

Testimony on Rural Broadband before the Center for Rural Pa  
By Craig Eccher  
President and CEO of Tri-County Rural Electric Cooperative  
February 18, 2021

Good morning, Mr. Chairman. I would like to thank you for this opportunity to speak to the committee on issues concerning broadband challenges in rural Pennsylvania.

My name is Craig Eccher and I am the president and CEO of Tri-County Rural Electric Cooperative. Tri-County was founded in 1937 and serves more than 19,000 members across 3,300 miles of power line covering 5,000 square miles in North Central Pennsylvania. We serve parts of Bradford, Tioga, Potter, McKean, Cameron, Clinton, and Lycoming counties. Rural electrical cooperatives like Tri-County are not-for-profit utilities owned and governed by those they serve. Our boards are democratically elected by their fellow members and excess profits are returned directly to our members. This arrangement gives electric cooperatives a unique connection to the needs of rural Pennsylvania. For many years now, what our members have been telling us is that they are being left behind in this new digital age. They have been adamant that a lack of broadband access is hurting their educational opportunities, hampering economic development in their communities, and forcing them into second-class citizen status among their fellow Pennsylvanians. Today, I want to let you know what Tri-County, through its subsidiary Tri-Co Connections is doing to help bridge this digital divide in the communities we serve, but I also want to let you know that we cannot resolve this problem on our own. Long-term solutions will require public and private sector investment, and leadership.

At the beginning of the 20th century, rural communities in Pennsylvania and throughout the country were being left out of the most important technological development of that time, electrification. Less than 10 percent of rural farms had electricity in 1930. Farm work was manual and often brutal. Even simple pleasures like listening to the day's news on the radio were out of reach for those without electricity. Younger generations were abandoning their rural roots and migrating to our electrified cities. For-profit corporations said delivering electricity to rural areas was an impossibility. Rural Americans needed help and they turned to their government for assistance. With the backing of both the federal and state government, rural communities banded together to form electric cooperatives. The deal was simple. If local communities would do the work, government would help them finance it. Today, electricity is available to every home and farm in Pennsylvania. What was once thought of as impossible is now simply the norm.

The similarities between the need for electrification in rural America and the need for broadband access in rural America are striking. Once again, our rural communities are being left behind by the technological advancement of the day. Once again, for-profit corporations have said that delivering broadband to rural America is impossibly hard.

Today, Tri-County, like many other rural electric cooperatives around the country, is again attempting to answer the call to develop the next transformative utility, broadband. In response to member demand and our own need for broadband, Tri-County began investigating what it would take to provide this service to our members and rural communities. In total, we are laying down 2,800 miles of fiber optics that will provide needed communication for our smart grid

technologies and ultimately improve electric reliability. It will also provide the infrastructure for Tri-Co Connections to deliver fiber to the home service to its members and rural communities at what we believe to be a competitive price. We are offering speeds of 100 Mbps, and 1000 Mbps or 1 Gig to homes and businesses in our service areas.

The largest obstacle for this project moving forward was funding. Because of low density and large capital costs, we have had to seek out assistance. Tri-County was lucky enough to be a successful bidder in the Federal Communications Commission (FCC) Connect America Fund Auction, better known as “CAF II.” We are currently receiving a total of \$32 million over 10 years from the FCC to help fund the building of our network. In addition, we have received \$15.6 million from the Governor’s Office of Broadband Initiatives program and a \$1.5 million Redevelopment Assistance Capitol Program grant. We also secured a \$2.5 million from Appalachian Regional Commission Power grant and most recently we were the successful bidder in the FCC Rural Development Opportunity Fund, better known as “RDOF”. We will be receiving a total of \$10.9 million over 10 years from the FCC. Although we have been successful with funding the total cost of this project is many millions more.

To date we have constructed more than 500 miles of fiber optical cable serving more the 700 residential and commercial customers. We anticipate construction another 600 miles in 2021 and installing close to 2000 services. The endeavor has not only provided to date 7 full time positions but also employed about 100 contract personnel. This itself has provided economic stimulus to rural areas within our territory. We anticipate critical Broadband infrastructure will, by providing the necessary technology, enhance economic development and spur small and mid-size businesses, expand the use of Telemedicine so desperately needed by our aging rural population, offer greater on line education opportunities for traditional and nontraditional students and finally just providing the ability to communicate to loved ones using FaceTime and Skype technologies. Leveraging the assets of an electric cooperative to build out a broadband network make a lot of sense however it comes with many challenges and business risks. Those risks include financial, legal and regulatory and staffing. We have been extremely fortunate navigating these risks and challenges.

We believe that the Commonwealth must play a role in helping deliver broadband to rural communities. We are well aware of the challenges the state is facing from a budgetary perspective. In rural communities, we are all too familiar with living within our means. However, we know that nothing is more critical to the sustainable future of our rural towns than providing infrastructure that can give our residents the same advantages as our families and friends in Pennsylvania’s cities and suburbs. As electric cooperatives continue to facilitate this conversation in rural Pennsylvania, we hope the Commonwealth will be receptive to innovative ideas that help spur deployment, protect Pennsylvania’s existing electric cooperatives, and provide assistance to guarantee this life-changing technology is available to all Pennsylvanians. We are appreciative of the efforts from rural leaders in the General Assembly such as Senate bill 835 and Act 98. These legislative efforts will help guarantee rural access to advanced telecommunications services.

I, personally, have spent 30 years in the electric cooperative business. Over that time, I have witnessed many changes in our communities, some for the better and some for the worse. I fear

that if we do not continue to address this issue, at the local, state, and federal level, rural Pennsylvania will suffer the consequence for years to come. I would implore you to continue to seek ways in which organizations like the Center for Rural Pennsylvania can provide assistance to us and others who are looking to address the rural broadband deficit. I thank you for your time and I would be happy to answer any questions.

Testimony on Rural Broadband before the Center for Rural PA  
By Bill Gerski  
Senior Vice President, Business Development, Tri-Co Connections  
February 18, 2021

Good morning, Mr. Chairman. Thank you for including me in this discussion of broadband challenges in rural Pennsylvania.

My name is Bill Gerski, Senior Vice President for Tri-Co Connections. Our mission is to offer the best possible communications and advanced broadband solutions to members of Tri-County Rural Electric territory. We serve our members with personal attention, and look to grow our local communities, helping to end the educational, economic and social inequalities created by the digital divide between rural and urban areas.

We can do this by building the infrastructure and providing access to the use of modern information and communication technologies such as high-speed Internet, state-of-the-art phone service and advanced streaming options. We want to help our members ensure that their homes are safe and secure, equipped with the latest security and energy management systems. We believe we are building the infrastructure that will deliver a brighter future to rural Pennsylvania.

The objective of Tri-Co Connections is to provide the citizens of North Central Pennsylvania, in and around our rural electric cooperative footprint, with access to high-speed broadband. COVID-19 has further emphasized and deepened the need for this service. Remote learning and working from home are very often nearly impossible without high-speed broadband. Online shopping, online access to government services and telemedicine appointments are all in greater demand. Even basic human connection to family and friends has become something available only online in many cases.

Our Senior Citizens represent one group who can be particularly vulnerable to COVID-19 restrictions without high-speed broadband, but who are also in many instances uneducated on how to use a computer or broadband service. With this understanding, we set out to create a solution, and have been instrumental in developing what is now known as the Senior2Senior program. This educational program pairs technologically knowledgeable high school seniors with Senior Citizens. The high school seniors educate the Senior Citizens on computer skills, digital literacy, cybersecurity and how to utilize apps for online banking, video conferencing, telemedicine and the like. We have accomplished this within a public-private partnership with the Potter County Education Council; the Potter County Human Services Area Agency on Aging; the Seneca Highlands CTC; UPMC; and local banks C&N and JVB. There are five Senior Centers in Potter County. All of these Centers have offered or will be offering these courses to Seniors in their communities. Our goal is to roll this out to the additional six counties where we will be providing broadband.

At Tri-Co Connections, we believe that this type of program directly meets the needs of our communities. With a large portion of our members being Seniors, we are not only investing in

bringing fiber to the home, but we are also investing in making sure that everyone in this vital segment of our community can reap the benefits of high-speed Internet.

Seniors represent one large portion of our members. Second homes represent another sizeable portion. One consequence of the COVID-19 pandemic has been that our members are spending more time in their second homes, sometimes even working from those second homes if possible. High-speed broadband service is especially valuable to those members looking to work from that second home, or whose children may be undertaking remote learning.

Many urbanites are also relocating to areas we serve. The quality of life in North Central Pennsylvania is excellent. It is truly an outdoor paradise, with kayaking, canoeing, fishing, swimming, boating, hiking, camping, horseback riding and stargazing at the Dark Skies of Cherry Springs. We like to say “We live where people vacation.” When we provide high-speed broadband service to these beautiful areas, our members are truly able to “Go Remote and Stay Connected.”

As we have begun rolling out broadband service, one important and enjoyable aspect has been educating our members about all the benefits they can realize through this technology. Well in advance of our activating our members, we are out in the communities making presentations. In fact, we have already made presentations, including Question and Answer sessions, to over 50 various community groups and government organizations, even many local schools. We direct members to our website ([www.tricoconnections.com](http://www.tricoconnections.com)) for additional information, and to sign up for our Advance Reservation System. This System helps us continue to educate them on the service and the benefits that will come with it, as well as provide status updates regarding our physical progress in each area.

As our activation date for each area gets closer, we have a series of educational brochures and postcards that we send out. Then at the time of activation, our technicians on-site are happy to answer any questions, and we leave detailed informational materials with the member. We believe that the more educated our members are, the better they can reap all the benefits that high-speed Internet has to offer.

We are excited that our first passing in our active areas has us achieving a take rate of over 40%, which is well above average for rural broadband companies. Moreover, we anticipate that this rate will increase as additional members return to their second homes for the warmer months, and as members who were unsure about signing up at first hear positive reviews from their neighbors and decide to sign up themselves.

It’s time to eliminate the digital divide that exists between urban and rural Pennsylvania, and we are delighted to be a part of this process. All rural Pennsylvanians should have access to remote schooling and online higher education, the ability to work from home, telemedicine, and all the other benefits of high-speed internet service.

The challenges of building out high-speed broadband to rural Pennsylvania are real, but the opportunities are endless!

Thank you for your time. I am happy to answer any questions.

Testimony on Rural Broadband before the Center for Rural Pa  
By Rachel Hauser  
Director of Regulatory Affairs and Economic Development, Tri-County Rural Electric  
Cooperative  
February 18, 2021

Good morning, Mr. Chairman. Thank you for this opportunity to speak to the committee on issues concerning rural broadband deployment in Pennsylvania.

My name is Rachel Hauser and I am the Director of Regulatory Affairs and Economic Development at Tri-County Rural Electric Cooperative. As a rural electric cooperative, many of our employees live in the areas we serve. We interact with our membership daily and work diligently to understand the issues important to them. In our area, much like rural America at large, older individuals comprise one of the largest demographics, resulting in a unique set of economic development needs. Aging populations are synonymous with individuals on a fixed income that have a significant need for affordable and flexible health care options like telehealth as well as the ability to access amenities from home to improve their quality of life. Statistically, rural areas also struggle with significant amounts of youth out-migration, can have difficulty attracting qualified individuals to locate to the area, and lack the qualified workforce necessary to sustain business. As we embarked on a comprehensive feasibility study process, it was apparent that these significant barriers to sustainable economic development in rural America can be addressed by the deliverance of reliable high-speed internet to residents and businesses. As such, access to reliable high-speed internet enables independence for our elderly population; enhances our businesses' abilities to compete in their market; gives our local and regional economic development partners the tools necessary to train and attract a qualified workforce; and communicates to our youth that they can stay here and find family-sustaining jobs. The benefits are too numerous to relay in this testimony, but it is this invaluable benefit to our community that drove Tri-County and Tri-Co Connections to pursue a fiber to the home project.

Before undertaking fiber deployment, Tri-County conducted market and technical feasibility studies and multiple financial iterations to determine the implications of rural fiber deployment in Tri-County's territory. This analysis quickly determined the need for significant financial assistance in the initial fiber infrastructure deployment to offset costs and ensure a positive return on investment (ROI) for Tri-County and its members. As a member-owned cooperative, our focus was on how we could help meet the needs of our members and communities while upholding the financial integrity of the company. The market for reliable, high-speed internet in our service area was prevalent, but building to that market required a significant financial outlay and working within a new and ever-changing regulatory framework.

Tri-County developed a funding plan and worked in close concert with multiple state legislators, state agency officials, the Governor's office, federal legislators, economic development stakeholders as well as consulting groups to pursue funding that would enable us to meet the needs of our membership and of rural Northern Pennsylvania through fiber deployment. Tri-County participated in the Connect America Fund II Auction held by the Federal Communications Commission in 2018. CAF II, like other FCC programs, was open to any company that could meet the deployment obligations contained within. Tri-County, and ultimately its subsidiary Tri-Co

Connections, was successful in obtaining approximately \$32 million over 10 years to serve just over 7,000 locations in one of the most severely underserved regions of Northern Pennsylvania. With Tri-County's membership comprising over 19,000 consumers, this would assist in the deployment to a small portion of Tri-County's membership. While this began to pave the way for Tri-County to undertake rural fiber deployment, it also brought with it several regulatory requirements that were unique to the telecommunications industry. These requirements included becoming an Eligible Telecommunication Carrier (ETC), which resulted in provision of phone service and participation in the Lifeline program. The Lifeline program reduces the cost of internet and phone service for qualifying low-income individuals. Each state handles the ETC designation process differently, but in Pennsylvania companies apply through the Pennsylvania Public Utility Commission (PA PUC) to gain their ETC status. This was neither a quick or simple process as this was new territory both at the Commission and for Tri-Co Connections (TCC). The PUC worked with Tri-Co Connections and after several months granted TCC their CLEC and ETC status. This enabled Tri-Co Connections to accept the CAF II funds and begin deploying fiber to the home. This was a historic day for the PA Public Utility Commission as it recognized the role rural electric cooperatives can play in helping to bridge the digital divide. In conjunction with the CAF II Auction, the Governor's office created the Pennsylvania Broadband Initiatives Program to provide additional funding to companies successful in CAF II. Tri-County worked closely with the Governor's office and PennDOT to apply for funding and were awarded \$15.6 million.

In conjunction with the CAF II auction, Tri-County also worked with the state of Pennsylvania, North Central Regional Planning and Development Commission and the Governor's office and was awarded a Redevelopment Assistance Capital Program grant for Phase I of Tri-County's buildout in Potter County. Understanding the immense financial need to deploy fiber in rural Pennsylvania, Tri-County continued to seek additional funding and were awarded a \$2.5 million federal grant through the Appalachian Regional Commission (ARC) POWER program. As part of that funding request, Tri-County worked closely with federal ARC officials, the PA Department of Community and Economic Development, Sheri Collins from the Governor's office, local stakeholders, and Tioga County officials. Most recently, in late 2020 Tri-County participated in the Federal Communications Commission's Rural Development Opportunity Fund (RDOF) and were awarded just over \$10 million over the course of 10 years to serve almost 3,500 locations in northern Pennsylvania with fiber. While the award of these funds allowed Tri-County and Tri-Co Connections to meet the needs of their members in a financially feasible way, the compliance and regulatory requirements that accompany these sources are both extensive and complicated. While the funding Tri-County was able to garner is significant, it only represents a small portion of the overall cost of deploying fiber to the Tri-County territory. Tri-County and Tri-Co Connections have made significant private investment far above and beyond the funding received to make the project a success thus far. One important takeaway from the Tri-County story is that rural broadband deployment requires a significant financial commitment to deploy the fiber infrastructure. Perhaps what is most important, however, are the strong partnerships that were created to help meet a widely identified need. It is these partnerships that have played a significant role in creating an environment that is more attractive to rural fiber deployment. This important economic sustainability issue is bipartisan and truly a matter that, to be successfully addressed, must be espoused by every level of government and the local community. The funding and regulatory outlook explained in this testimony represents several years of hard work by many talented individuals that found a way to work with one another toward a common goal: bridging

the digital divide. These individuals aren't only at Tri-County REC or Tri-Co Connections, but rather represent local, state and federal government as well as other private and public sector professionals that found working together much more effective at addressing such a critical issue than working alone. The legislature passed Act 98 in late 2020 to better enable electric cooperatives to deploy fiber infrastructure. Additionally, Tri-County has developed a strong working relationship within the state of Pennsylvania, its various agencies and the PUC to address several project-specific hurdles that have ultimately fostered a regulatory atmosphere more attractive to rural fiber deployment. These accomplishments represent a partnership that focuses on one goal: meeting the long-term economic development needs of rural Pennsylvanians through an investment in future-proof fiber deployment.

Thank you for your time. I would be happy to answer any questions.

## Outline of Talking Points for Legislative Hearing on Broadband Connectivity

02/18/21

Michele M. Moore, Ph.D.

Executive Director of the Potter County Education Council

Seniors 2 Seniors Program

### Tri-County Broadband Project and Potter County Education Council (PCEC): A Brief Overview

- Educational Summit on the Digital Divide in Potter County (January 2019)
- Community Meetings & Conversations (Summer 2019)
- Development of the Seniors 2 Seniors (S2S) Course (Summer 2019)
- Creation of the Seniors 2 Seniors Steering Committee (July 2019)
  - Potter County Education Council
  - Tri-Co Connections
  - Potter County Human Services & Area Agency on Aging
  - Potter County Government
  - Seneca Highlands Career and Technical Center (CTC)
  - Local Financial Institutions
  - UPMC-Cole
- Additional committee member from PA LINK joined in 2020.

### Outline of the Seniors 2 Seniors Course

- A teacher from the CTC's Network Systems Technology Program taught basic technology skills to senior citizens (specifically targeting those 65 years of age and older) while senior high school students (mainly those participating in the Network Systems Technology Program) provided instructional support to the course participants. Additional high school student volunteers from the local school districts also provided support when needed.
- The course was held at the four senior centers in Potter County once a week for one hour per day on a rotating schedule.
- Each rotation of the course was eight weeks in length with a maximum of twenty participants.
- PCEC laptops were utilized in the course, although some participants did bring their own portable devices as well.
- Adult helpers (steering committee members) from PCEC, Tri-Co Connections, and one of the local banks (JVB) were also on hand to provide additional support.
- The rotations began in September 2019.
- The worldwide pandemic hit in the middle of the third rotation of the course.
- After a postponement of more than three months, the third rotation was completed in the summer of 2020 while adhering to CDC Guidelines.

- The final rotation of the course was completed at the end of October 2020 while continuing to adhere to CDC Guidelines.

#### Successes of the Seniors 2 Seniors Course

- Introduction to basic skills (i.e., using features of Google)
- Improvement in participants' confidence in using technology (observations & self-reporting)
- Socialization of senior citizens/meeting new people
- Bringing more senior citizens into the senior centers of Potter County.
- A grant was awarded from PA LINK to purchase a color printer for each of the senior centers to be used by the centers' patrons.
- Interactions between senior citizens and senior high school students, helping to bridge the generational divide.
- Fifty participants completed the eight-week course, approximately a 63% completion rate.
- Through Tri-Co Connections, the Seniors 2 Seniors course was recognized by the FCC.

#### Looking Ahead/Future Goals of Seniors 2 Seniors

- Repeat of the Seniors 2 Seniors Course which the S2S Steering Committee now refers to as Seniors 2 Seniors (1.0) in 2021-2022.
- Increase number of sites up to possibly seven or eight.
- Recruit additional instructors to assist with the Seniors 2 Seniors program.
- Develop Seniors 2 Seniors (2.0) which will target completers of Seniors 2 Seniors (1.0) and will expand upon the skills they learned in the first course.
- Potter County Area Agency on Aging has applied for grants with the hope of being able to begin funding a program coordinator for the Seniors 2 Seniors program.
- Continue looking for additional financial support to purchase additional sets of laptops and possibly tablets for use in the course.
- Potential for additional programs to grow out of Seniors 2 Seniors.

Thank you.

Michele M. Moore, Ph.D.

Executive Director of The Potter County Education Council



# Oswayo Valley School District

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**Mr. Jed Hamberger, Superintendent**

**Mrs. Amy Yohe, Business Manager**

**Mrs. Christi Stedman, Assistant to Superintendent**

My name is Jed Hamberger. I'm the current Superintendent at Oswayo Valley School District located in Potter County, Pennsylvania. Since joining the district in October of 2019, my top three initiatives have been: Broadband Access, Lowering Cyber Enrollment, and STEM Integration. I've been fortunate enough to connect with Tri-County Rural Electric Cooperative (Tri-County), Appalachian Regional Commission (ARC), Zito Media, and Potter County Planning Commission. It is through these partnerships that we've conducted virtual meetings to discuss the infrastructure upgrades needed that are vital for us to provide remote instruction to our students through live streamed synchronous instruction. Our original efforts were to curtail the amount of cyber students enrolled outside of our district. This has been a substantial cost to the district totaling over \$700,000 solely in 2020. From the beginning we've been looking at all aspects of connectivity due to the vast regions within our district that have no service providers available. Frontier Communications is our Local Exchange Carrier (LEC) that provides telephone services to our area. They are currently in Bankruptcy and restructuring.

<https://www.businesswire.com/news/home/20200821005477/en/Frontier-Communications-Restructuring-Plan-Confirmed-by-Court>

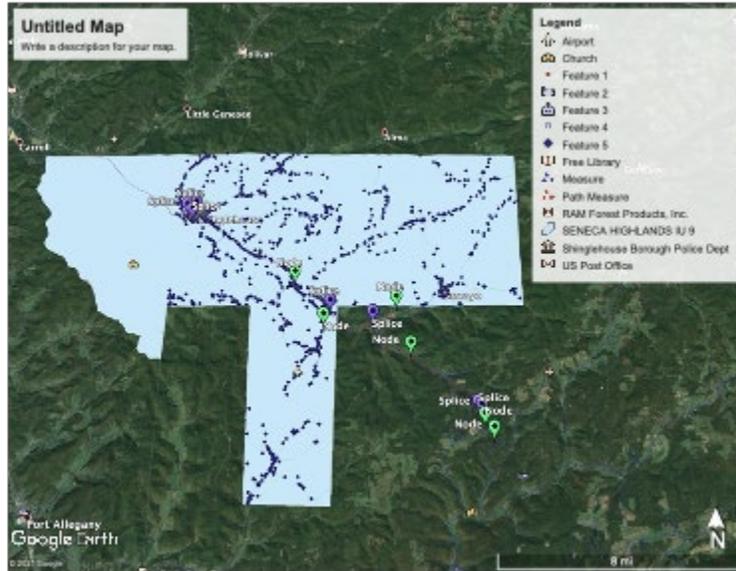
Verizon and AT&T do not have any footprints in our area (most common wireless carriers). Usually, one of them has a small footprint in an area with Fiber to light up or supply bandwidth to towers for carrier service.

Tri-County is a provider in a large part of our rural district, and they have made huge improvements to our infrastructure in recent months running fiber lines for high-speed internet. Unlike many other carriers who are still working with Coax cables which were designed for audio and video to come into the residence but were not designed for high-definition video upload and streaming. Unfortunately, this was designed to be a one-way street for data. Now, we are at the point where we need major interstates run in order to be able to receive and send mass amounts of data to run multiple devices for students in their homes.

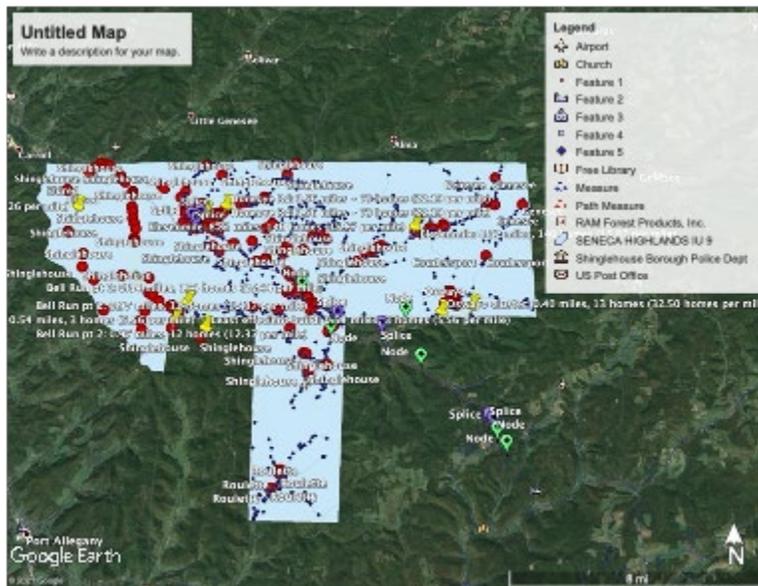
With the help of Will Hunt from Potter County, we located local towers in our region and then laid them out on an ARC GIS mapping system. We then developed an online survey with an assessment of incoming data speeds and outgoing data speeds for all current students and families to participate in. We pushed this survey out twice as a confidential survey. The results indicated that 2/3 of our district did not have the high-speed internet they needed to be able to live stream instruction to at least one device in the home, let alone if we had multiple students and a parent or guardian all working from home. This also gave us the ability to map out the lines that were currently run in our district by local providers and then pinpoint high population areas with 10-20 houses per mile that would be suitable for Zito and Tri-County to be able to run their lines. This kicked things into gear and Tri-County had already had their mapping laid out for their upgrades. This gave us a solid starting point

and we then had to fill in the gaps using other carriers such as, Zito Media and Spectrum due to the ownership of the poles that are already in the ground.

Before: Places of residency within the district and one main line run through the middle of the district only connecting to the school.



After the partnership: 100% of our district will be connected to high-speed quality internet access.



Once we compiled all this information, we were able to use all of it to apply for a grant through the USDA for distance learning and telemedicine services. Hospitals in our region are on a downward slope and have limited their services available thus becoming a life flight hub to simply transport patients to better equipped hospitals in the Pittsburgh and Buffalo areas. We have done a lot already

but there are still gaps that will need to be filled. To do this, it is going to take action from the legislature to provide funding to be able to accomplish these goals from a statewide perspective.

- Expand QUALITY broadband access like Tri-County has in other regions of the northern tier.
- Remove the rights to pole ownership to create a competitive market for service providers. (Reference: <https://www.ncta.com/whats-new/excessive-pole-rates-are-stifling-rural-broadband-investment-and-deployment>)
- Revamp funding formulas to be able to provide the funds needed to address the lack of access to rural communities. Stop dumping money into Philadelphia and Pittsburgh.
- Get other rural service providers to do what Tri-County is doing, they have set an example for everyone to follow, and I feel that it is a solution to all our rural school districts' problems.
- Moving forward once the infrastructure is developed the big roadblock is going to be recovery time to get things back online.

The reality is that we will rarely cancel school due to the weather if infrastructure is up to the level we need for virtual instruction. The new issue we are dealing with is power outages like we saw on our second day of school this year. With power outages comes the lack of connectivity so I feel that we should also address the maintenance costs of restoring access. I do not want to see a flash in the pan for funding but a long-term investment by the legislature putting funding into the hands of the people who will maintain these services for the future. Our local fiber providers are Zito Media and some Spectrum Cable. Neither of which owns a cellular solution. Cellular solutions come into play when your broadband access is out of commission due to weather related outages.

Five years ago, Shinglehouse had an offer from a tower builder in the area, but the company was not able to secure any leases from a carrier to provide service. Since the wireless carriers would need extensive cost to build out or lease fiber from one of our two fiber providers (Zito/Spectrum) this is why we need to change the operation of ownership of infrastructure. If we can open the market to multiple providers, then we will have competitive rates for companies that want to expand their range to more consumers.

Respectfully,



Jed Hamberger  
Superintendent

Testimony on Rural Broadband before the Center for Rural PA

By Aaron Young

Chief Operating Officer, Tri-Co Connections

February 18, 2021

Good Morning, Mr. Chairman. I appreciate the opportunity to discuss the issues surrounding broadband deployment in rural Pennsylvania with the committee this morning.

My name is Aaron Young, Chief Operating Officer for Tri-Co Connections. Our goal at Tri-County and Tri-Co Connections is to ensure all our members have access to reliable high-speed internet and to do our part to help bridge the digital divide in rural Pennsylvania. Tri-County is accomplishing this goal by building a state-of-the-art fiber network that will not only serve the needs of our members today, but for years into the future.

Deploying an end-to-end fiber optic network provides Tri-Co Connections customers many benefits over technologies in use by other service providers today. Tri-Co Connections offers our customers symmetrical connectivity at speeds up to 1Gbps. The symmetrical nature of our offering allows customers to download and upload content with equal bandwidth. The ability to transfer information bi-directionally has become even more critical over the last year. Working from home, learning from home and telehealth have created a need to both receive and send information equally. Building an all-fiber network has created a future proof product for our customers. As costs of electronics decline and need increases, Tri-Co Connections can expand our offerings to 10Gbps and beyond by simply changing the electronics at each end of the network.

Unlike the middle mile fiber networks that many have deployed, Tri-County is building a true end-to-end fiber to the home solution. A fiber to the home deployment requires careful analysis of the number of homes passed, future growth potential and a consideration of future usage increases. While this approach requires a much more complex design than a middle mile network, it will ensure rural Americans have access to a high speed, reliable internet connection. This model requires Tri-County and Tri-Co Connections to not just build a robust fiber plant, but also design and support the network infrastructure required to supply rural customers with reliable high-speed internet and voice services.

The Tri-County fiber network will not only bring the high speed, reliable communication that our residents need, but will also have the added benefit of allowing for the creation a more reliable electrical grid for our members. Using our fiber ring we will be able to increase communication with our substations for increased monitoring, faster outage response time and ultimately less cumulative outage hours.

Tri-County has built over 500 miles of fiber plant and connected over 700 members to date, but it certainly has not come without its challenges. Building in rural America where most lines are off road, over ravines and through the woods takes a very strategic approach and lots of teamwork to get the job done. We have deployed survey crews in advance to analyze the poles.

We have increased our right of way cutting as well as accelerated our pole replacement program to ensure our fiber contractors have as clean a route as possible for deployment. These steps are all completed before our fiber construction contractors arrive on site, giving them the ability to build as quickly and efficiently as possible with limited interruptions in production.

All these steps are very expensive and at a density of 5.8 homes per mile it has been essential that we not only seek financial assistance, but also that we work directly with great partners to get a solid product at an affordable price. We have been fortunate to find some excellent companies to partner with right here in Pennsylvania for this build. These partnerships have not only allowed us to achieve our financial goals but have also created additional jobs in Pennsylvania. Through direct work with these companies, we anticipate building over 600 additional miles of fiber optic cable this year and having the ability to reach over 4000 additional rural Pennsylvanians with high-speed Internet.

We have also been faced with and will continue to face the realities of the changes COVID-19 has had on our industry. Tri-Co Connections performed our first installation in April of 2020, with the global pandemic in full swing. While we faced a few weeks of uncertainty around whether we should pause or continue forward we decided at the end of the day our members needed these services now more than ever. We increased our installers safety protocols and began to provide reliable internet and voice services to our members. Many of these members had no options for the now required need to work or learn from home before our arrival. While we have refined and nearly perfected our installation and build procedures in the COVID era there continues to be a major lingering effect. We are now faced with unexpected supply shortages, extremely long lead times and higher material costs. We are making changes and strategic decisions to combat this, such as projecting material needs as far as a year in advance, but at the end of the day this will certainly drive-up project costs and require additional financial resources to accomplish our goals.

The good news is, at the end of the day we have and with your assistance will continue to overcome these challenges. We will continue to provide our members and others in rural Pennsylvania a product that will not only help meet their work, education and health connectivity needs today, but also a product that is flexible enough to meet their bandwidth needs many years into the future.

I thank you for your time today and I would be happy to answer any questions that you may have.

**From:** Ron Stidmon <[rstidmon@gmail.com](mailto:rstidmon@gmail.com)>  
**Sent:** Tuesday, February 16, 2021 1:15 PM  
**To:** Kyle Kopko <[kkopko@rural.palegislature.us](mailto:kkopko@rural.palegislature.us)>  
**Subject:** Re: rural broadband

This is a quick and dirty overview of our situation. Thanks

Our farm, Enon Valley Garlic, has been trying to get broadband service for more than 15 years. We have had 2 different satellite services, DSL and a DIY repeater I installed to send the Internet to our farm. Our local cable company, licensed to operate as a monopoly in our township has repeatedly refused to extend their lines across a railroad which crosses our street. The cable stops about 300 yards from our farm. Originally Comcast (Xfinity for their internet business) said the telephone poles were too short to accommodate the cable lines while maintaining the required separation. Three years ago we were able to get all the shorter poles replaced but then we were told the cost to cross the tracks was not justified based on the number of customers that would subscribe to their product. We have committed to signing up at least 5 customers but our overtures have been repeatedly ignored.

One of our residents is a cad/cam designer for a company near Pittsburgh. He needs 200-300 MBS service to work from home, but the Covid has made this option unavailable. Similarly, we are spending nearly \$2000 per year to get 10 MPS service to our farm. That low bandwidth means we cannot host our own website but must rely on higher priced hosting services.

We feel we are second class citizens where rural tribes in Africa are able to receive Internet service far beyond what is available to us. We don't understand how this situation can be tolerated. We have looked into building our own broadband network for all the no-service areas in our township but we learned that a law preventing us from doing this through our township government was passed with the strong support of the existing broadband business community. If they won't connect us, why are we prevented from doing it ourselves?

We have a small farm in Beaver County, Darlington Twp. We have been trying for more than 15 years to have access to broadband internet service. Until recently, our fastest service was DSL at 3 MBS. That has not been increased to near 10MBS.

While this is better, it is still far below what we should have as there is high speed cable available literally a stones-throw away. We have pleaded with the cable company, our township government, our state congressman and our state senator all to no avail.

My neighbor is unable to work from home, but the Covid restrictions have prevented him from going to his office. He will probably lose his job soon.

I am offended that we are ignored and denied access to what is the equivalent of electricity 3 years ago. I don't know where else to ask for help. We are rural citizens and need help. Thanks,

Ron Stidmon

enon valley garlic

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