

HOMETOWN STRONG

COMMUNITY FOCUSED PARTNERSHIPS

Wilson County, North Carolina

Points of Interest	County Data
Population	81,801
Per Capita Income	\$24,273
Median Household Income	\$42,850
Poverty Rate	21.1%
Minority Population	53.2%
Proximity to Urban Center	45 minutes to Raleigh

Wilson County's community internet, Greenlight, partnered with Wilson Community College and Gig East to kickstart a fiber optics training program. Aiming to educate an emerging workforce as well as demonstrate the county's ability to serve as a fiber optics center, the county developed a 10-week training course and a four-and-a-half-day intensive boot camp.¹ As remote work presents itself as a viable work option, establishing strong fiber optics across the state is becoming increasingly necessary for rural economies to remain competitive. Building on the county's expertise in fiber and tech infrastructure, the training course continues to develop and meet the unique needs of North Carolinians.

Wilson County leverages its unique assets in the tech industry to develop fiber optics trainings. Seeing great success from two initial phases of the program, the county works to expand accessibility and depth of training, hoping to increase opportunities in tech across the region.¹

The Community and Its History

Wilson County was formed on February 14, 1855 from Edgecombe, Nash, Johnston, and Wayne Counties.⁵ The

county seat, also named Wilson, was established prior to the county formation in 1848, along the Raleigh to Wilmington railroad. The town's formation was an effort by state senators Wyatt Moye and Joshua Barnes, both of Edgecombe County, to combine two train stops, Toisnot Depot and Hickory Grove.⁶ The new county of Wilson had accessible routes to both major cities, transforming the area into a viable trading town. Both the county and the town were named after Louis Dicken Wilson, a well-known politician and military officer who died in the Mexican American War. Since its formation, Wilson County has proven to be adaptable yet well rooted in its sense of place and history.⁷

Wilson County provides a varied landscape for its residents. The land is flat and coastal on the eastern half, yet hilly on the western side of the county, closer to the piedmont region of North Carolina. The Contentnea Creek runs through the county, and swampland consumes portions of the region, although there is much less swampland now than there was several decades ago.⁶ This rich natural land created an abundant agricultural industry. While the cotton industry dominated the region for much of the 18th and 19th centuries, the county switched to tobacco around 1890. By 1920, Wilson was known as the "World's Greatest Tobacco Market." Today, the agricultural industry produces \$100 million every year. Even with the immense success of the agricultural industry, Wilson sought to diversify its industry after World War II to ensure



economic longevity.⁶

Wilson County today offers an eclectic mix of activities and industries for its residents. The area is heralded for its pork barbeque, the North Carolina Baseball Museum, and the annual Whirligig Festival centered around folk art. History is preserved in the Lucas-Barnes House, built in 1853 and the James Scarborough House, dating back to 1821.⁵ While the agricultural industry continues to see success, Wilson has also opened its doors to pharmaceutical industries, life science research, and building supply manufacturers.⁴ Wilson is also home to one of the fastest internet companies in the state. The community owned, fiber-to-the-home network created job opportunities, advanced the capabilities of previously existing companies, and continues to serve over 10,800 households.¹ With advanced technology, a deep sense of community engagement, and a dedication to preserving the culture of the region, Wilson County proves itself to be a diverse and forward thinking community.

The Strategy

As North Carolina's first Gigabit city, the town of Wilson is known for its

community owned and operated internet system called Greenlight.¹ Greenlight was established about 15 years ago, after Wilson County was refused faster internet by Time Warner Cable. Internet companies such as Time Warner Cable are unlikely to expand high speed internet in rural communities. Rural regions are less confined and more spread out, posing a financial burden for internet companies. After that refusal, Wilson established its own thriving internet infrastructure, Greenlight Community Broadband. While many states, including North Carolina, have since banned city-run internet due to opposition from large, influential internet companies, NC ensured that Wilson is exempt from these limitations.¹ Wilson County has one of the fastest internet speeds in the state and has secured its reputation as a tech hub. The issue then became the lack of an emerging, well-trained workforce despite a booming infrastructure and ample job opportunities. After the identification of

this potential problem, Greenlight partnered with Wilson Community College and Gig East Exchange to develop the fiber-optics training program. The program's goal was to develop a strong local workforce as well as establish Wilson County as a fiber-optics center in North Carolina.¹

The training program was developed by Greenlight, Wilson Community College and Gig East Exchange, a community space for tech innovators. The first roll out of this program was a 10-week, Fiber Optic Basics pilot course. The course was led by Greenlight employees and companies that manufacture and supply fiber optics materials. While most fiber optics training courses can reach thousands of dollars, Greenlight priced the course at \$140. With the goal of empowering and leveraging the skills required to build a strong, emerging workforce, accessibility was a key concern for the program coordinators. The 10-week program received overwhelmingly positive feedback, leading to discussions on continuing and expanding the program.

The initial 10-week program was at capacity and some participants drove as much as four hours every day to attend.² To decrease travel time and continue to increase accessibility, Greenlight next program was a four and a half day fiber optics "boot camp." The training was eight hours a day, priced at \$145, and yet again the class was at capacity. This shorter course was designed to encourage participants to stay in Wilson for the entirety of the



Wilson's Whirligig Park

boot camp, allowing participants to engage with local hotels, bars, and restaurants. Like the 10-week training, the boot camp pulled participants from all over the state, the farthest driving four and a half hours from Asheville.¹

Topics discussed in the course range from the history of fiber optics to the manufacturing process to understanding the specific electronic processes involved. Despite the intensive nature of the boot camp and the wide range of subjects covered, participants responded with a desire to learn more.² The course provides an overview of the complexities of fiber optics, but moving forward, Wilson County will look into expanding this training. Wilson County's community owned internet system has tapped into a key market as the need for high speed and well-functioning internet continues to expand. Rural communities specifically have a key interest in advancing the capabilities of their internet systems. The program has plans to build on the already existing early college program and create a two-year fiber optics track through the Wilson Academy of Applied Technology's High School.¹ Students would graduate high school with an associate degree in fiber optics, giving Wilson County a well-trained workforce with ample job opportunities, and ensuring that fiber optics expertise can be spread throughout the region and state.

How and Why it Worked

A Community-Owned Internet. The success of Wilson County's fiber optics training program can be attributed to its investment in a community owned internet, Greenlight. The implementation and continued maintenance of Greenlight ensures that fully trained, fiber optics staff as well as strong internet infrastructure are readily available in Wilson County. These resources provided the backbone for the training itself. The program's design and development could be handled by Wilson County and its residents due to this industry specific expertise.

Unique Partnerships. While Greenlight provided the technical, fiber optics expertise, partnerships with Wilson Community College and Gig East ensured the successful development of the 10-week course and the boot camp.¹ Gig East is Wilson County's tech networking and events center. All three groups brought different realms of expertise to the development of the training program. They managed the logistics of in-person instruction, promoted the course through interested communication lines and networks, and provided participants with a high-quality course on fiber optics.

Lessons Learned

The value of hands on training. Throughout both the 10-week course and the boot camp, instructors discovered that hands on fiber optics engagement was well received by

participants whereas classroom instruction was not as well received.¹ Not only did participants enjoy it more, but hands on training allowed for a better understanding of the intricate processes. Moving forward, hands on training could come to be a larger part of the course to increase interest and comprehension.

Interest in internet training programs. With a lack of strong broadband and poor internet access presenting itself as a pressing issue, especially across rural communities, the need for these technical trainings is as important as ever. Both the 10-week course and the boot camp were full of hardworking students who traveled across the state to access this opportunity. There is no shortage of individuals and groups who want to learn about how to increase internet accessibility for their communities. Many participants even expressed interest in further learning, demonstrating the need for even more technical and specialized coursework.

Endnotes

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