

Capstone Project
Tennessee Certified Economic Developer
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***The Impact of Connectivity
on Small, Rural Communities***

Outline

Introduction: Access to high-speed internet can change the economic thread of a small, rural community and is a crucial tool in economic, community and workforce development. As we work to recruit high-paying, high-skill jobs to Tennessee, high-speed internet access is critical. The rural city of Henderson, located in Chester County, Tennessee, since 2015, has had access to one gigabit fiber, however, fiber optic internet is available to just 7% of Chester County residents, and only 26% of residents in Chester County have access to fixed wireless internet service. The city of Henderson has had economic and community development successes since their gig fiber installation, but there is more work to be done to connect those outside the city limits and in the extreme rural areas “out in the county.” As the economic development team in Chester County works to recruit new business, support entrepreneurs, help existing businesses expand, and educate our workforce, one of the main priorities must be high-speed internet. For Henderson and Chester County to continue to move in a positive direction they need to consider becoming a Broadband Ready Community, a State of Tennessee led initiative. They must also collaborate with the local electrical cooperative, continue communication with state legislature representatives, and work with local providers to make installing high-speed internet in the community uncomplicated.

Body:

1. Background

- a. *Info on community and organization:* Henderson is located in Southwestern Tennessee and is the seat of Chester County. Henderson is located 85 miles northeast of Memphis, 135 miles southwest of Nashville and 15 miles south of Jackson, Tennessee. In 1976, a group of businessmen and education leaders in Chester County came together to form the Henderson | Chester County Chamber of Commerce. Over the years, the chamber has grown from just a phone line in the county courthouse, to becoming a 162-member organization with a full-time staff of two. The chamber is overseen by a volunteer board of directors. The chamber serves as the economic development team for Chester County.
- b. *Description of the opportunity or need that the project addresses:* Tennessee is the 24th most connected state in the U.S. according to broadbandnow.com. 90.1% of Tennesseans have access to wired broadband of 25mpbs or faster, where in Chester County, only 48.2% of residents have that same access. Only 18.1% of Tennesseans have access to 1 gigabit fiber. In Chester County, 7.3% of residents have access to 1 gigabit fiber and the majority of those are within the city of Henderson limits.

1.Successes: In 2015, Aeneas Internet and Telephone, a provider based out of Jackson, Tennessee, announced it would roll out a pilot program in Henderson providing affordable one gigabit fiber to businesses, two industrial parks, and residents. The fiber connectivity allowed for new business creation in the rural town of Henderson including 8th Day Software and Bramblett Group. While these successes have changed the economic fiber of the Henderson community, there is much work to be done.

2.Challenges: It is not just software and computer based businesses that require internet connections. One of the main industries in Chester County is agriculture. There are over 415 people in Chester County working in the agriculture industry and it has a \$33.7 million economic impact in the county. Currently, 29% of U.S. farms have no access to the internet according to a USDA report. The digital divide between rural and urban connectivity is astonishing. According to a CBS report, only 3% of those living in urban areas lack access to high-speed internet versus 39% of people in rural areas.

- c. Applicable TCED coursework:* In the Tennessee Entrepreneurship and Small Business Development Course, entrepreneurship trends were discussed. One of the major trends presented was the need for fiber in small communities. One case study presented was Sallisaw, Oklahoma (population 8,874) that provided fiber to every home. They saw a 186% increase in self-employed business increasing employee numbers from 1 to 2-9 after the internet connections.
- d. State or national standards or trends identified in research:* The digital gap between urban and rural areas is troubling when one understands the consequences. Reports indicate that there could be 45,000 fewer rural doctors by the end of 2019 making the need for telemedicine critical. Jonathan Spalter of USTelecom estimates that five million rural students will be pursuing online degrees by 2020, but 21% of schools in rural areas will still lack fiber connection.

2. Project Description

- a. Project Name:* The identified project is to form a community broadband ready team and become a Broadband Ready Community.
- b. Who is involved:* Chester County Economic Development team; The Chester County mayor, city of Henderson mayor, chamber of commerce executive director, director of the public school system, electric cooperative representative, chamber board of directors and other key players.
- c. Goals and Objectives:* Form a broadband ready team, become a Broadband Ready Community and identify access gaps in the county.
- d. Timeframe:* Committee formed within one month, Broadband Ready ordinance read at county commissioner meeting and approved within four months.
- e. Results:* Being a certified Broadband Community and the creation of a team to be the champions of broadband in the community.

3. Results and Lessons Learned

- a. While this is a new project, the results have not yet been evaluated, but lessons learned through the research of this paper provide knowledge, evidence and statistics of the critical importance of working to become a broadband community.

Conclusion: Since only 26% of Chester County residents have access to fixed wireless internet and only 7% have access to gig fiber, the economic development team in Chester County must make access to internet a top priority. The gig fiber installation in Henderson by Aeneas has allowed for job growth, job creation and new business investment, but to continue the growth, Chester County must work to close connectivity gaps. The goal of this capstone project is to create a community broadband team, identify digital gaps, and become a certified Broadband Ready Community. With the team's leadership this is an achievable goal.