Balance
156	Debt Service					
156 E 72310 --- --- --- ---	158,476.00	158,476.00	324.80	396.24	0.00	158,079.76
156 E 82130 --- --- --- ---	3,650,000.00	3,650,000.00	0.00	0.00	0.00	3,650,000.00
156 E 82230 --- --- --- ---	4,545,228.00	4,545,228.00	0.00	0.00	0.00	4,545,228.00
156 E 82330 --- --- --- ---	1,500.00	1,500.00	0.00	0.00	0.00	1,500.00
156 - --- --- --- --- ---	8,355,204.00	8,355,204.00	324.80	396.24	0.00	8,354,807.76

Fnd T Acct	Obj Prj Loc Prg Acct	2024-25	2024-25	2024-25	October 2024-25	2024-25	Uncollected
		Original Budget	Budget Revisions	Revised Budget	Monthly Activity	FYTD Activity	Balance
177	Capital Projects						
177 R 40210	--- --- --- --- Local Option Sales Tax	0.00	0.00	0.00	0.00	0.00	0.00
177 R 40390	--- --- --- --- Other Statutory Local Tax	600,000.00	0.00	600,000.00	0.00	113,777.17	486,222.83
177 R 44110	--- --- --- --- Interest Earned	401,500.00	0.00	401,500.00	66,850.33	324,422.26	77,077.74
177 R 44530	--- --- --- --- Sale of Equipment	0.00	0.00	0.00	0.00	0.00	0.00
177 R 44540	--- --- --- --- Sale of Property	8,000,000.00	0.00	8,000,000.00	0.00	0.00	8,000,000.00
177 R 44570	--- --- --- --- Contributions & Gifts	0.00	0.00	0.00	0.00	0.00	0.00
177 R 44990	--- --- --- --- Other Local Revenue	0.00	0.00	0.00	0.00	0.00	0.00
177 R 46530	--- --- --- --- Energy Efficient Schools Grant	0.00	0.00	0.00	0.00	0.00	0.00
177 R 48130	--- --- --- --- CONTRIBUTIONS	0.00	0.00	0.00	0.00	0.00	0.00
177 R 49100	--- --- --- --- Bonds Issued	0.00	0.00	0.00	0.00	0.00	0.00
177 -	----- --- --- --- Capital Projects	9,001,500.00	0.00	9,001,500.00	66,850.33	438,199.43	8,563,300.57

Fnd T Acct	Obj Prj Loc	Prg Acct	2024-25	2024-25	October 2024-25	2024-25	Encumbered	Unencumbered
			<u>Original Budget</u>	<u>Revised Budget</u>	<u>Monthly Activity</u>	<u>FYTD Activity</u>	<u>Amount</u>	<u>Balance</u>
177		Capital Projects						
177 E 81300	---	---	0.00	0.00	0.00	0.00	0.00	0.00
177 E 82130	---	---	0.00	0.00	0.00	0.00	0.00	0.00
177 E 82230	---	---	0.00	0.00	0.00	0.00	0.00	0.00
177 E 82330	---	---	0.00	0.00	0.00	0.00	0.00	0.00
177 E 91300	---	---	16,404,062.00	16,404,062.00	1,749,161.94	7,153,858.64	1,807,293.10	7,442,910.26
177 E 99100	---	---	0.00	0.00	0.00	0.00	0.00	0.00
177 -	---	---	16,404,062.00	16,404,062.00	1,749,161.94	7,153,858.64	1,807,293.10	7,442,910.26

<u>Fnd T Acct</u>	<u>Obj Prj Loc</u>	<u>Prg</u>	<u>Acct</u>	<u>2024-25</u> <u>Original Budget</u>	<u>2024-25</u> <u>Budget Revisions</u>	<u>2024-25</u> <u>Revised Budget</u>	<u>October</u> <u>2024-25</u> <u>Monthly Activity</u>	<u>2024-25</u> <u>FYTD Activity</u>	<u>Uncollected</u> <u>Balance</u>
Grand Revenue Totals				84,023,459.00	1,027,759.93	85,051,218.93	2,786,208.46	8,706,059.76	76,345,159.17

Number of Accounts: 383

\*\*\*\*\* End of report \*\*\*\*\*

<u>Fnd T Acct</u>	<u>Obj Prj Loc</u>	<u>Prg</u>	<u>Acct</u>	<u>2024-25</u> <u>Original Budget</u>	<u>2024-25</u> <u>Revised Budget</u>	<u>October 2024-25</u> <u>Monthly Activity</u>	<u>2024-25</u> <u>FYTD Activity</u>	<u>Encumbered</u> <u>Amount</u>	<u>Unencumbered</u> <u>Balance</u>
Grand Expense Totals				95,260,848.00	96,289,007.93	7,566,039.82	24,980,164.53	3,850,808.10	67,458,035.30

Number of Accounts: 4909

\*\*\*\*\* End of report \*\*\*\*\*

**FRANKLIN SPECIAL SCHOOL DISTRICT**  
**Comparison of Sales Tax Revenue**  
**FY 2023-2024 to FY 2024-2025**

Received	For the	Actual Sales Tax Revenue				Increase (Decrease) FY24-25 from FY23-24		% Chg FY22-23 compared to FY21-22	% Chg FY23-24 compared to FY22-23	% Chg FY24-25 compared to FY23-24	% Chg FY24-25 compared to FY23-24	
		During	Month of	FY21-22	FY22-23	FY23-24	FY24-25	Month-to- Month	Year-to- Date	Month-to- Month	Month-to- Month	Year-to- Date
Aug	May	\$ 596,966	\$ 630,152	\$ 673,793	\$ 684,759	\$ 10,966	\$ 10,966	5.6%	6.9%	1.6%	1.6%	
Sep	June	620,365	620,525	672,365	666,397	\$ (5,968)	\$ 4,998	0.0%	8.4%	-0.9%	0.4%	
Oct	July	619,147	605,780	652,325	684,031	\$ 31,706	\$ 36,704	-2.2%	7.7%	4.9%	1.8%	
Nov	Aug	606,729	586,419	638,368	697,116	\$ 58,748	\$ 95,452	-3.3%	8.9%	9.2%	3.6%	
Dec	Sept	637,185	597,545	645,418	-							
Jan	Oct	634,248	584,861	654,065	-							
Feb	Nov	674,124	616,549	692,106	-							
Mar	Dec	829,679	753,642	852,757	-							
Apr	Jan	581,999	583,357	601,380	-							
<b>ADA Adjustment</b>		<b>(763,167)</b>	<b>287,134</b>	<b>(107,591)</b>	<b>-</b>							
May	Feb	580,125	536,943	592,528	-							
June	March	598,238	649,595	646,884	-							
July	April	603,419	632,614	665,765	-							
<b>Total YTD</b>		<b>\$ 6,819,057</b>	<b>\$ 7,685,116</b>	<b>\$ 7,880,163</b>	<b>\$ 2,732,303</b>	<b>\$ 95,452</b>						
<b>FY 2024-2025 Budgeted Total</b>					<b>\$ 7,900,000</b>							
<b>Actual Over (Under) Budget</b>					<b>\$ (5,167,697)</b>							
<b>% of Budget Received YTD</b>					<b>34.6%</b>							
<b>ADA Adjustment (Sales Tax)</b>												
19-20		-67,495										
20-21		-306,074										
21-22		-763,167										
22-23		287,134										
23-24		-107,591										