Pennsylvania Broadband Development Authority

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Pennsylvania Broadband Development Authority
October 18, 2022
9:00 AM
In-Person: Desert Room, Keystone Building Meeting Center
Virtual Meeting
Dial-In: +1 267-332-8737
Phone Conference ID: 439 774 944#

I.   Call to Order

II.   Approval of September 15, 2022 Meeting Minutes

III.   Penn State Extension Presentation
   • Broadband Availability, Access, Equity, and Utilization Proposal

IV.   Approval of Penn State Extension Scope of Work and Cost

V.   Public Comment

VI.   Adjournment

This meeting will be recorded, and your participation is your consent to being recorded. Due to limited space in-person general public participation may be limited.

Pennsylvania Broadband Development Authority
Board Meeting Minutes
September 15, 2022
Microsoft Teams Meeting

Board members and voting designees in attendance:

- Representative Pam Snyder, Chair
- Dr. Kyle Kopko, Center for Rural Pennsylvania
- Joe Witmer, PUC, on behalf of Gladys Brown-Dutrieuille
- Senator Kristin Phillips-Hill, Secretary
- Matt Franchak, on behalf of Senator John Kane
- Phil Kirchner, on behalf of Representative Carl Walker Metzgar
- Representative Carl Walker Metzgar
- Mark Critz, Department of Agriculture, on behalf of Secretary Russell Redding
- Dr. David Volkman, Department of Education, on behalf of Acting Secretary Eric Hagarty
- Matt Bembenick, Department of General Services, on behalf of Acting Secretary Joe Lee
- Zach Reber, Office of the Budget, on behalf of Secretary Ben Lukens
- Mike Hanna, Department of Community and Economic Development, on behalf of Acting Secretary Neil Weaver

Designees in attendance:

- Beth Rosentel, Office of Representative Pam Snyder
- Pam Frontino, Center for Rural Pennsylvania

Department of Community and Economic Development (DCED) staff in attendance:

- Brandon Carson
- Erin Wachter
- Kalie Snyder
- Lori A. Butler
- Leigh Walter
- Terri Wills
- Paul Opiyo
- Lori Irwin
- Colin Parry

Guests in attendance:

- Nicole Ugarte, National Telecommunications and Information Administration
- Eric Epstein, Rock the Capital
- Todd Eachus, Broadband Communications Association of Pennsylvania
- Jim Mercante, Southern Chester County Digital Coalition
- Jim Skjeveland, Rolka Loube
- Allison Kotzowitz
- Bryan DeWalt
- Kim Sukoloski
- Charlotte Keith, Spotlight PA

I.   Call to Order

Chairwoman Snyder called the meeting to order at 10:00 AM.
Kalie Snyder conducted a roll call of the board members and confirmed quorum.

II.   Approval of August 22, 2022, Meeting Minutes

Chairwoman Snyder called for a motion to approve the minutes as presented to the board. Motion made by Phil Kirchner. Motion was seconded by Dr. Kopko. Chairwoman Snyder asked for all Board members to approve or deny the motion. Motion passed unanimously.

III.   Election of Assistant Secretary

Chairwoman Snyder recognized her appointment to Chair of the Authority and asked for a motion to nominate a new Assistant Secretary. Dr. Kopko made a motion to appoint Senator Kane as Assistant Secretary. Motion was seconded by Matt Bembenick. Chairwoman Snyder asked for all Board members to approve or deny the motion. Motion passed unanimously.

IV.   Sub-Committee Membership Updates and Next Steps

Brandon Carson provided an update of the sub-committee member changes and an overview of the process to fill future vacancies. Brandon suggested that the Chair of the Board approve appointments for future vacant sub-committee seats. Chairwoman Snyder called for questions on the member changes and the vacancy process, there were none. Chairwoman Snyder called for a motion to approve the sub-committees as presented. Matt Franchak made a motion to approve the members. Motion was seconded by Dr. Kopko. Chairwoman Snyder asked for all Board members to approve or deny the motion. Motion passed unanimously.

Chairwoman Snyder asked for a motion to allow the Chair of the Board to approve sub-committee member changes. Dr. Kopko made a motion to allow the Chair to approve sub-committee member changes. Motion was seconded by Matt Franchak. Chairwoman Snyder asked for Board members to approve or deny the motion. Motion passed unanimously.

V.   Approval of Capital Projects Fund Grant Plan

Erin Wachter provided an overview of the Capital Projects Fund Grant Program (CPF). She also provided an overview of the Commonwealth's CPF Program Plans, to include three (3) separate sub-grant programs; 1) PA Broadband Infrastructure Program ($200 million), Digital Anchor Institution Grant Program ($45 million), 3) Digital Access and Opportunity Grant Program ($20 million). The remaining $13 million will be used for administrative costs, 2.5% for the Broadband office and 2.5% for grantees. Timeline for these programs depends on approval from Treasury, but the office anticipates a quarter 1, 2023 roll out of the $200 million Broadband Infrastructure Program and $45 million Digital Anchor Institution Grant Program and a quarter 4, 2023 roll out of the $20 million Digital Access and Opportunity Grant Program, to align with the timing of the State's Digital Equity Plan.

The Chairwoman called for questions on the CPF Program Plans. Joe Witmer asked if the Authority has thought about the RDOF areas that are no longer considered served due to contract

termination and the remaining awardees, and how these areas will be identified. Brandon acknowledged that BEAD and CPF dollars could be used in those areas and indicated that staff is looking at ways to incentivize RDOF awardees to shorten their project timelines.

Mark Critz asked for confirmation that there will be dedicated Authority staff supported through CPF administration dollars, to which Erin confirmed yes.

Matt Franchak asked for the definition of "quickly" as used in the Infrastructure Program. Brandon said its relative but his idea of quickly is 18 months, for complete project build out.

Chairwoman Snyder asked for a motion to approve the Capital Projects Fund Program Plans as presented to the Board. Motion made by Representative Metzgar. Motion seconded by Matt Franchak. Chairwoman Snyder asked for Kalie Snyder to do a roll call vote of each Board member for concurrence. Motion passed unanimously.

VI.   Public Comment

Eric Epstein, Rock the Capital, discussed a recent PUC meeting and comments made about interconnectivity. He also requested a legal opinion if the Authority chooses not to sunshine the sub-committee meetings.

Todd Eachus, Broadband Cable Association, asked for clarity on the amount of administrative funds available for sub-grantees, to which Erin provided clarity that it's an even split of 5%. He also mentioned the Emergency Connectivity Funds, a program that focuses on devices, and PA received $100 million, so to ensure coordination with those funds. Lastly, he understands the need to define the term "quickly" but requests consideration of workforce and supply chain issues that may prevent delays.
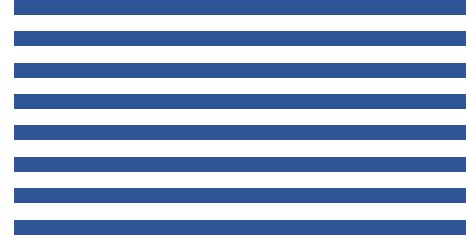
Jim Mercante, Southern Chester County Digital Coalition, added comments about the ACP requirements under CPF and that there are currently some concerns regarding the program being misused by providers and suggested establishing a process for accountability.

VII.   Adjournment

Chairwoman Snyder called for a motion to adjourn. Motion to adjourn was made by Matt Franchak. Motion seconded by Dr. Kyle Kopko. Meeting adjourned at 10:30 AM.

Respectfully submitted,

Senator Kristin Phillips-Hill
Secretary

PennState Extension

BROADBAND AVAILABILITY, ACCESS, EQUITY, & UTILIZATION PROPOSAL

September 28, 2022

Penn State Extension Engagement

- Pennsylvania received $368,743,200 in RDOF funding

- 327,000 Pennsylvanians will gain access to high-speed internet

- 66 of 67 counties received funding

- Pennsylvania ranked 7th in the nation for RDOF auction money awarded

- As a trusted community partner

- Offices in all 67 counties

- Uniquely positioned to collaborate with stakeholders on efforts to expand high-speed internet access

Overview

The Pennsylvania State University College of Agricultural Sciences is pleased to share the following Broadband Availability, Access, Equity, and Utilization Proposal. The broadband initiative seeks to explore mapping and spatial analysis tools relevant to stakeholder needs; inform the FCC challenge process; offer deployment cost estimation tools, and explore options to expand digital literacy and equity.

Penn State Extension has an established track record of pioneering applied research and outreach beyond the university walls that helps residents navigate the issues and opportunities of new technology and connected digital infrastructure. Specifically, the College has focused on technology development, deployment, application, utilization, and economics that support the ability of individuals, organizations, and businesses to enhance their capacity to manage resources more effectively and efficiently.

Background

Penn State Extension is a modern educational organization dedicated to delivering science-based information to people, businesses, and communities. In support of Extension's public good mission, in March of 2020, the Pennsylvania Public Utility Commission (PA PUC) reached out with an idea to create a map highlighting funding available through the Rural Digital Opportunity Fund (RDOF) by federal, state, and local legislative districts. Chairman Gladys Brown-Dutrieuille tasked her staff to assist with RDOF adoption. General Counsel Joe Witmer contacted Extension with insightful mapping suggestions. Together, an easily accessible online map was created that empowered stakeholders to quickly visualize where local funding was available and to use map tools to drill down to additional community-level data. The new visual representation of broadband data encouraged elected officials, especially county commissioners, to engage potential bidders. The combination of easily accessible and visual information is widely credited with helping the Commonwealth:

- Receive $368,743,200 in RDOF funding

- Up to 327,000 Pennsylvanians will gain access to high-speed internet over the next ten years

- 66 of 67 counties received funding

- Pennsylvania ranked 7th in the nation for RDOF auction money awarded

Broadband Availability, Access, Equity, & Utilization

Penn State Extension spatial analytic capabilities developed for the FCC RDOF project can now assist Commonwealth, agencies, organizations, communities, and industry with mapping and spatial analysis in the following ways:

- Assisting in any FCC service claim challenges based on mapping data

- Working with individual counties and economic development districts on identifying priority broadband deployment projects

- Assisting internet service providers, agencies, and organizations with downloadable mapping data

- Providing mapping tools to estimate the cost of serving unserved/underserved populations

- Conducting statewide and individual county broadband needs assessments

- Incorporating updated data and demographics from trusted secondary data sources

- Locating unserved or underserved homes and businesses

- Providing viewshed tools to estimate wireless tower reach

- Displaying the locations of vertical assets owned by federal, state, and local entities

- Identifying utility infrastructure locations that can be leveraged for fiber installations

Prioritized Projects

1. Public Broadband Spatial Analysis and Mapping Tools

   Utilizing FCC Form 477 data and CostQuest fabric data, Penn State Extension will develop and update state broadband maps. Beyond simple broadband mapping, the FCC provider data will be combined with public data (i.e., census-demographics, BLS-employment/jobs, EPA-environmental justice, general services-emergency management pole, tower, and viewshed data, PDA Ag census, etc.) and with permission, private data (i.e., fiber runs, taps, towers, etc.).

2. FCC Challenge Applied Research Process

   In collaboration with a scientific steering committee, Penn State Extension will evaluate the accuracy of industry-provided FCC data to inform the Commonwealth challenge process. Spatial and secondary data analysis will verify Form 477 claims and identify potential anomalies. Further, the Penn State Extension network across all 67 counties will be engaged to confirm broadband availability through provider website data and compared to the official Form 477 data to identify additional FCC challenges and funding opportunities.

3. Broadband Deployment and Fiber Cost Modeling support

   Penn State Extension will work at the county, Local Development Districts, and/or Economic Development Districts level to provide geo-analytics, data analysis, and cost estimating for fiber to the premises to support local data-driven decisions about broadband deployment. As other future-proof broadband deployment technologies are developed, they may be incorporated into future costing models.

4. Digital Literacy and Equity

   Beyond broadband deployment to underserved areas and communities, Penn State Extension will work to promote digital equity in underserved populations through community, industry, agency, government, and public-private partnerships. Digital equity and utilization applied research and education will focus on developing new digital skills and using them to address/access new opportunities such as jobs, education, health, and quality of life. Examples of Extension digital equity work can be found through national 4-H, which has the Tech Changemakers program in place to empower young people to close the digital divide and provide opportunities for all people in all communities through digital education tools for youth and adults.

Project Timeline

November 1, 2022 – June 30, 2023

The project timeline depends on the timely release of accurate FCC/NTIA data and funding availability. If unforeseen data or funding delays occur, the Penn State Extension Broadband team respectfully requests the option to implement a one-time no-cost extension to last no longer than October 30, 2023.

Budget Estimation

- Faculty Researchers, Extension Educators, & Staffing $375,219
- Programming, Design, Integration, & Development $333,964
- Materials & Equipment..$55,600
- Travel & Project Support $57,500

     Total $822,283

Note: The budget is designed to begin new project development, education, and applied research. As such, project funding will be prioritized based on actual cost, sustainability, and the potential to help stakeholders positively manage broadband deployment options.

Broadband Vision & Objectives

In keeping with the unique land-grant mission, the value of engaged knowledge work, and the desire to foster positive innovation, the broadband initiative will focus on:

- Providing publicly accessible and open-source data mapping and analysis tools where stakeholders can visually identify unserved broadband areas

- Making transparent current FCC broadband data, demographics, and infrastructure data to inform the challenge processes for the residents of the Commonwealth

- Empowering local officials, economic development professionals, and communities to reasonably estimate deployment costs of fiber to the premises (home or business)

- Enhancing broadband accessibility, equity, adoption, utilization, security, and policy conversations through the implementation of transdisciplinary public-private project teams and transparent data analysis

- Exploring broadband infrastructure relevant to stakeholder needs to support data-driven decision-making for health, education, business efficiency, sustainability, growth, competitiveness, and profitability

- Utilizing broadband technology to empower individuals, businesses, and communities across the Commonwealth with options that enhance their capacity to access and manage resources more effectively and efficiently

- Continuing to be a trusted educational institution as a neutral source of quality information that supports data-driven decisions

Extension Qualifications Overview

Penn State Extension maintains active offices in all 67 counties throughout the Commonwealth. As a result, Extension personnel can quickly connect new broadband ideas, information, and opportunities to stakeholder needs through applied research and education. The direct relationship with local citizens and county commissioners informed Extension's broadband effort by building awareness about the need for accurate broadband mapping, potential funding available, and deployment implications for Pennsylvania. The network of connections to residents is unique to the Penn State land-grant mission and truly makes Penn State Extension exceptionally qualified to help residents across the entire state with the most challenging issues and opportunities.

As mentioned previously, Penn State Extension, in partnership with the PA Public Utility Commission, was instrumental in helping to bring more than $368 million in broadband infrastructure funding to 66 of Pennsylvania's 67 counties (7th most in the US). Additionally, the broadband team developed a costing model to help local governments, counties, schools, and nonprofits identify the areas with the largest underserved populations with the lowest broadband availability. In a recent interview, FCC Commissioner nominee Gigi Sohn referred to the Penn State Extension map as "the Gold Standard" in state mapping.

Concerning agriculture, farmers will require broadband access to support emerging technologies such as augmented reality, artificial intelligence, robotic milking, autonomous vehicles, and blockchain-based supply-chain tracking. Farms and food-based businesses across the state without access to high-speed internet will be at a considerable economic disadvantage and unlikely to maintain their efforts to enhance efficiency, sustainability, growth, competitiveness, and profitability. Moving beyond the food system, residents without broadband access will lack the ability to utilize telemedicine, education, entertainment, and discover employment opportunities benefitting those in connected areas.

As an illustration of urgency, over the next 12-24 months, tech companies expect to release 20+ new augmented reality devices. When integrated with other technologies like blockchain for security or connected information infrastructure for data-driven decisions, the emerging technologies may be a competitive tool for all-size farm operations and businesses. However, Pennsylvania will lose a competitive edge to other states without deploying a future-proofed broadband infrastructure with the capacity to support emerging technologies in areas with the most need.

Further, over the last 24 months, Penn State Extension partnered with the Smeal College of Business Supply Chain and Information Systems Department to work on a blockchain feasibility survey and pilot farm project. Business blockchain is an emerging technology that may connect producers to consumers, offer real tack & traceability, expand verification of carbon markets, enhance inventory management, speed transaction efficiency, and offer immutable security options for businesses. However, PA businesses will not be able to leverage the potential competitive advantages of business blockchain without robust and connected broadband infrastructure.

The combination of Penn State Extension's broadband partnership success, current blockchain project(s), awareness building about emerging technologies, and many other successes place the entire College in a position to be at the forefront of broadband development. The College actively seeks projects that will bring transdisciplinary approaches to bear on emerging technology and broadband infrastructure while leveraging the incredible power of the unique land grant teaching, research, and extension (outreach) mission.

For more information, please contact:

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Version:
    July 7, 2022 – Original proposal
    September 12, 2022 – Timeline Update
    September 28, 2022 – Timeline and Broadband Availability, Access, Equity, & Utilization Section

Penn State Extension Engagement

- 31.2M website pageviews
- ~ 10 million users
- 439,000+ program registrants
- 190,000+ email subscribers
- 481,939 publications distributed

PennState Extension