

COUNTY BROADBAND EXPANSION

REPORT OF SURVEY
FINDINGS

**CCAP and Penn State Extension
July 2021**

COUNTY BROADBAND EXPANSION: REPORT OF SURVEY FINDINGS



Counties have been at the forefront of broadband expansion in the commonwealth and are continuing to develop partnerships and creative solutions that strive to provide internet connectivity for their residents, especially in rural areas and better bandwidth capacity statewide at affordable rates.

To help capture information, identify, and share best practices surrounding broadband expansion and deployment initiatives, CCAP has worked with Penn State Extension to develop a county survey to better understand county approaches to broadband development. This report is a culmination of survey responses to aid in informing and developing the commonwealth's plan for broadband development and bridging the digital divide.

Table of Contents

<i>Background.....</i>	<i>3</i>
<i>Summary of Findings.....</i>	<i>5</i>
<i>Topic Review and Discussion.....</i>	<i>7</i>
<i>County Perspectives.....</i>	<i>12</i>
<i>County Project Spotlights.....</i>	<i>14</i>
<i>Appendix.....</i>	<i>24</i>

BACKGROUND

Although the need for internet access continues to increase across the nation—as the backbone of business, and as a tool for education, health care, emergency services and other key parts of our everyday lives, broadband continues to be echoed at all levels of government as one of the biggest hurdles of the 21st century. COVID-19 has further exposed the lack of availability and the need of Pennsylvanians for high speed and reliable internet access for key parts of our everyday lives, especially as schools and businesses must constantly adapt to changing pandemic conditions and we begin to shift into the “new normal.” Even in places with access to broadband, we are using the technology more than before, creating capacity issues even in urban areas.

But high speed and reliable internet access has become a necessity, and our communities cannot continue to wait for infrastructure that is critical to our economic vitality and our personal quality of life. Even agricultural work has become increasingly dependent on connectivity as technology is added to traditional farm equipment and new tools such as drones help improve productivity. Without broadband, a significant number of Pennsylvanians are missing access to opportunities, while rural areas in particular find it harder and harder to attract and retain residents and encourage business development.

"Broadband can no longer be considered a luxury item and ought to be considered a required utility just as electric is now. Even more so now with the onset of COVID-19 and our education system suffering due to the lack of connectivity and the availability to access telemedicine and mental health programs for our youth and aging population." – Survey Respondent, Potter County

Even before the pandemic, counties have been at the forefront of broadband expansion in the commonwealth and are continuing to develop partnerships and creative solutions that work to provide internet connectivity for their residents, especially in rural areas and better bandwidth capacity statewide. With the further increased reliance on use of connectivity alongside federal, state, and local investment in bridging the digital divide, counties have been further exploring projects and ways to be leaders on expanding access. Counties can also learn from the best practices and innovative ideas, such as regional cooperative models, that have seen success in Pennsylvania and throughout the country, to create and build meaningful collaborative partnerships to ensure no Pennsylvanian gets left behind.

The health and future viability of our communities has an impact on the strength of our entire commonwealth. Broadband expansion will be a critical tool to move all of Pennsylvania forward together, particularly in the changing post-COVID world.

ABOUT THE SURVEY

The County Commissioners Association of Pennsylvania (CCAP) and Penn State Extension conducted the "County Broadband Survey" online from April 26, 2021 to May 14, 2021. Targeted email invitations were sent to county commissioners, council members, executives, chief clerks, administrators and solicitors in all 67 CCAP member counties on April 26, 2021, which included a link to participate in the online survey. Reminders to participate in the survey were highlighted in CCAP E-Newsletters, and targeted email reminders were sent on May 3, 2021 and May 7, 2021. Incomplete and duplicate responses were eliminated from the data. 49 completed surveys were received, for a response rate of 73.1%.

Respondents represent all seven CCAP districts and counties class 2A through 8. The online survey was developed, distributed, and responses recorded through the Qualtrics survey platform. Analysis of the response data was performed utilizing Qualtrics and Excel.

Information in this report summarizes the key findings of survey responses. A PDF version of the "County Broadband Survey" questionnaire can be found in the report Appendix.

For more information about the survey, please contact Melissa Gates, CCAP Government Relations Associate, mgates@pacounties.org or Cristy Halerz Schmidt, Penn State Extension Applied Research Educator and CCAP Extension Fellow, cah215@psu.edu.

SUMMARY OF FINDINGS

Counties are engaged and investing in broadband expansion initiatives

- Approximately 85% of respondents are engaged in a broadband expansion project, or plan to engage in the future (41 counties). This represents nearly two-thirds of counties in Pennsylvania.
- More than half of county respondents have taken the leadership role in developing and deploying broadband expansion projects and initiatives (22 counties - 58.6%).
- Multiple types of investment are utilized for the projects, with federal pandemic relief dollars and other grants as the most common funding sources, though county general fund revenue is often leveraged as well.

There is no one-size-fits-all solution to bridging the digital divide

- Counties are deploying different types of service (first, middle, last mile) at equal proportion throughout the state depending on service needs, geographical challenges, cost to deploy and affordability for the resident.
- A majority of counties are utilizing co-located transponders or fixed wireless (23 counties - 42.9%) or fiber (21 counties - 37%) technology.
- Depending on the broadband service needs of each county, project sizes vary greatly from several miles of fiber serving a few hundred homes to building out complete county population access. This is dependent on the broadband infrastructure and service that is currently in place.

Counties cannot solve the issue of broadband expansion and access alone

- Counties are working with an array of partners and providers to deploy services, including the state, other local governments, regional development and planning partners, private industry, public, private, and non-profit stakeholder groups.
- A high percentage of counties are collaborating with small/local providers and regional partners such as Local Development Districts (LDDs), Councils of Governments (COGs) and planning commissions to develop cost-effective, comprehensive, multi-county and regional approaches to broadband deployment.
- Even with substantial initiatives taken on by counties and regional partners, a comprehensive broadband system across the commonwealth requires more attention and investment to be successfully built and maintained for Pennsylvania's future.

SUMMARY OF FINDINGS *(continued)*

Strategic, coordinated investments and partnerships are critical

- Initial buildout and infrastructure is primary, though maintenance and planning for the future is critical, especially with the federal, state and local investment being made in broadband expansion efforts.
- Several counties recommended conducting a feasibility study as a best practice to curating a successful plan, though noted time pressures to utilize federal one-time funding.
- Most respondents do not anticipate maintenance costs to the county, however others cite cost recovery through user fees or revenue generated.
- With adjacent projects and substantial investment, strategic, planned, coordinated investment between all levels of government and industry is critical to avoid overbuild and ensure commonwealth residents have adequate and affordable access to broadband now and longer-term.

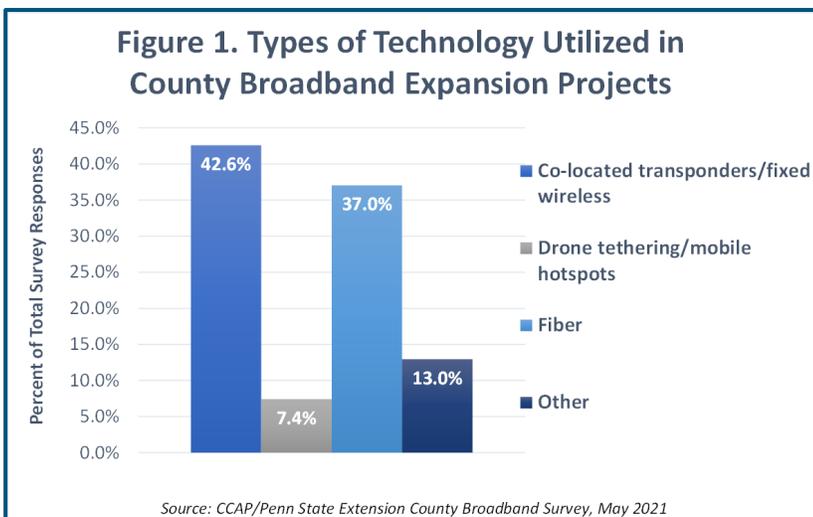
TOPIC REVIEW AND DISCUSSION

Through engaging in broadband expansion and access projects, counties have found there is no one-size-fits-all solution, rather collaboration and partnerships paired with best practices and learned experiences allowed for the highest rates of success and service delivery to commonwealth residents. In the survey, counties were asked a variety of questions ranging from partnerships and technology use to best practices and lessons learned. Each topic aims to provide a better understanding of the role of counties in broadband development with the goal of informing a path forward to bridge the digital divide in the commonwealth.

Technology and Infrastructure

Available Technologies

- The majority of counties are utilizing co-located transponders or fixed wireless (23 counties - 42.9%) or fiber (21 counties - 37%) technology.



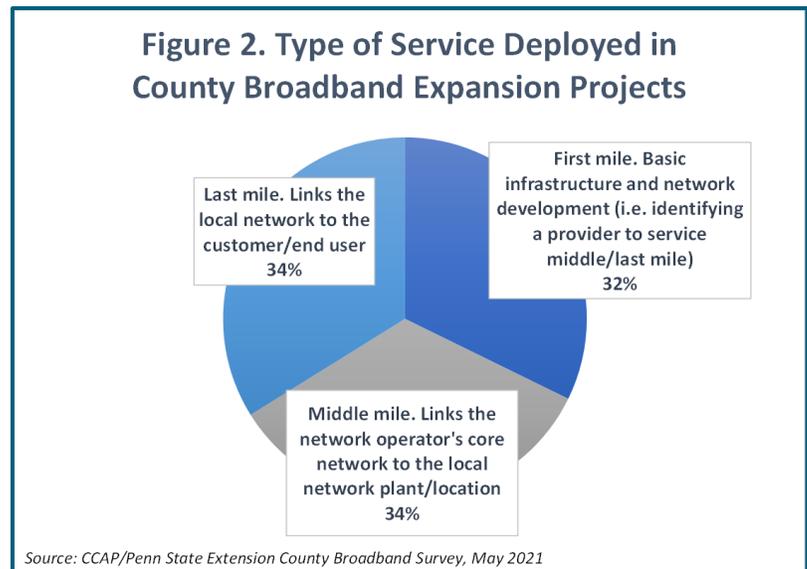
- While fiber is viewed as a long-term solution, counties noted the expense to providers to be between \$25,000-\$40,000 per mile, which often times is not viewed as profitable, particularly in rural areas with aging populations who may not subscribe.

- Geography and affordability were repeated frequently as the top drivers of decision making on what technology a county chooses to deploy. The size and desired number of residents served was also critical in assessing technology type.

*Question: "What type of technology is your county utilizing?
(Please select all that apply)"*

Existing Infrastructure

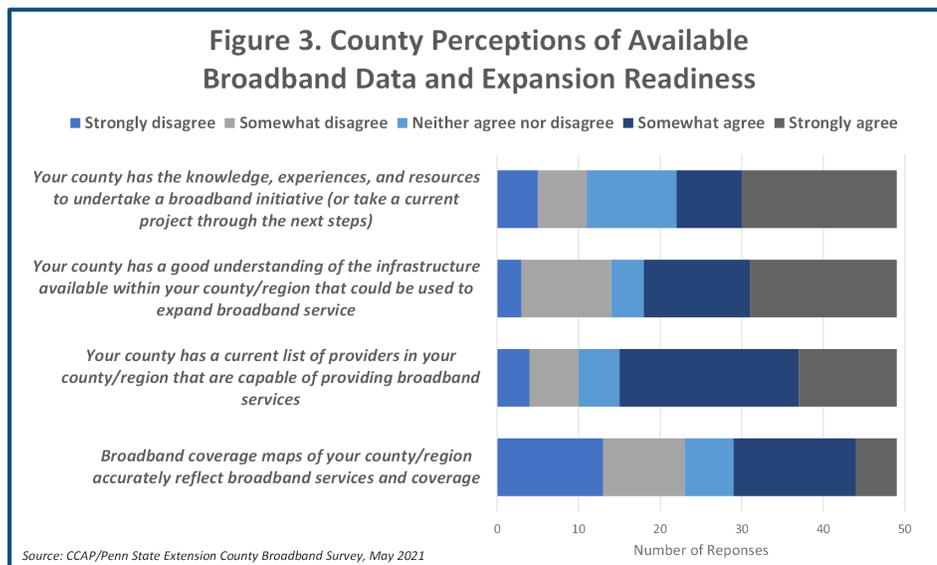
- Counties are deploying varying amounts of first, middle and last mile service, with 10 counties reporting deploying one of the three types, eight counties reporting two serve types and 12 counties reporting deployment of all three types of service.
- Several respondents reported utilizing emergency 911 offices and emergency management offices to aid in broadband expansion projects.
- A reoccurring recommendation included the ability to leverage state-owned towers as a key infrastructure asset to deployment.
- Counties that have conducted feasibility studies noted these studies are critical in determining what existing infrastructure may be leveraged and at what costs, including state, county, locally and privately owned assets.



Question: "What type of service is your county involved in deploying? (Please select all that apply)"

Data/Broadband Mapping

- Counties acknowledged the need for comprehensive mapping for broadband availability and are generally aware of Penn State Extension's mapping efforts.



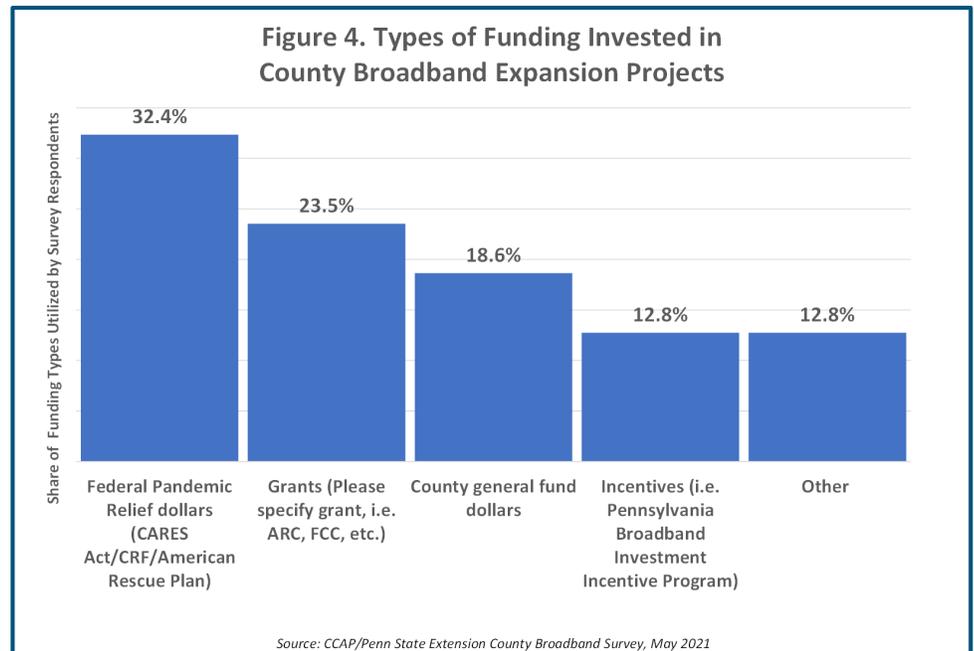
Question: "Regarding broadband in your county, please assess the following statements."

- There was no apparent correlation between regions or classes of counties on responses to accuracy of mapping, awareness of providers locally, awareness of available infrastructure for deployment or county knowledge and ability to undertake broadband projects.
- Feasibility studies were again noted as tools and primary sources of data for counties, as were regional studies and infrastructure assessments.

Funding

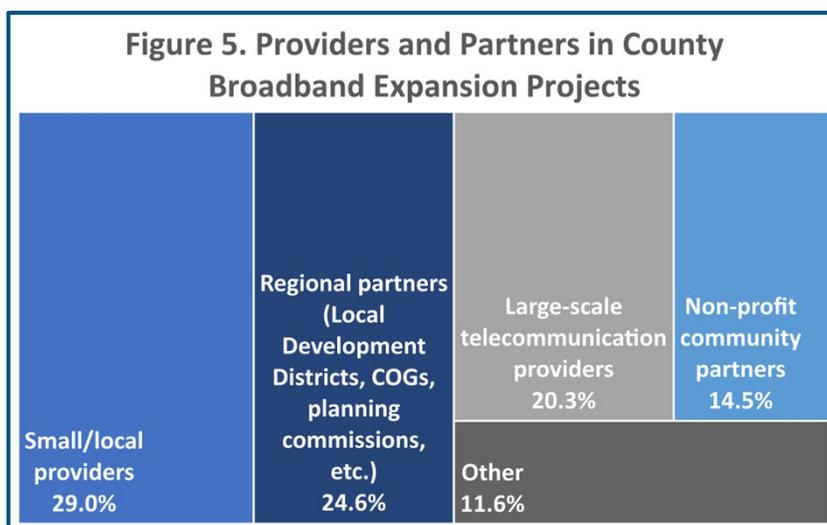
Types and Sizes of Investments

- Broadband investment varied significantly based on the status and timeline of a project. Older projects utilized more grant and county funding whereas newer projects more heavily leverage federal pandemic relief funding.
- Funding is comprised of a mix of county general fund dollars, federal pandemic relief funding, federal grants, incentives and other funding.
- Approximately one-third of counties reported utilizing county general fund dollars, ranging from investments of \$8,000 to over \$1.5 million. These investments vary highly depending on the size and cost of the overall project alongside the braiding of funding and matching requirements.
- A majority of counties noted wanting to leverage American Rescue Plan Funding for broadband expansion and affordability efforts, but were unsure of how much they will be able to dedicate to these projects. An additional consideration is the timeframe for utilization of all federal pandemic relief funding and how counties can best pair this funding with other available grants, noting some of the grant requirements and limitations.



Question: "What types and amounts of funding have invested in the project? (Please select all funding types that apply, and provide dollar estimate of funding amounts in the text box)"

Partnerships



Question: "What partners/providers has the county worked with to deploy broadband service? (Please select all that apply, and indicate the names of partners/providers in the text box)"

County Collaboration

- Survey respondents noted 15 different occasions of projects spanning two or more counties.
- A common theme throughout single-county project responses was the openness to discussions with other counties/regions "as soon and efficiently as possible".
- Counties who are not currently engaged expressed interest in partnering with neighboring/regional counties to allocate resources and provide access more efficiently.
- Most of the reported regional initiatives are bridged by Local Development Districts (LDDs), Councils of Governments (COGs) or regional providers.
- Counties who are further along on their projects overwhelmingly shared best practices and lessons learned, demonstrating the desire to share experiences with other counties and tell their own county stories.

Local/Regional Partnerships

- Non-profit community and regional partners hold a significant role in county/regional broadband expansion projects.
- Partners include municipalities, school districts, authorities, hospitals and health systems, Chambers of Commerce and golf courses.
- Regional partner involvement, including COGs, planning commissions and LDDs, is critical and highly utilized in county projects as these entities are able to coordinate communications and resources across multiple counties and within their own network to share best practices and better inform a statewide approach to broadband deployment.

- Of the 15 counties who reported their projects were not county led, 12 (80%) shared regional partners were the lead project coordinators.

Providers

- Counties are working with larger-scale, incumbent providers at similar rates as smaller, local providers, representing at least 16 small and local providers and 14 larger-scale providers.
- Choice of provider is related to technology type and need for the county/region.
- Counties have varying levels of knowledge of providers in their respective counties/regions that are capable of providing broadband services.
- Several counties noted the challenges and expenses of providers to deploy varying technologies, including fiber, which has impacted decisions on technology and service types deployed.
- Small start-ups and entrepreneurs are filling the gaps where the larger providers have shown little to no interest in investing in the hardest to reach areas of the county based on survey feedback.

COUNTY PERSPECTIVES

(Note to readers: The information presented in this section is drawn directly from survey responses to accurately reflect the experience and perspective of County Broadband Survey respondents).

Key Takeaways and Lessons Learned

Partnerships

- Trusted industry partnerships are key.
- Projects of this type require commitment from various departments - the Commissioners, IT, Planning, GIS, Economic Development and Emergency Services all committed significant time to this initiative.
- Regional relationships and multi-county partnerships are a critical resource.
- Work as a team with other stakeholder entities and find interested providers.
- Spend time discussing the reason the county needs to improve access to broadband with your non-profit partners. Partners may offer the county space for equipment either free of charge or for the cost of projected utility expenses. It can help keep the start-up costs for the project down. It takes time to go from having all the equipment installed to having a network that is actively serving paying customers.
- Public input and public buy-in to projects can be extremely beneficial.

Investment

- Projects ought to consider the future – don't plan for today, build for tomorrow.
- Feasibility studies are key to success as they allow for an inventory of current "on the ground capabilities" then provide solutions to gaps. Don't launch in to building a backbone until you have completed a study.

Service and Access

- Avoid getting caught up in the technical jargon.
- Documentation of need in those underserved and unserved geographies is crucial for moving broadband deployment projects forward, including utilization of accurate mapping and Penn State Extension's broadband map.

Barriers to Broadband Expansion

Partnerships

- Even with an incumbent provider, expansion is stalled while waiting for current providers to upgrade their current services and infrastructure.

Investment

- Financial barriers and the rural nature of the landscape can be challenging in developing plans or leveraging a project.
- One time, time-limited funding may hinder future investment if there are not longer-term strategic investments.

Service and Access

- Without a comprehensive state plan or information on current provision, there is an increase potential for duplication of effort.
- Need to understand what infrastructure is available vs. areas of need.
- In rural counties it is going to be very difficult to find a provider that is willing to step up with such a low take rate and high cost per mile. Mobile broadband and microwave type services in rural counties may be more cost effective in some areas.

Suggestions for the State to Support Broadband Initiatives

Partnerships

- The knowledge and expertise of Local Development Districts (LDDs) ought to be utilized in the creation and execution of a comprehensive state broadband plan.
- Work with fiber optic line owners to tap unused broadband on interstate networks.
- Assist school districts with creating WiFi hot spots through mobile options on school buses and library systems with connectivity in book mobiles.
- Provide assistance to emergency 911 offices and emergency management offices to ensure that their systems are technically equipped for expanding broadband needs.

Investment

- The state should direct funding of qualified projects that promote ubiquitous availability that initially targets underserved populations.
- Large broadband block grants should be provided directly to county governments and multi-county jointers.

- Establish a reimbursement program for staff time in the development of RFP's and the administration duties with carrying out deployment projects.
- Assist in further planning to identify needs areas and offset upfront capital investment.
- Allocate a direct payment to the county and allow the county to utilize its purchasing and procurement systems to direct the broadband deployment activities within their county in accordance with their comprehensive or other related plans. This could be network development undertaken by the county or the county could choose to support a non-profit or for-profit partner working on this issue in their area.

Service and Access

- The state should emphasize middle and last mile projects, targeting regional efforts.
- Ensure that those living in the most rural areas have equitable access to broadband services, not only for purposes of accessing technology for leisure, academics, etc. but also for safety purposes.
- Continue regular updates to broadband resources pages so that the most up-to-date data is available.
- Establish a technology technical assistance department to serve counties and municipalities in the same way DCED's Center for Local Government Services assists us.
- Implement a strategy for the last mile deployment.
- Open up the state-owned towers more easily for counties to access.

COUNTY PROJECT SPOTLIGHTS

This report aims to highlight the experiences of counties across the commonwealth throughout their broadband deployment initiatives. As noted, there is no one-size-fits-all solution, which makes each county's perspective unique. With counties at different stages of project deployment and implementation, the following county spotlights aim to showcase projects across an array of counties, capturing those different techniques, project models and approaches to broadband solutions. The following county spotlights were selected based on the level of detail provided by respondents, and intentionally represent various county classes, sizes and regions to illustrate the diversity of broadband expansion approaches.

COUNTY PROJECT SPOTLIGHTS

BUCKS COUNTY

COUNTY CLASS: 2A - CCAP DISTRICT: 5

PROJECT TYPE: County-led, early stages

PROVIDER (TBD)

- ✓ Large-scale telecommunications providers (Verizon, Lumen, Crown Castle)

FUNDING UTILIZED (TBD)

- ✓ County General Funds
- ✓ Federal pandemic relief dollars
- ✓ Grants
- ✓ Incentives
- ✓ Other

TECHNOLOGY UTILIZED (TBD)

- ✓ Co-located transponders/fixed wireless
- ✓ Drone tethering/mobile hotspots
- ✓ Fiber

PARTNERS (TBD)

- ✓ Exploring partnership with non-profit

ADVICE/BEST PRACTICES

- ✓ Don't plan for today, build for tomorrow
- ✓ Remember possibilities of 4G/5G service versus maintenance of last mile cabling



More Information: www.buckscounty.gov

COUNTY PROJECT SPOTLIGHTS

CENTRE COUNTY

COUNTY CLASS: 4 - CCAP DISTRICT: 4

PROJECT TYPE: 1 County-led; 1 Northcentral LDD/SEDA-COG-led

PROVIDER

- ✓ Small/local (Centre WISP Venture LLC)

TECHNOLOGY UTILIZED

- ✓ Co-located transponders/fixed wireless
- ✓ Fiber
- ✓ Other (Centre WISP)

FUNDING UTILIZED

- ✓ County General Funds
- ✓ Federal pandemic relief dollars
- ✓ Grants: ARC \$100,000 w/state match of \$100,000 through SEDA-COG
- ✓ Other: Private Sector

PARTNERS

- ✓ Centre WISP Venture LLC in 2019 to expand fixed wireless internet services to the Penns Valley.
- ✓ Northcentral LLD/SEDA-COG in 2020 to acquire (was awarded) an Appalachian Regional Commission POWER Grant to upgrade internet services in the Snow Shoe Borough area.

ADVICE/BEST PRACTICES

- ✓ Offer a match and/or certain percentage of funding for projects exceeding a threshold amount.
- ✓ Inventory and publish state-owned assets available for lease on which private-owned fixed wireless equipment could be attached.
- ✓ Assist with the engineering and permitting of pole attachment costs in coordination with electric utility companies as an off shoot of the PUC's pole attachment advisory research.
- ✓ Enhance and expand KINBER's PennREN alignment so that additional residential and business connections can be made.
- ✓ Help community anchors in rural areas (libraries, schools, community centers, fire stations, etc.) get service connections.
- ✓ Work with fiber optic line owners to tap unused broadband on interstate networks.
- ✓ Assist emergency 911 offices and emergency management offices to ensure their systems are technically equipped for expanding broadband needs.
- ✓ Continue regular updates to broadband resources pages so that the most up-to-date data is available.

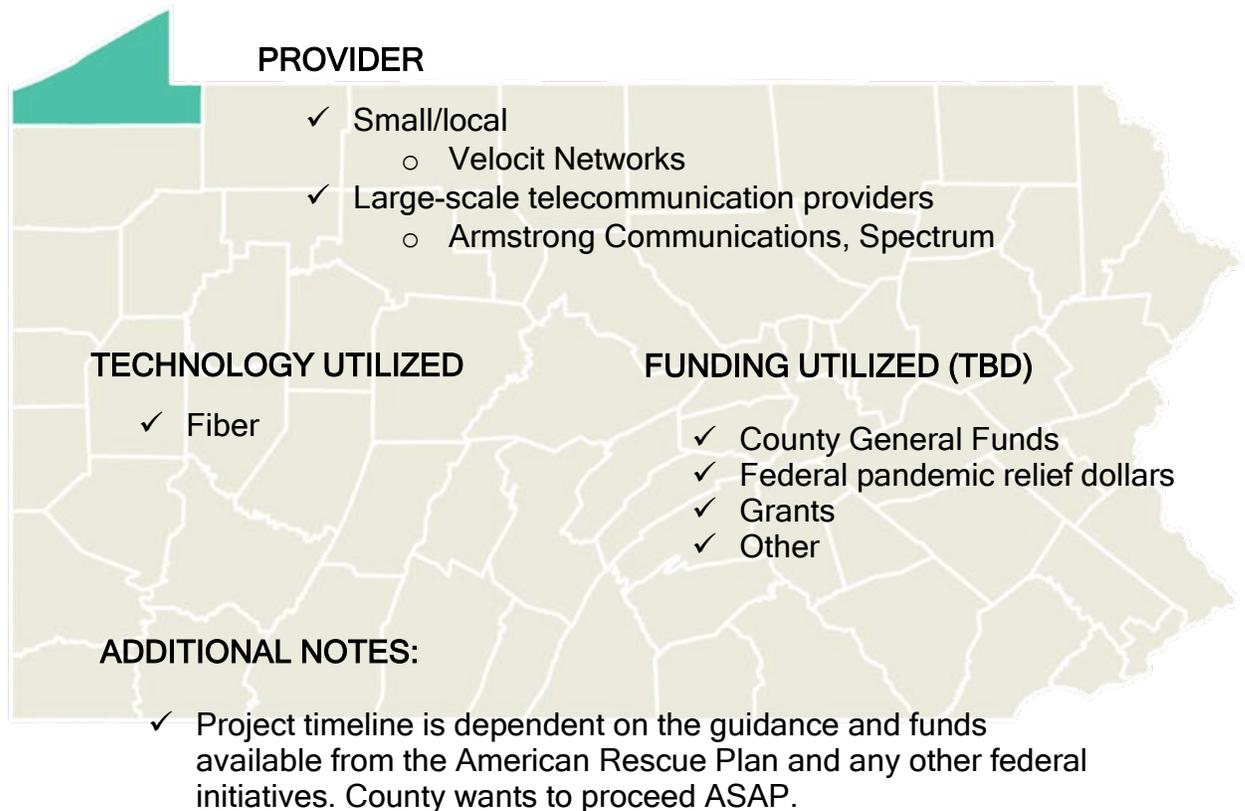
More Information: www.centrecountypa.org

COUNTY PROJECT SPOTLIGHTS

ERIE COUNTY

COUNTY CLASS: 3 - CCAP DISTRICT: 1

PROJECT TYPE: County-led, early stages



More Information: www.erie.gov

COUNTY PROJECT SPOTLIGHTS

MCKEAN COUNTY

COUNTY CLASS: 6 - CCAP DISTRICT: 1

PROJECT TYPE: County-led

PROVIDER

- ✓ Small/local
 - SkyPacket - 1st ISP on network
- ✓ Large-scale telecommunication providers
 - Zito Media- provides fiber access

TECHNOLOGY UTILIZED

- ✓ Co-located transponders/fixed wireless
 - Fixed wireless utilizes Citizen Broadband Radio Service equipment

FUNDING UTILIZED

- ✓ County General Funds (\$10,658.00)
- ✓ Federal pandemic relief dollars (\$1,164,233.10)

ADVICE/BEST PRACTICES

- ✓ Spend time discussing the reason the county needs to improve access to broadband with your non-profit partners.
- ✓ We had multiple partners who offered the county space for equipment either free of charge or for the cost of projected utility expenses. It helped keep the start-up costs for the project down.
- ✓ It takes time to go from having all the equipment installed to having a network that is actively serving paying customers. There is testing and optimization that must happen, CBRS requires certified installers which takes time to train or find and schedule, and other issues that cause delays.
- ✓ With fixed wireless it is also important to make sure customers know that while there are multiple service tiers - 100/10 service or even 50/10 service might not be available in their location due to distance from equipment, clutter, etc.

PARTNERS

- ✓ Non-profit community partners:
 - ATA - provides tower space
 - Kane Community Radio - provides tower space
 - Bradford Regional Airport - provides access to Zito Eline and space for microwave and related hardware
- ✓ Regional partners:
 - North Central PA Regional Planning and Development
- ✓ Other:
 - ConnxxNE - contractor who did design build of phase 1 (6 sites) and phase 2 (2 sites in progress); County has an operation and maintenance agreement

More Information: www.mckeancountypa.org

COUNTY PROJECT SPOTLIGHTS

MERCER COUNTY

COUNTY CLASS: 5 - CCAP DISTRICT: 1

PROJECT TYPE: Led by private companies



More Information: www.mcc.co.mercer.pa.us

COUNTY PROJECT SPOTLIGHTS

SEDA-COG

COUNTY CLASS: 6. 7 - CCAP DISTRICT: 3

PROJECT TYPE: Regional initiative, SEDA-COG-led; Juniata, Mifflin, and Perry Counties

PROVIDER

- ✓ Small/local
 - Centre WISP, Mifflin County Wireless

TECHNOLOGY UTILIZED

- ✓ Co-located transponders/fixed wireless (Mifflin County, Juniata County)
 - Juniata utilized Emergency Services towers for basic infrastructure
- ✓ Other:
 - Perry County is on phase 3, deploying RFQ

PARTNERS

- ✓ SEDA-COG
- ✓ Mission Critical (consultant in Perry)

ADVICE/BEST PRACTICES

- ✓ To their credit, small start-ups/entrepreneurs are filling the gaps where the larger ISPs have shown little to no interest in investing in the hardest to reach areas of the county. The CARES Act did stimulate this to occur, as it helped offset some initial equipment costs. We are fully confident that any economic return will far exceed any governmental investment. (Mifflin)
- ✓ Would highly recommend utilizing Centre WISP. The staff is great to work with. One of our challenges was getting tower leases in place for the provider, as we have leases with several governmental agencies for our Emergency Services towers. (Juniata)
- ✓ We are the rookies here with broadband, we had to learn as we went along. I feel that we the Commissioners have really taken this project seriously and worked with the Consultant on each phase. Funding is the major roadblock for us. We are a very rural county with no tax base to help. (Perry)

FUNDING UTILIZED

- ✓ Perry:
 - Federal pandemic relief dollars (\$1.5 million)
 - Grants (RCAP)
- ✓ Juniata
 - County general fund dollars
 - Federal Pandemic Relief dollars (\$422,728.46)
 - Grants (\$142,000.00)
 - Incentives
 - Other
- ✓ Mifflin
 - County general fund dollars (\$112,103.10 + \$27,711.28)
 - Grants (SEDA-COG max \$95,000)
 - Other

More Information: www.seda-cog.org

COUNTY PROJECT SPOTLIGHTS

SAP&DC and ABI

COUNTY CLASS: 4, 5, 6, 8 - CCAP DISTRICT: 2, 3

PROJECT TYPE: Regional initiative, SAP&DC and Alleghenies Broadband Inc.; Bedford, Blair, Cambria, Fulton, Huntingdon, and Somerset Counties

PROVIDER

- ✓ Small/local
 - Crowsnest Broadband, others

TECHNOLOGY UTILIZED

- ✓ Co-located transponders/fixed wireless (Bedford)
- ✓ Drone tethering/mobile hotspots (Somerset)
- ✓ Fiber

FUNDING UTILIZED

- ✓ County general funds (\$300,000 Somerset; \$298,000 Bedford pending ARC)
- ✓ Federal pandemic relief dollars (\$447,000 Bedford pending ARC; \$300,000 Blair; approximately \$2 million, Somerset)
- ✓ Grants

PARTNERS

- ✓ Non-profit community partners
 - Alleghenies Broadband (all)
 - Schools (Somerset)
- ✓ Regional partners
 - Southern Alleghenies Planning and Development Commission

ADVICE/BEST PRACTICES

- ✓ Going into a regional relationship has been great for us. (Blair)

More Information: www.sapdc.org; www.allegheniesbroadband.com

COUNTY PROJECT SPOTLIGHTS

SULLIVAN COUNTY

COUNTY CLASS: 8 - CCAP DISTRICT: 7

PROJECT TYPE: Led by Comcast



More Information: www.sullivancounty-pa.us

COUNTY PROJECT SPOTLIGHTS

YORK COUNTY

COUNTY CLASS: 3 - CCAP DISTRICT: 6

PROJECT TYPE: Led by York County Economic Alliance and Lit Communities

PROVIDER

- ✓ Large-scale telecommunications providers (Shentel, Millenium, Widelity)

FUNDING UTILIZED

- ✓ County General Funds (\$50,000)
- ✓ Federal pandemic relief dollars (\$1.2 million)

TECHNOLOGY UTILIZED

- ✓ Co-located transponders/fixed wireless
- ✓ Drone tethering/mobile hotspots
- ✓ Fiber

PARTNERS

- ✓ Regional partners
 - York County Economic Alliance
- ✓ Other
 - Henkies & McCoy
 - Met-Ed
 - Katapult Engineering

ADVICE/BEST PRACTICES

- ✓ We used CARES funding to conduct a **business study**, so we have a playbook that provides a holistic look at our broadband needs, business models, and funding sources.
- ✓ We've built our backbone and are now working on our middle mile.
- ✓ We have a broadband task force in place.
- ✓ Happy to share the work we have done with other counties.

More Information: www.yorkcountypa.gov

APPENDIX

COUNTY BROADBAND SURVEY – QUALTRICS QUESTIONNAIRE

What is your county's name?

Regarding broadband in your county, please assess the following statements:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Broadband coverage maps of your county/region accurately reflect broadband services and coverage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your county has a current list of providers in your county/region that are capable of providing broadband services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your county has a good understanding of the infrastructure available within your county/region that could be used to expand broadband service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your county has the knowledge, experiences, and resources to undertake a broadband initiative (or take a current project through the next steps)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Has your county engaged in a broadband expansion project, or do you plan to engage in the future?

- Yes
- No

Is the county project county-led or is there another entity/provider taking the lead on project development?

- Yes, county-led
- No, other entity (please specify)

Are there any specific factors or barriers that are preventing your county from engaging in broadband expansion projects?

If the Commonwealth could supplement county broadband as part of Federal pandemic stimulus funding that is designated for broadband and infrastructure development, in your opinion, how could the state best use this funding to support or facilitate county broadband deployment initiatives?

Are there other counties involved in the project? Is this part of a regional initiative? (Please specify names of counties and/or regional initiative)

What types and amounts of funding have been invested in the project? (Please select all funding types that apply, and provide dollar estimate of funding amounts in the text box)

- County general fund dollars
- Federal Pandemic Relief dollars (CARES Act/CRF/American Rescue Plan)
- Grants (Please specify grant, i.e. ARC, FCC, etc.)
- Incentives (i.e. Pennsylvania Broadband Investment Incentive Program)
- Other (Please specify)

What partners/providers has the county worked with to deploy broadband service? (Please select all that apply, and indicate the names of partners/providers in the text box)

- Small/local providers
- Large-scale telecommunication providers
- Non-profit community partners
- Regional partners (Local Development Districts, COGs, planning commissions, etc.)
- Other (Please specify)

What type of service is your county involved in deploying? (Please select all that apply)

- First mile. Basic infrastructure and network development (i.e. identifying a provider to service middle/last mile)
- Middle mile. Links the network operator's core network to the local network plant/location
- Last mile. Links the local network to the customer/end user

What type of technology is your county utilizing? (Please select all that apply)

- Co-located transponders/fixed wireless
- Drone tethering/mobile hotspots
- Fiber
- Other (please specify)

When is your county's broadband expansion project set to be completed? Please provide as many details about your timeline as possible.

Are there any anticipated annual maintenance costs to your county? If yes, how is the county planning to cover such costs (user fees, annual budget allocations, etc.)?

What is the predicted service area for your broadband expansion project? (Please indicate by the measure that best applies to your project. Measures might include: number of homes, square miles, or region of county/Commonwealth.)

Do you have an anticipated cost to consumers for broadband services that utilize the county's project technology?

- Yes
- No

Please specify anticipated consumer costs with as much detail as possible.

Please note any additional information about your county's broadband project that you would like to share.

Based upon your experience with this project, what advice or suggestions would you give to other counties considering similar projects? What are some key takeaways, roadblocks and lessons learned from this project?

Who is the key contact for your county's broadband initiatives, should CCAP have further questions or communications regarding broadband expansion and deployment projects?

Name

Title

Email address

If the Commonwealth could supplement county broadband as part of Federal pandemic stimulus funding that is designated for broadband and infrastructure development, in your opinion, how could the state best use this funding to support or facilitate county broadband deployment initiatives?

This report was prepared by Melissa Gates of the County Commissioners Association of Pennsylvania (CCAP) and Cristy Halerz Schmidt of Penn State Extension with assistance from Penn State's Center for Economic and Community Development (CECD).

The County Commissioners Association of Pennsylvania (CCAP) is the voice of county government; a statewide nonprofit, nonpartisan association representing all 67 counties in Pennsylvania. CCAP members include county commissioners, council members, county executives, administrators, chief clerks, and solicitors.

County governments are responsible for a wide variety of critical services, including provision of human services (i.e., mental health, intellectual disabilities, juvenile justice, children and youth, long-term care, drug and alcohol services, housing) to people in need in our communities. In addition, counties are responsible for emergency management and 911 services, administration of the courts and corrections system, elections, maintenance of county bridges, and the county property assessment rolls, and are also involved in environmental and land use planning, protection of open space and community and economic development.

CCAP strengthens the counties' abilities to govern their own affairs and improve the well-being and quality of life for every Pennsylvania resident. It advocates for favorable state and federal legislation, programs, and policies on behalf of counties. CCAP is committed to service excellence through education, information, insurance, technology and other programs that support effective county government. Founded in 1886, CCAP is an affiliate of the National Association of Counties. For more information about Pennsylvania counties and CCAP, log on to www.pacounties.org and visit CCAP's Twitter page [@PACountiesGR](https://twitter.com/PACountiesGR).

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