

Foothills Regional Commission

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POLK COUNTY CONNECTIVITY REPORT

2025





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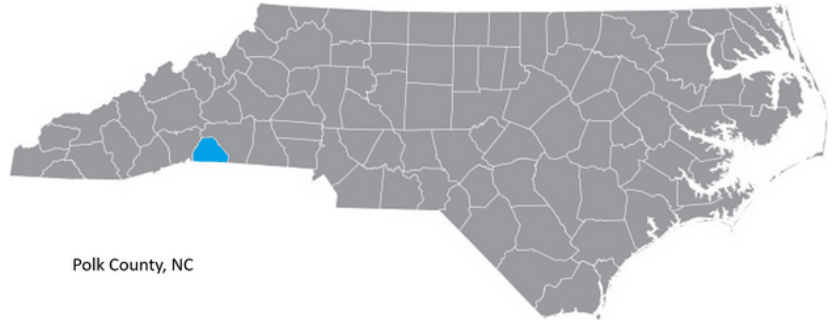
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INTRODUCTION

Polk County is located in the Appalachian Mountains of Western North Carolina and is home to approximately 20,000 people. It has the fourth-highest median age in the state and is experiencing a slow population decline, as many younger residents move to nearby cities. Meanwhile, its retirement population continues to grow, making it one of the fastest-aging counties in North Carolina.

Historically, Polk County relied on agriculture and textiles — similar to its neighbors, Rutherford and Henderson Counties. However, when the textile industry declined, Polk shifted its focus to agriculture, healthcare and related services, and outdoor recreation.

Currently designated as a Tier 2 county, Polk has evolved into both a bedroom community for Asheville and the Greenville-Spartanburg area and a popular retirement destination in Western North Carolina. This has created a notable wealth disparity among retirees, professionals, and local service and tourism workers. Evidence of this gap can be seen in the fact that 60.2% of Polk County Schools students qualify for free or reduced-price lunch, while Polk also has the second-highest average housing price in the state.



Polk County, NC

The outmigration of younger, tech-savvy residents has left Polk County with an aging population and fewer local champions for digital adoption. As a result, digital literacy challenges persist. In 2020, about 20% of residents lacked broadband access, and a significant portion was deemed underserved according to the NC Broadband Survey. Most households pay over \$81 per month for broadband, forcing many to rely solely on cellular devices, public facilities, or simply go without internet service.



OVERVIEW OF HELENE

Polk County and Western North Carolina were struck by Hurricane Helene on September 27, 2024. While most expected strong winds and significant rain, few anticipated the record flooding that occurred. This led to extensive damage in the towns of Saluda and Tryon, at the Green River Game Lands, and to homes, infrastructure, farms, businesses, and more throughout Polk County. The county has mobilized a comprehensive assessment team to fully understand Helene's impacts and guide a coordinated recovery effort, and work is ongoing as recovery measures continue to evolve.

As of December 2024, initial estimates place the total damages in the hundreds of millions of dollars. Most residents were without power for at least seven days and lacked internet access for several weeks. Internet and cellular connectivity issues continue to persist and are expected to remain challenging for the foreseeable future as the infrastructure is gradually restored.

"Most citizens of Polk County were without power for a minimum of seven days, and most were without internet for several weeks."

GEOGRAPHIES & LOCATIONS IMPACTED

Tryon, Saluda, and the stretch along the Green River between these towns were among the areas most severely impacted by Hurricane Helene. This region experienced extensive flooding, infrastructure, and property damage. Saluda, with roughly 650 residents, and Tryon, home to approximately 1,600 people, both suffered significant infrastructure damage with Tryon's recreation facilities particularly hard hit.

Many homes, churches, and businesses were isolated and sustained major damage. Numerous structures were lost to flooding and landslides, and the area remains at high risk for future landslides.

Additionally, the region between Mill Spring and Lake Lure suffered heavily, with several bridges extensively damaged and the Lake Adger Dam experiencing a catastrophic failure that now requires urgent repair. Pre-existing challenges with broadband and cellular access in these communities were further exacerbated by Helene's impacts.

The damage has significantly impacted the outdoor recreation economy on which Polk County relies. Many businesses have closed, parts of the Green River Gorge Outdoor Recreation area remain inaccessible, and entire sections of the Green River are now unsafe.

Beyond these economic setbacks, the county also faced widespread infrastructure damage. Utility poles were destroyed and power lines knocked down, leading to major delays in restoring both power and broadband services. In some areas, broadband remains unavailable, with no established timeline for restoration.

"The damage has significantly impacted the outdoor recreation economy on which Polk County relies."

STRATEGIES TO BUILD RESILIENCE

Polk County aims to build resilience in its infrastructure by implementing several projects as part of the rebuilding efforts. These initiatives are organized into two main areas: Infrastructure and Digital Skills.

Infrastructure improvements will play a major role in enhancing resilience. Hurricane Helene demonstrated that the region's infrastructure was unprepared for a significant weather event. As utility, sewer, and water lines are rebuilt, broadband access and resiliency must be integrated into these networks. Given the extensive work needed to repair, replace, and install new sewer and water lines, there is a valuable opportunity to lay fiber alongside them. This approach also enables the installation of advanced technology to detect leaks, breaks, and other issues, resulting in a more robust fiber, water, and sewer infrastructure that best serves our citizens.

Utility and overhead broadband will continue to be used throughout the county as the primary mode of delivering internet service in Western North Carolina. However, one major issue revealed during this event is that most locations in Polk County have access to only one internet provider. When that single provider experiences prolonged outages, residents and businesses are left without internet access, forcing them to consider relocation, costly alternatives such as satellite internet, or simply go without.

This underscores the importance of offering residents and businesses multiple internet provider options to ensure redundancy and drive competition for better service and pricing.

In addition to network diversity, enhancing digital skills is critical for Polk County. In the aftermath of Helene, the library system stepped up, serving thousands as de facto digital navigators. However, this level of service is unsustainable for the library alone, highlighting the urgent need for a dedicated digital navigator to help residents master technology.

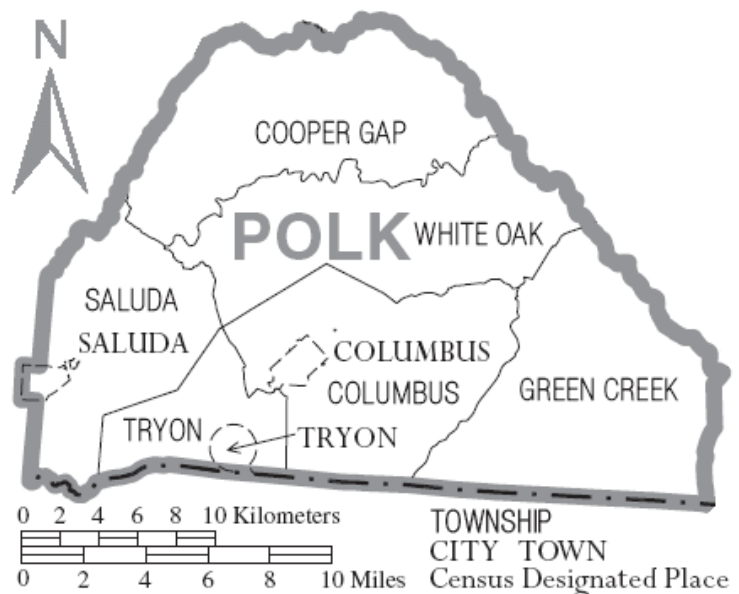
This situation clearly calls for dedicated funding to upskill the community in digital literacy. Polk County faces a significant long-term need to develop digital skills; yet, as a Tier 2 county, securing local funding for these projects is challenging. External funding is essential to expand digital training capacity within local governments, educational institutions, and nonprofits. Ultimately, the most important long-term strategy is to acquire additional resources to bolster local programming and coordinate digital literacy initiatives across institutions.

STRATEGIES TO BUILD RESILIENCE CONT.

Polk County, the most affluent county in the Foothills Region, still experiences a significant income divide. Notably, 19.6% of households in the county lack access to a computer device. However, there is currently no clear strategy to address this issue.

To bridge this gap, there is a strong need for an independent nonprofit organization dedicated to providing affordable device access within the community. Given the county's limited capacity to manage such a program, an independently operated nonprofit would be the most effective solution.

The ideal funding approach would be to provide seed money to establish this nonprofit, ensuring it can effectively serve the community's needs. Alternatively, efforts could focus on expanding access through a partnership with Through the Trees, an organization based in Brevard.



HELENE IMPACT ON DIGITAL LITERACY AND INCLUSION

Hurricane Helene highlighted digital equity challenges in our region. With widespread power and internet outages, people had to rely on overwhelmed cellphone towers for connectivity. This experience has galvanized the community to expand broadband resources and build redundancy.

Digital device access issues have worsened as many residents lost devices to flooding and cannot afford replacements, intensifying the need for affordable technology.

In Polk County, there is a critical need for digital literacy training. The county's library and school systems lack the resources to effectively train residents in using digital devices. Moreover, a significant wealth gap between working-age residents and retirees exacerbates struggles with affordable access. To address these challenges, we propose a regional approach by establishing a centralized hub in the Foothills region. If funded, Rutherford County would serve as an accessible center for Polk County residents to obtain affordable devices and receive digital literacy training.

Even as Polk County mobilizes to restore its critical infrastructure, Hurricane Helene has also underscored the urgent need for comprehensive recovery efforts.



HELENE IMPACT ON INFRASTRUCTURE

Hurricane Helene had a major impact on infrastructure in Polk County. It degraded Lake Adger Dam, washed away roads and bridges, and knocked down electrical and broadband poles, severing vital utility lines. Polk County is guiding reconstruction efforts with a "dig-once" approach designed to save time and money while fostering collaboration with town partners, the Foothills Regional Commission, and local nonprofits. Rebuilding will take years, and substantial funding and cooperation are essential for a full recovery. Hurricane Helene is the most expensive disaster in North Carolina's recorded history and is expected to be the costliest in the United States' history.



ACKNOWLEDGEMENTS

In addition to those involved in the creation of this plan, the following entities have been identified as partners essential to advancing the established goals. This is not an exhaustive list of partners, but an initial cohort of key players.

- Connect Humanity
- Reid Consulting Group
- Breaking Point Solutions



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