Public Hearing on Rural Broadband Development and Policy: Testimony Highlights

June 2022

Key Findings

- The federal Infrastructure Investment and Jobs Act could provide up to $1.2 billion dollars to expand broadband access in Pennsylvania.
- To maximize Pennsylvania's share of federal broadband funds, it is imperative to quickly and accurately document unserved and underserved households and be prepared to potentially challenge Federal Communications Commission maps.
- Increased broadband funding will likely lead to greater demand for workforce development and support as states compete for qualified technicians to implement projects.

Current State of Rural Broadband

On May 20, 2022, the Center for Rural Pennsylvania Board of Directors hosted a public hearing on rural broadband development and policy in Wellsboro, Tioga County. The Center's Board held its first hearing on broadband in Wellsboro in 2018. Since that time, significant changes and investments have occurred in rural areas, and this public hearing was held to learn more about those changes and the upcoming investments that will be made because of the passage of the federal Infrastructure Investment and Jobs Act (IIJA) in 2021. The IIJA has allocated billions of dollars for broadband projects nationwide.

The hearing also highlighted progress since the passage of Act 96 of 2021, which created the Pennsylvania Broadband Development Authority as an arbiter of funds and broadband projects across Pennsylvania.

To understand the current state of broadband deployment in Pennsylvania, and how to support rural communities' in maximizing future broadband investments, the hearing featured testimony from broadband industry representatives, local government officials, nonprofit leaders, and researchers. Additionally, the Center received extensive written testimony from other broadband stakeholders, which are posted with other testimony on the Center's website. The Center Board was joined by Sen. Kristin Phillips-Hill, who is a member of the Pennsylvania Broadband Development Authority Board, and Sen. Cris Dush and Rep. Clint Owlett, who represent Tioga County.

Broadband Development Authority

Brandon Carson, Executive Director of the Pennsylvania Broadband Development Authority, and Erin Wachter, Deputy Secretary of Policy and Planning for the Governor's Policy Office discussed the creation and current work of the Broadband Authority. The Authority is governed by an 11-member board made up of legislators and other policy officials (including the Executive Director of the Center for Rural Pennsylvania). While the Authority is in the early stages of its work, it will eventually have a staff of approximately 10 employees. The Authority will establish grant programs to distribute federal funds and undertake an extensive data collection effort to prepare for the release of new Federal Communications Commission (FCC) broadband maps, which will mark the initial phase of funding from the IIJA. Public feedback is underway on a statewide action plan that will determine how dollars are prioritized, and more than 300 individuals and 80 organizations have been involved with initial feedback webinars.

Currently, the Authority has four core goals for the statewide action plan:
- Broadband Service Infrastructure and Availability
- Device and Technology Access
- Digital Equity and Affordability
- Digital Literacy and Technical Support

Mr. Carson and Ms. Wachter also provided an overview of the federal resources and regulations related to upcoming broadband investment. As stipulated in IIJA, management of broadband rollout will be organized by the National Telecommunications and Information Administration and not by the FCC. Most of the resources that will be made available to the states will come from the Broadband Equity, Access, and Deployment (BEAD) Program, which includes $42.45 billion to be distributed among all 50 states. Pennsylvania has already requested an initial $5 million for planning purposes. Each state is eligible for at least $100 million. Additional funds will be distributed to states based on the number of households that are deemed to be "unserved" [meaning they have no

internet connection or connection speeds less than 25 Megabits per second (Mbps) download/3 Mbps upload and "underserved" (less than 100/20 Mbps)].

Based on initial estimates from the Authority, Mr. Carson said that Pennsylvania could receive as much as $1 billion to $1.2 billion in federal dollars for broadband deployment. Additional funds will be available in smaller amounts for digital equity planning and connecting middle mile infrastructure to last mile networks to connect historically unserved areas. Mr. Carson expressed the importance of prioritizing rural, low-density areas that have been prohibitively expensive to connect in the past. However, there is still not a precise timeline for when funds will be available since the FCC has yet to release updated maps and initial analyses.

Mr. Carson also noted that supply chain and workforce issues are a serious concern for completing projects during the five-year timeline the state is required to develop, and that states would have to work together to ensure that overall production isn't hampered by adverse competition for labor and equipment.

Industry Representatives
Two panels covered internet service providers' perspectives on the implementation of BEAD funds. Todd L. Eachus, President of the Broadband Communications Association of Pennsylvania (BCAP), reinforced the importance of focusing on unserved and underserved areas and on creating protections against overbuild (using federal dollars to build projects where strong broadband connections already exist). He also encouraged legislators to be wary of the risk of fraud and waste from corporate entities that may try to benefit from federal dollars without a proven track record of success in internet service provision. He noted that those who build these projects have a responsibility to maintain new fiber networks over time, even in the most rural areas, and that maintenance of the networks would likely be profitable even when initial buildouts might have been cost prohibitive without federal dollars. Mr. Eachus encouraged the Authority to work with municipalities to streamline permits and with others on pole attachment requirements to improve the cost effectiveness of fiber buildout and maintenance. Lastly, he said that he is encouraging member providers to share data with the Authority to help determine where access is available and where limitations still exist.

Joseph Lorah, Director of Government and Public Affairs at Blue Ridge, a private cable company, discussed a recent project that had connected more than 1,550 customers in Tioga County to fiber, and a separate $250 million initiative to update its network infrastructure. He

reiterated the point to minimize overbuild and prioritize closing the digital divide where high-speed connections do not exist.

The second panel focused on phone and wireless internet providers. Steven Samara, President of the Pennsylvania Telephone Association, discussed the phone industry's interest in deregulation, as regulatory hurdles make it difficult to compete for broadband projects against less regulated competitors. Mr. Samara also noted that some telephone companies have had impressive uptake rates on broadband offerings, with North Penn Telecom (a telecom company local to Tioga County) seeing 85 percent of customers sign up for broadband with recent expansions.

Thomas Musgrove, Government Affairs Manager at Crown Castle, a telecom infrastructure company, discussed the proliferation of Wireless Internet Service Providers (WISPs) over the past several years. WISPs operate by running fiber cables to a central tower and then distributing access wirelessly, rather than running cable directly to households. He said this can be cost effective in rural areas where low population density can make direct fiber cost prohibitive. However, Mr. Musgrove identified specific challenges to implementing WISPs, specifically around zoning and permitting requirements on telephone poles and radio towers. Even small adjustments to cell towers require building permits, which can make upfitting and updating technology difficult. Mr. Musgrove also said that zoning has not kept up with changing needs, and municipalities that limit tower construction close to populations are limiting access to wireless services.

Barbara Burba, President, and Christopher H. Schubert, Esq., Treasurer of the Pennsylvania Wireless Association, echoed the sentiments on permitting and zoning, adding that lack of local regulations can likewise be detrimental to effective implementation of wireless internet projects. They also noted that some municipalities charge significant fees for access to roofs and other infrastructure, and that private organizations will avoid projects in areas with exorbitant fees and focus on areas where service can be provided with relatively less expense.

Broaband in North Central Pennsylvania
Several panels focused specifically on the state of broadband in north central Pennsylvania. Jason Bottiglieri, Superintendent of the Wyalusing Area School District, and James A. Nobles, President and CEO of North Penn Comprehensive Health Services and Laurel Health Centers, discussed the significant challenges their communities face because of limited access to high-speed

internet. They reiterated that high-speed internet access is a necessity and encouraged legislative action to prioritize funding to expand into areas where residents are unserved or where service is not meeting advertised levels. They also encouraged legislative action to limit data throttling. Mr. Nobles discussed regulations around telehealth and suggested that audio-only telehealth appointments may be a way to bridge the digital divide while internet expansion continues.

Rachel Hauser, Director of Regulatory Affairs and Economic Development at Tri-County Rural Electric Cooperative and Tri-Co Connections, discussed their work to provide high-speed internet to 2,500 members over the past four years. She stressed the increasing importance of symmetrical upload and download speed provision as video conferencing and other technological changes have increased the demand for quality uploading. Ms. Hauser reinforced the complexity of the current regulatory environment on providers, especially in terms of telephone poles and rights of way. She also highlighted Tri-Co's Senior2Senior program, a digital literacy effort that connects high school seniors with senior citizens to help the older generation build their technology skills. This program has been expanding across other regions of the Commonwealth and was recognized by multiple state legislators as a novel way to meet federal digital literacy requirements and provide valuable teaching opportunities to young adults.

Kristin Hamilton, Executive Director of Develop Tioga, discussed the challenges that Tioga County faces in getting full broadband connectivity. She reiterated the challenge of accessing service data from broadband providers, who worry about competition from other companies in their service areas. Ms. Hamilton also stressed the importance of subject matter experts being available for municipalities in making policy decisions, including draft ordinances that could help clarify important considerations for broadband. These experts could help ensure that municipalities can institute consistent rules for providers on access to infrastructure and reduce barriers to effective, region-wide deployment.

Robert Veilleux, McKean County Economic Development Liaison, also encouraged updating requirements around utility poles and other infrastructure. He noted that McKean County had to partner with local municipalities in its development of a new WISP because Commonwealth assets would have cost thousands of dollars to rent.

County commissioners from three local counties discussed how their municipal governments have been

working to understand the extent of broadband access and availability among their constituents. Commissioner Robert Postal of Mifflin County and the County Commissioners Association of Pennsylvania (CCAP) discussed recent work by the association and Penn State Extension to survey counties and find out what they are doing locally to improve connectivity. That work culminated in the July 2021 report "County Broadband Expansion," which stressed the need for multi-partner investments and development of best practices among counties, while acknowledging that no single solution will work for counties with different regulatory and geographic environments.

Elizabeth A. Lose, Assistant Director of the Centre County Planning and Community Development Office, discussed the county's development of a new comprehensive plan and broadband plan, and the support of a new WISP. She highlighted the value of developing strong partnerships with local internet service providers and the importance of keeping county offices involved in the development of the state's five-year plan.

Erick Coolidge, Tioga County Commissioner, echoed the policy considerations of the other panelists and noted how valuable accurate mapping and data will be to developing the state's five-year plan and deploying broadband to rural Pennsylvania.

Data Collection Important to Access Funds
The final panel discussed the steps Pennsylvania will need to take to prepare for the IIJA funds.

Jeremy Jurick, Vice President - National Broadband Services Director at Michael Baker International, discussed the importance of challenging upcoming FCC maps that will dictate how federal dollars are distributed among the states and territories from the BEAD program. Mr. Jurick encouraged an expansive data collection effort including surveys, data collection from service providers, speed test data, and grassroots data collection to confirm unserved areas. He also stressed the importance of including socioeconomic and environmental justice data to understand the financial constraints to accessing broadband, rather than focusing on deployment alone. Michael Baker's Broadband Digital Equity Atlas collects much of these data and identifies several rural areas in the Commonwealth to be in significant need of digital equity outreach. Finally, he encouraged the Broadband Authority to use community engagement practices to ensure that residents can share their broadband experience, and not let personal testimonials be set aside in favor of secondary data collection.

Thomas Beresnyak, Client Relationship Manager, and Harry Crissy, Extension Educator at Penn State Extension, discussed their work with the Pennsylvania Public Utility Commission (PUC) to map and track broadband expenditures from a previous federal program, the Rural Development Opportunity Fund (RDOF). Their work created a broadband access map that helped Pennsylvania receive more than $367 million in program funding for projects in almost every county in Pennsylvania. They offered their services in expanding the map to assist in planning for BEAD funding, which will require digital access measures similar to their previous map, which is open source and publicly available at https://extension.psu.edu/pennsylvania-broadband-map.

Sascha Meinrath, Palmer Chair of Technology at Penn State University, urged legislators to take advantage of all resources available to quickly develop strong data capacity. He discussed his previous research with the Center for Rural Pennsylvania that demonstrated significant separation between advertised broadband access and availability, and found that rural customers are likely to pay more money for worse service than their urban counterparts.

Professor Meinrath stressed that Pennsylvania is lagging other states in preparing data to challenge the forthcoming FCC maps, and that failing to get thorough access measures could cost the Commonwealth billions of dollars over the next decade. While some states, such as Michigan and Ohio, have spent more time preparing to challenge their federal allocations, he suggested there is still time for experts to compile the necessary data in a public and open-source manner to challenge the maps in the next six to 12 months.

Scan QR code for the agenda, testimony, and recording of the public hearing.