

2024

WEST VIRGINIA OFFICE OF BROADBAND

West Virginia Broadband Enhancement Council

Annual Report







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1. Executive Summary

The West Virginia Department of Economic Development, Office of Broadband, and the West Virginia Broadband Enhancement Council jointly submit this 2024 Annual Report to the West Virginia Legislature, in compliance with W. Va. Code §31-G-1A-2(8). The agencies work collaboratively with a shared mission: to expand and improve broadband connectivity in West Virginia.

Throughout 2024, West Virginia achieved significant milestones through the continuation of the West Virginia Broadband Investment Plan and implementing Internet for All West Virginia.

Through Internet for All West Virginia, the West Virginia Office of Broadband, West Virginia Broadband Enhancement Council, and our partners joined together to launch West Virginia's Digital Equity Plan and Broadband Equity, Access, and Deployment (BEAD) Plan. During 2024, the National Telecommunication and Information Administration (NTIA) approved West Virginia's Initial Proposal Volume 1 and 2 resulting in the successful launch of the West Virginia BEAD Challenge Process, Pre-Application, Full Application, and Full Application Extension Round. The Internet for All West Virginia initiative is designed to achieve digital equity throughout the Mountain State. Working together, West Virginia can achieve a more connected future.

The WVBIP enters its third-year dedicating funds from the American Rescue Plan Act (ARPA) State and Local Fiscal Recovery Fund (SLFRF) and Capital Projects Fund (CPF) with a total combined allocation of \$172,467,297 to close out the year. With this investment of public funding dedicated to broadband expansion, West Virginia will deploy approximately 3,850 miles of fiber to connect over 39,500 unserved and underserved locations.

The WVBIP continues to achieve milestones within its mission based on the following foundation:

- Leverage Private Investment
- Involve Local Governments
- Encourage Public-Private Partnerships
- Connect the Unconnected

The WVBIP includes four separate programs, each designed to meet West Virginia's broadband development needs through efficient utilization of state and federal funding streams. Briefly, the WVBIP programs include:

- a. Line Extension, Advancement and Development (LEAD): Expansions of existing fiber and cable networks,
- b. GigReady: A state incentive for local governments and organizations to pool local ARPA allocations or other local funding,
- c. Major Broadband Project Strategies (MPBS): Significant new networks or major expansions of existing networks, and

d. Wireless Internet Networks (WIN): Expansions or upgrades of existing fixed wireless networks.

Project announcements began in 2022, and by the close of 2023, West Virginians started connecting to new broadband infrastructure. Throughout 2023 and 2024, WVDED continued to build additional connections, awarding 40 projects touching 37 counties. Additionally, in 2024, WVDED closed out the application window for the BEAD program which implements several major plan documents for Infrastructure Investment and Jobs Act (IIJA) grant funding, setting the stage for project awards and even more infrastructure deployment in 2025 to achieve universal broadband coverage.

West Virginia's 2024 Accomplishments

One of the first states to:

Receive NTIA approval of its Initial Proposal

Receive NTIA approval of its Digital Equity Plan

Receive approval for its DE Capacity Grant (\$9 million)



Launched deployment application process for BEAD, CPF, SLFRF and ARC funds



Approved 11 LEAD awards, deploying over 600 miles of fiber to 4,900 locations



Led 140+ engagement meetings with 50+ Federal, state, and local stakeholders

1.1 West Virginia Broadband Enhancement Council

The West Virginia Broadband Enhancement Council, created in 2017 by the West Virginia Legislature, represents diverse users of broadband, including residential and business users located throughout the State. The Council continues to provide the West Virginia Office of Broadband administrative and technical support services and ensures coordination of broadband efforts in West Virginia. The Council has 13 voting members; as well as two Senate Appointees and two House of Delegates Appointees, one from each party, to serve as ex officio, nonvoting advisory members. The Council conducts a regular meeting on the second Thursday of each month, at 10:00 a.m., in the West Virginia Department of Commerce offices in Building 3 at the State Capitol Complex or virtually.

The Council builds upon input from numerous state agencies and recognizes the value of representation from urban and rural communities throughout West Virginia. The Council's composition, which includes a cross-section of state agency directors, legislative advisory members, business community leaders and both urban and residential users, ensures that multiple voices are heard, that West Virginia's needs are represented, and that viable solutions are thoughtfully pursued.

The Council is committed to the development of policies, plans, and procedures to expand and enhance broadband access throughout West Virginia. The Council places a primary emphasis on the development of broadband infrastructure in unserved and underserved areas of the State as outlined in West Virginia Code § 31G-1-1, et seq: http://www.wvlegislature.gov/WVCODE/31G.

The Council's annual budget includes the purchase of the licensing necessary to continue speed testing and mapping projects, associated data subscriptions, software, marketing and communications, and other limited expenses to support broadband expansion. Additionally, the Council approved the expenditure of funding for specific legal services and technical consulting services.

In 2021, House Bill 2002 amended West Virginia Code §31G to outline specific duties and authorities to be shared among West Virginia Broadband Enhancement Council the Office of Broadband.

For more information, visit the Council website at: broadband.wv.gov.

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Rural Business User Congressional District 1

Vacant

Rural Business User Congressional District 2

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1.2 West Virginia Office of Broadband

Created in 2021 by an act of the West Virginia Legislature, the West Virginia Office of Broadband is organized under WVDED as outlined in West Virginia Code § 31G-1A-1, et seq. The Office of Broadband is managed by a director, who reports to the Secretary of Economic Development.

The Office of Broadband works cooperatively with the West Virginia Broadband Enhancement Council. Both the Office of Broadband and Council are formed under WVDED. The agencies work collaboratively with a shared mission: to expand and improve broadband connectivity in West Virginia.

Duties of the Office of Broadband include making recommendations to the legislature, gathering and reporting broadband adoption rate data, and leading public awareness of issues concerning broadband service. The authority of the Office includes the ability to make recommendations to the Legislature regarding broadband expansion and easement programs, solicit, receive and dispense funds from funding sources other than the legislature, and overseeing the use of conduit. The Office of Broadband is the lead agency for most efforts described throughout this document and continues to spearhead the BEAD and Digital Equity programs for the State. For consistency, WVDED will be used in reference to the Office of Broadband in all but the following sections.

The Secretary of WVDED oversees all activities within the Office of Broadband. Figure 1 offers a full organizational chart of the Office of Broadband.

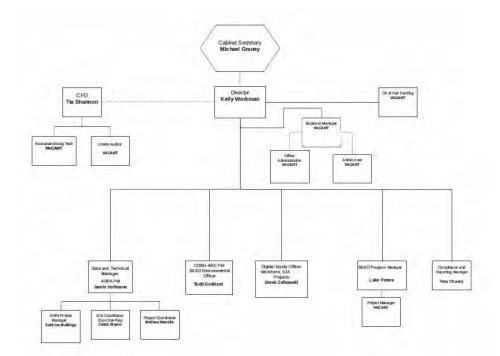


Figure 1: Office of Broadband Organizational Chart

Table 1 details the roles of each of the five Office of Broadband BEAD team members. These BEAD team members will specifically support the implementation of BEAD funding alongside existing Office of Broadband staff to implement the BEAD program.

Table 1: Core Office of Broadband Team Members

Full/part-		rt-	
Current/plann	ed time	Position	Role
Current (1) Planned (2)	Full	Program Manager (1) Project Manager (2)	The Program Manager and Project Managers will support Office of Broadband staff with processing data requests; implementing BEAD activities; managing community outreach and stakeholder activities, and ensuring that grantees and subgrantees complete deliverables in a timely manner and meet BEAD Program objectives, including alignment with the Digital Equity Planning Grant.
Current (1)	Full	Accounting Technician	Under the direction of the agency CFO, the Accounting Technician will be responsible for completing and submitting grant reports in coordination with the Business Manager, Administrative Professional, Office Administrator, and Office of Broadband staff (as allowable and appropriate); preparing activities related to grant monitoring, audit, or compliance requests; processing invoices and grant-related financial documents; and compiling, reconciling, and managing the submission of subgrantee reports and documents.
Planned (1)	Full	Administrative Professional	The Administrative Professional will be in charge of completing and submitting grant reports on behalf of, or in coordination with, the Business Manager, Accounting Technician, Office Administrator, and Office staff (as allowable and appropriate); archiving grant-related documents and documentation; preparing for, and supporting, any activities related to grant monitoring, audit, or compliance; and compiling, reconciling, and managing the submission of subgrantee reports and documents.

For efficiency and subject matter expertise, the Office of Broadband and Council have procured professional consulting services. Contracted partners include: Bowles Rice LLP, providing legal assistance; The Thrasher Group, providing engineering consulting services; Tilson Technology Management, Inc., (Tilson) providing overarching broadband consulting services; and Ookla, providing speed testing data and analytics. Tilson provides support to WVDED throughout the BEAD process and assists WVDED in the development and administration of the West Virginia Broadband Investment Plan, discussed in the subsequent section.

For more information, visit: broadband.wv.gov.

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1.3 2024 Achievements and Milestones

The West Virginia Department of Economic Development, the Office of Broadband, along with the West Virginia Broadband Enhancement Council and the West Virginia Economic Development Council, made significant advancements with the State's broadband expansion initiatives throughout 2024. These advancements include:

Broadband Equity, Access, and Deployment:

- West Virginia became one of the first states to receive NTIA approval of the Initial Proposal.
- West Virginia was one of the first states to open a BEAD application cycle. The state
 accepted pre-applications and full applications for BEAD deployment, and supported
 applicants with detailed procedures, FAQs, and application webinars.
- West Virginia held its second Broadband Summit from October 22 to October 23, 2023.
- West Virginia successfully executed the state BEAD Challenge process.
- Governor Jim Justice issued the approval of 11 LEAD awards, which will deploy over 600
 miles of fiber infrastructure to cover over 4,900 locations.
- WVDED secured \$1,509,517 from the Appalachian Regional Commission to provide Technical Assistance to workforce development entities interested in applying for WVDED's forthcoming Workforce Development Grant Program.

Digital Equity Initiatives:

- The NTIA approved West Virginia's Digital Equity Plan on February 29, 2024. West Virginia was one of the first states to receive NTIA approval of this plan.
- West Virginia submitted its Digital Equity Capacity Grant Application on May 15, 2024, and the NTIA officially approved West Virginia's DE Capacity Grant application on November 1, 2024.
- The NTIA approved West Virginia for \$9 million in Digital Equity Capacity funds.
- WVDED led over 140 engagement meetings with over 50 Federal, state and local stakeholders.

American Rescue Plan Act:

- Approximately \$175 million in grant funds were awarded to support 42 broadband projects across West Virginia.
- Four projects have completed construction, delivering high-speed broadband to targeted locations.
- Twelve projects are actively under construction.
- Eight projects are scheduled to begin construction in early 2025.
- Eighteen projects in the permitting and design phase will start construction in 2025.
- WVDED released a new version of the West Virginia Broadband Availability Dashboard.

2. Introduction

2.1 Key Priorities

West Virginia's leaders understand that broadband has moved beyond optional to essential. WVDED is guided by three core pillars as it strives to achieve universal broadband coverage and digital equity for West Virginia through the planning and implementation of Infrastructure Act funds. These are:



With these primary areas in mind, recent policy initiatives indicate that improving broadband and bridging the digital divide is one of the State's highest priorities. Broadband is the essential economic infrastructure that West Virginia needs to compete regionally, nationally and globally.

The West Virginia Broadband Enhancement Council and the West Virginia Office of Broadband continue to advocate for greater connectivity. This mission is strongly supported by the Governor Justice, the West Virginia Legislature, West Virginia Department of Economic Development, West Virginia Department of Commerce, and numerous partners.

Nationally, West Virginia's Congressional representatives continue to support and enhance Federal programs for broadband development. With this shared vision firmly in place, State policy is implemented to address barriers as they are identified.

2.2 Key Partnerships

Communication with and cooperation among West Virginia's Internet Service Provider (ISP) community is essential to the expansion of broadband in West Virginia. Joint ventures and innovative partnerships between public agencies, private companies and investor-owned utilities demonstrate the collaboration needed to improve connectivity. Notably, Internet Service Providers in West Virginia have dedicated matching funds in the amount of \$67,597,879 for a total investment of more than \$240 million in broadband infrastructure projects throughout West Virginia across all projects announced to date.

The West Virginia Broadband Enhancement Council and the West Virginia Office of Broadband strongly support these efforts and will continue working to develop a more connected West Virginia. Working collaboratively, West Virginia is pursuing primary goals to:

- Encourage the development of broadband infrastructure in the State;
- Evaluate and map the broadband infrastructure and service systems through an Interactive Mapping Program and other data collection methods;
- Eliminate barriers to broadband infrastructure development within the State;
- Engage and mobilize the expertise, funding, and partners to facilitate the creation of reliable and affordable broadband service; and
- Expand economic development and represent the State in matters related to broadband infrastructure development.

The West Virginia Office of Broadband and West Virginia Broadband Enhancement Council extend appreciation to Tilson Technology Management, Inc., for significant contributions and commitment to broadband development in the State of West Virginia as the State's lead broadband consultant.

West Virginia's long-standing partnership with Ookla® continues to strengthen the State's growing ability to collect, analyze and visualize important broadband consumer speed test data.

Recently, AECOMM assisted the Office with identifying gaps and solutions pertaining to pole attachments. AECOMM supported the Office by providing industry knowledge necessary to coordinate with utilities, pole owners, Internet Service Providers, and the Public Service Commission of West Virginia.

3. Infrastructure Investment and Jobs Act Programs

WVDED is tasked with deploying local and Federal broadband funds, including historic funding from the Infrastructure Investment and Jobs Act (IIJA), administered by the National Telecommunications and Information Administration (NTIA). IIJA funding includes \$1.2 billion in Broadband Equity, Access, and Deployment (BEAD) funding for deployment and \$9,011,588 in Digital Equity Act funding for the State of West Virginia. This investment in broadband infrastructure and related digital inclusion will help West Virginia achieve its goal of universal broadband access.

WVDED continues to lead the nation as one of the first states to execute the deployment application process for internet service providers. By the end of 2024, WVDED will conclude the application process, including an extension, and will begin the subgrantee selection process and other pre-award activities. WVDED looks forward to supporting its subgrantees in 2025 and implementing plans through the ongoing support of partners and local stakeholders. WVDED's deployment progress means West Virginia will be one of the first states to award BEAD subgrants for workforce, related non-deployment support projects, and digital equity in 2025. Digital equity projects will be supported by any remaining BEAD funds following deployment awards, as well as the State's \$9 million allocation under the Digital Equity Capacity Grant Program, administered by NTIA.

The following marks key milestones in 2024 for the BEAD Digital Equity Capacity Grant Program.

West Virginia's IIJA Milestones in 2024

- a) Became one of the first states to receive NTIA approval of the Initial Proposal
- b) Successfully executed the state BEAD Challenge process
- c) Launched a comprehensive deployment application process for BEAD, CPF, SLFRF, and ARC funds
- d) Accepted Pre-Applications, Full Applications, and Extension Applications for BEAD deployment
- e) Supported applicants with detailed procedures, FAQs, and application webinars
- f) Became one of the first states to receive NTIA approval of the State Digital Equity Plan
- g) Approved for \$9 million in Digital Equity Capacity funds
- h) Supported West Virginian organizations submitting Digital Equity Competitive Grant Program applications
- i) Led over 140 engagement meetings with over 50 Federal, state, and local stakeholders

3.1 Broadband Deployment

3.1.1 BEAD Initial Proposal

West Virginia's Initial Proposal comprises two volumes and establishes its proposed plan to achieve full broadband access across the State. Volume 1 identifies locations targeted for funding and details the State's plan to run a challenge process. This challenge process, discussed in greater detail in Section 3.1.2, offers internet service providers the opportunity to provide input on target locations and their BEAD eligibility status. Specifically, the BEAD eligibility status determines whether applicants will be able to propose projects for these locations. Then, Volume 2 describes how the State will run a fair, open, and competitive application process, select projects, and meet BEAD requirements with the aim of achieving universal broadband coverage.

Across these two volumes, WVDED built upon its Five-Year Action Plan and covered all 20 topics required by NTIA. These are highlighted in Figure 2.

Figure 21: Initial Proposal Requirements



WVDED was proudly one of the first states to receive NTIA approval of both its volumes:

- January 29, 2024 Approval of Initial Proposal Volume 1
- April 18, 2024 Approval of Initial Proposal Volume 2

These documents have and will continue to guide the State through the rest of its BEAD deployment efforts, beginning with the State Challenge Process.

3.1.2 State Challenge Process

Upon approval of its Initial Proposal, WVDED and its partners implemented a challenge process that supported accurate identification of broadband serviceable locations available for BEAD funding. The possible statuses for locations are unserved, underserved, served, and eligible CAIs. Served locations would ultimately not be eligible for BEAD funding.

Challenge Phase (30 days). WVDED created an online portal through which representatives of internet service providers, local government, and non-profits could submit challenges to the BEAD-eligibility statuses of locations. This phase ran from February 10 to March 10, 2024.

Rebuttal Phase (30 days). After the challenge phase, internet service providers could participate in the rebuttal phase, during which they could provide counterevidence to a challenge. This phase ran from March 11 to April 13, 2024.

Final Determination Phase (11 days). WVDED reviewed the evidence for each challenge, including the evidence from any rebuttals, and made a final determination to "sustain" or "reject" each challenge. This final phase ran from April 13 to April 24, 2024.

The BEAD Challenge Process began in February and closed in April 2024 and resulting in the challenges listed in Table 2.

Table 2: Challenge Process Results

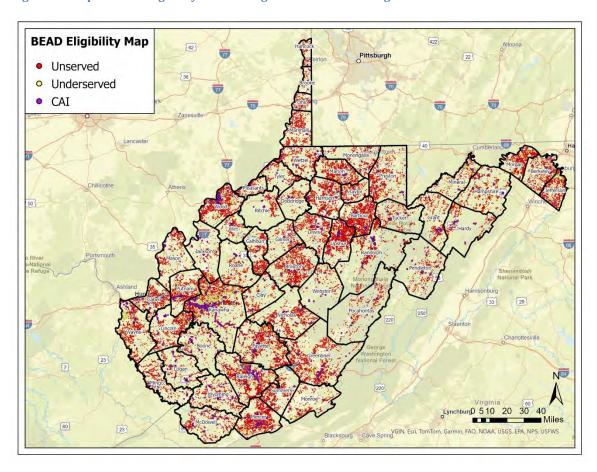
Challenge Category	Challenges:	
	Submitted	Approved
Existing Service	3 <i>,</i> 953	3,889
Planned Service	76,765	65,649
Availability	18	3
Business Service Only	3	0
CAI	224	2
Qualifying Broadband Available	112	110

Note that West Virginia adopted a pre-challenge modification to treat 11,890 locations served via digital subscriber line (DSL) as underserved to facilitate the phase-out of legacy copper facilities. West Virginia also reported 211,621 locations served by an enforceable commitment. Following the final determination phase, WVDED determined the counts listed in Table 3 for broadband serviceable locations in West Virginia.

Table 3: Count of Eligible Locations Following the Challenge Process

Serviceability Status	Count
Unserved	96,986
Underserved	14,850
Eligible CAIs	2,342

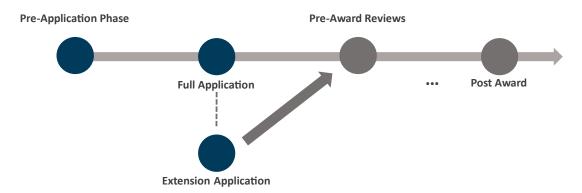
Figure 32: Map of BEAD Eligibility in West Virginia After the Challenge Process



3.1.3 BEAD Application Process and Resources

The BEAD program is divided into two phases and an extension phase, followed by the Pre-Award and Post Award. These phases are highlighted in Figure 4 below. At the time of drafting this report, WVDED has not publicly announced the results of the application phases. These details will be released at a later date.

Figure 43: BEAD Program Phases



3.1.3.1 Pre-Application Phase

On March 18, 2024, only a week after West Virginia received approval of its Challenge Process results from NTIA, WVDED launched the first phase in its application process: the Pre-Application phase. The Pre-Application phase allowed interested parties to show their eligibility and capacity for expanding broadband infrastructure with BEAD funding. Applicants had to complete this step if they planned to submit a Full Application. The phase ran for 60 days from March 18 to May 30, 2024, after an extension.

During this phase, applicants submitted key information about their companies, capacity to take on projects of varying sizes via two or three pro formas, commitments required for the BEAD program, and more. Overall, this phase was intended to collect information that will apply to all the applicants' proposed projects, streamlining the process, and assessing the capacity of the applicant. WVDED assessed the materials and performed remediation as necessary with the applicants.

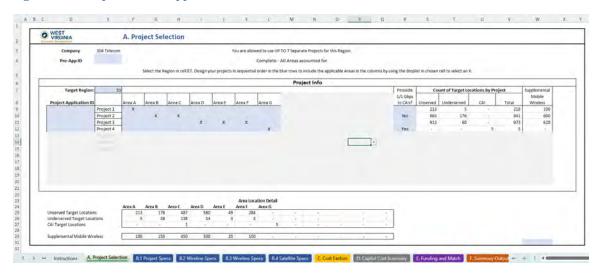
3.1.3.2 Full Application Phase

After the close of the Pre-Application phase, review of the applications, remediation, and conclusion of the process, WVDED launched the Full Application phase. Applicants that had successfully completed Pre-Applications were then able to submit their proposed projects during this new phase. Because the State had already collected general application information during the Pre-Application portion, applicants could focus on designing and submitting their proposed projects.

This phase ran for another 60 days, from August 26 to October 24, 2024. Using a combination of the ZoomGrants portal and specially designed workbooks, applicants created and detailed their proposed projects for WVDED consideration. WVDED designed the application workbooks to incorporate many of the program rules and allow applicants to build their projects in a logical manner. Figure 5 shows an example of the Full Application Workbook, which guided applicants through each step in the project specification design process.

While details related to the number of applications received, applicants participating, and provisional subgrantees cannot be announced at this time, WVDED views it as a strong success.

Figure 54: Example of a Full Application Workbook



3.1.3.3 Extension Application Phase

Prior to the conclusion of the Full Application phase, WVDED conceived of and announced the Extension Application phase, which would solicit proposals for Target Areas and Regions that either did not receive proposals during the Full Application phase or were at risk of not having viable proposals. WVDED established this program feature in case an extension would be necessary.

After the close of the Full Application phase, WVDED found that the Extension was required. Accordingly, WVDED held the Extension Application phase from November 13 to December 19, 2024. The Extension focused on the remaining Target Areas that currently lack viable projects or are at risk of not receiving any. During the Extension, additional funding for broadband deployment was made accessible through the Appalachian Regional Commission (ARC) and the U.S. Department of Treasury's Capital Projects Fund (CPF) and State and Local Fiscal Recovery Fund (SLFRF). WVDED also created a new set of program procedures that built on the original BEAD Deployment Program Procedures and introduced increased flexibility in creating applications.

Additionally, to promote as much participation as possible, WVDED opened this phase to applicants that had not yet submitted Pre-Applications on the condition that interested entities must submit one prior to proposing projects.

3.1.3.4 BEAD Program Resources and Assistance

Throughout the application phases, WVDED created a wide range of resources and disseminated these and other information about the program to encourage greater, easier participation. These include, but are not limited to:

- Fifteen workshops, webinars, and office hour sessions;
- Deployment Program Procedures, which were updated as new information became available;

- Extension Program Procedures;
- A regularly updated Frequently Asked Questions (FAQ) document that at the time of drafting this report stands at 47 pages;
- Blog posts announcing news related to the program, important dates and changes to the program, and the availability of other resources;
- A questions submission form that interested entities used as an indirect way of communicating with WVDED; and
- Email contact information through which applicants submitted many questions and could quickly and easily contact WVDED.

WVDED aimed to create an environment that fostered greater participation in the program while helping to guide existing applicants through each step. To accomplish this, WVDED held the above mentioned 15 workshops, webinars, and other sessions. Table 4 provides an overview of each session and its contents.

Table 4: Workshops, Webinars, and Other Sessions Held by WVDED

No.	Date	Location	Topics
1	March 14, 2024	Webinar	Pre-Application: Walkthrough, regulatory,
			legal, and program compliance
2	March 28, 2024	Fairmont, WV	Pre-Application: Walkthrough, regulatory,
			legal, and program compliance
3	April 10, 2024	Webinar	<u>Pre-Application</u> : Responses to FAQs, letter of
			credit or performance bond, scoring details
4	May 3, 2024	Online Office Hours	Questions from applicants
5	May 8, 2024	Webinar	Pre- and Full Application: Pre- vs. Full
			Application, anti-collusion policy, letter of
			credit or performance bond, scoring rubric,
			protected and proprietary information
			disclosures
6	May 23, 2024	Charleston, WV	Pre- and Full Application: ZoomGrants
			questions and documents, defining proposed
			projects, application commitment form,
			demonstrated community support
7	June 6, 2024	Morgantown, WV	<u>Full Application</u> : Target Areas and Regions,
			mapping resources, application workbook,
			resiliency and scalability, fixed wireless and
			mobile wireless overlay, high-level design
	1 10 0001	*** 1 ·	and proposed network description
8	June 12, 2024	Webinar	Full Application: ZoomGrants questions and
			documents, Target Areas and Regions,
			mapping resources, lower tier participant
	C + 1 27 2024	17' + 100 A	form, compliance topics
9	September 27, 2024	Virtual Q&A	Full Application: Application portal
			questions, general questions, technical
10	Ostobou 0 2024	Mohinan	questions, timeline, additional Q&A
10	October 9, 2024	Webinar	Extension Application: Overview,
			requirements, creating proposed projects,
			project prioritization and selection

11	December 3, 2024	Webinar Series 1/5	Extension Application: Key information,
			structure, and ZoomGrants portal
12	December 3, 2024	Webinar Series 2/5	Extension Application: Pre-Application
			process
13	December 3, 2024	Webinar Series 3/5	Extension Application: Overview
14	December 5, 2024	Webinar Series 4/5	Extension Application: Building Applications
			 Creating projects, high-level design,
			resiliency and scalability, speed of network
			and other technical capabilities
15	December 6, 2024	Webinar Series 5/5	Extension Application: Extension
			Application: Capital cost and grant request,
			community impact & support, documents

3.2 BEAD Workforce Development

For West Virginia to achieve Internet for All, it will need a well-trained, highly skilled workforce of broadband industry professionals spanning occupations. WVDED is committed to engaging stakeholders and investing in the education and workforce development system to ensure the industry has the talent it needs to meet the State's connectivity goals.

WVDED continues to convene its Workforce Planning Team and Workforce Development Council. The list of Council members can be found in the Initial Proposal, Volume 2 (page 95). The Planning Team designed a \$20 million-\$50 million Workforce Development Grant Program, incorporating feedback from the Council and stakeholders to ensure the program meets the needs of West Virginia's broadband industry. The Workforce Development Grant application period will open in the spring of 2025.

To advance the Grant program, WVDED is leveraging funding from the Appalachian Regional Commission (ARC) to contract the West Virginia Grant Resource Centers to provide interested applicants with Technical Assistance. This TA includes the developing broadband industry workforce resources, supporting applicants as they design their education and training programs, identify areas of collaboration, and write their grant applications. These efforts will support a more efficient, cohesive workforce development system in West Virginia. ARC TA resources can be found on the WVDED Workforce website.

3.3 Digital Equity

The West Virginia Department of Economic Development appreciates the continued support of its Digital Equity Steering Committee in 2024. The Committee supports the advancement of the state's vision to ensure that all West Virginians have the resources they need to participate in the digital world and achieve the numerous benefits of digital equity.

Table 5: Digital Equity Steering Committee Members

Digital Equity Steering Committee Members		
Angela Vance	Associate State Director, Advocacy, AARP WV	
Roger Calhoun	Member, Rural Residential User, West Virginia Broadband Enhancement Council	
Alex Weld	Executive Director, Generation WV	
Annie Stroud	Broadband Coordinator, Generation WV	
Donna Calvert	Director, Special Services, WV Library Commission	

3.3.1 Digital Equity Plan

"Digital equity is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is necessary for access to essential services, civic and cultural participation, employment, and lifelong learning."

-Digital equity definition, National Digital Inclusion Alliance (NDIA)

The NTIA approved <u>West Virginia's Digital Equity Plan</u> on February 29, 2024. This plan is designed to ensure that everyone in the State has access to affordable high-speed internet, affordable devices to use the internet, and the opportunity to learn the skills necessary to take full advantage of everything the internet offers. West Virginia's DE Plan includes:

- a. A statewide vision for digital equity
- b. A digital equity framework and scorecard
- c. Plans for digital literacy innovation programs
- d. Proposed technology-related apprenticeship or other workforce opportunities
- e. Integration with the State's Economic Development Strategy, educational and health outcomes, and civic and social engagement
- f. Action steps to implement the Digital Equity Plan that contains all requirements set forth in the Notice of Funding Opportunity.

3.3.2 Digital Equity Capacity Grant Program

In 2024, West Virginia began implementation of the digital equity goals described in the approved State Digital Equity Plan. Implementation of the Plan is supported by \$9 million allocated to West Virginia through the Digital Equity Capacity Grant Program, administered by NTIA.

With the official wind-down of the Affordable Connectivity Program (ACP), WVDED explored new methods of ensuring affordability of high-speed internet service, including spreading awareness of existing affordable internet packages and other relevant consumer information. WVDED will continue to support affordability efforts through thoughtful deployment selection and further coordination with stakeholders.

WVDED developed a comprehensive plan for use of Capacity funds that focuses on priority elements from the Digital Equity Plan, including skills support, device access, and planning support for local governments. West Virginia will also invest Digital Equity Capacity Grant funding to update the State's Digital Equity Plan. Capacity funding priorities are described below:

Digital Skills and Navigators Program: WVDED is prioritizing implementation of a Digital Skills subgrant program to address a "lack of technical knowledge," as identified in the Digital Equity Plan Needs Assessment. This program will leverage experienced West Virginian organizations to provide training and education to members of Covered Populations on the use of digital tools, accessing online resources, and practicing safe and responsible online behavior.

Pilot Device Program: WVDED will pilot its Affordable Device Program to provide eligible residents with new, used, or refurbished devices. The program, connected to the digital skills training program, will ensure participants have the technical assistance needed to operate their new devices. This program, targeted for low-income individuals as defined by the Covered Households category of the Digital Equity Act, will be scaled in subsequent years based on best practices learned from the pilot and available funds.

Local Digital Equity Planning: This grant program will be available to local governments (e.g. municipal, county) to support the development of local Digital Equity plans. Successful plans will include strategies and key activities aligned with the State's Plan so subgrantees are prepared to secure future implementation funding. Local planning will support continued interest and activity in digital inclusion work at the local level following implementation of the Digital Equity Act.

DE Plan Updates and Data Collection: WVDED will revise the State's DE Plan, specifically regarding affordability activities, the Local DE Planning Program, and implementation timeline. Additionally, WVDED will continue to collect data and administer surveys to establish more precise baseline figures and subsequent monitoring of Key Performance Indicators (KPIs). WVDED will partner with the National Digital Inclusion Alliance (NDIA), the Digital Equity Research Center (DERC), Merit Network, and seven other states to create a State Evaluation Tool to assist with evaluating both individual projects and overall statewide progress.

3.3.3 Digital Equity Asset Map

In addition to selection of subgrantees for the Digital Equity Capacity Program and any remaining BEAD funds, WVDED is committed to hosting an updated Digital Equity asset inventory and community resource library available to the public through an interactive online dashboard.

This fall, WVDED launched the <u>Digital Equity Asset Map</u> and an asset form to collect more information about active initiatives across the state that support digital equity. WVDED continues to conduct outreach with partners to support visibility and learn more about related services throughout West Virginia.



The Digital Equity Asset Form can be found here.

The Digital Equity Asset Map can be found here.

3.3.4 Digital Equity Competitive Grant

WVDED supported applicants in West Virginia applying to the first round of the Digital Equity Competitive Grant Program, administered by NTIA and available to a variety of organizations throughout the country for digital inclusion projects. WVDED prepared application resources for interested applicants, provided requested letters of support, and continued to collaborate with NTIA to ensure organizations were prepared to submit responsive applications.

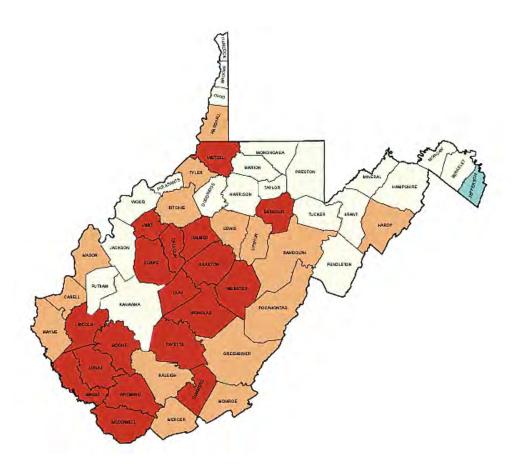
As NTIA announces awards on a rolling basis, WVDED will coordinate with any West Virginian awardees to ensure successful cooperation. When more details are available for the next round of the DE Competitive Grant Program, the Office of Broadband will again encourage potential applicants to apply and provide assistance.

3.3.5 Appalachia Digital Accelerator Project

WVDED supported local connectivity plans this year in connection with Connect Humanity's <u>Appalachia Digital Accelerator Project</u>, supported by the Appalachian Regional Commission (ARC).

In West Virginia, Connect Humanity partnered with Generation WV, Regional Optical Communications (ROC), and WVDED to convene stakeholders, gather data, and draft a county-level digital equity plan for each of the state's 18 ARC distressed counties. The resulting digital equity plans will assist each county in coordinating digital inclusion activities and assist with applying for upcoming grant opportunities.

Figure 6: Map of West Virginia by ARC Economic Status (FY 2023, Targeted Counties Shown in Red)



Targeted counties include: Barbour; Boone; Braxton; Calhoun; Clay; Fayette; Gilmer; Lincoln; Logan; McDowell; Mingo; Nicholas; Roane; Summers; Webster; Wetzel; Wirt; Wyoming.

Connect Humanity and its partners convened county steering committees including public officials, local educators, and community leaders. County steering committees meet monthly, helping guide each county's priorities and potential projects.

In June 2024, WVDED attended 3 planning workshops in Clarksburg, Ansted, and Gilbert to discuss local barriers to broadband adoption, potential digital inclusion projects, funding sources, and partners.

Final Connectivity Plans for all 18 counties will be available in 2025 and will inform the State's digital equity implementation planning.

3.4 West Virginia's Core Planning Team and Partnerships

A diverse set of stakeholders informed WVDED's efforts this year to build application processes that are responsive to the current broadband and digital equity landscape in West Virginia. This stakeholder engagement includes public, private, and nonprofit organizations, as well as members of the general public.

WVDED and the Core Planning Team's university partners conducted outreach to local, regional, federal, and national organizations that directly or indirectly serve covered populations. These organizations provided insight in strategic planning meetings for the timing of digital equity and workforce programming, as well as support with informational materials for local stakeholders.

WVDED continues to facilitate regular convenings of stakeholders for planning, including the Broadband Industry Workforce Group, Workforce Development Council, Broadband Enhancement Council, and the Digital Equity Steering Committee. These groups include government entities, internet service providers, economic development organizations, community and technical colleges, community anchor institutions, nonprofit organizations, and private sector partners. WVDED regularly reports to the Joint Committee on Government and Finance within the State Legislature.

WVDED continues to engage with representatives of unserved and underserved communities, including historically underrepresented and marginalized groups within the eight digital equity covered populations. WVDED coordinated broadband deployment and digital equity initiatives and sought input from the Digital Equity Steering Committee, Broadband Enhancement Council, and additional local and community organizations to plan programs that focus on the needs of underrepresented communities. Outreach to underrepresented communities has continued since the Initial Proposal via webinars announced on the Internet for All Website, in-person events at community anchor institutions, and project updates distributed online.

3.4.1 2024 Engagement

WVDED led and participated in **over 140 outreach and training sessions in 2024** for BEAD and Digital Equity. **Engagement highlights in 2024 include**:

- Engaged over 50 organizations in events throughout the year, including Regional Planning and Development Councils, county development authorities, libraries, educational institutions, nonprofits, workforce boards, and industry representatives
- Hosted a **successful 2024 West Virginia Broadband Summit** on the broadband industry and economic development strategies
- Prepared 4 webinars, 2 in-person workshops, and 5 application support videos on the BEAD deployment process
- Reviewed 18 county local connectivity plans

- Participated in **20 workforce development meetings** on grant design and credentials of value
- Led over **30 digital equity meetings** on current programming, barriers, and grant design

WVDED will provide a complete list of local coordination this year in the BEAD Final Proposal.

4. West Virginia Broadband Mapping

West Virginia makes broadband mapping central to its mission to expand digital connectivity statewide. Comprehensive and precise mapping forms the foundation of strategic infrastructure planning, allowing the state to assess broadband availability and gaps accurately. By tracking both historical and ongoing broadband investments, the WVDED not only monitors progress but also optimizes the administration of multiple federal broadband initiatives. Through continuous updates and refinements, West Virginia's mapping efforts strive to identify unserved and underserved areas with greater accuracy, supporting the state's commitment to closing the digital divide.

4.1 West Virginia Broadband Map

In early 2021, the Office of Broadband applied multi-criteria decision-making models to West Virginia's Statewide Addressing and Mapping System (SAMS) to develop a comprehensive broadband mapping system. This dataset provided broadband availability insights at the address level across the state, forming a critical foundation for funding decisions within the West Virginia Broadband Investment Plan's grant programs.

With the launch of the Federal Communication Commission's (FCC) Broadband Data Collection (BDC) program in 2022, the Office transitioned from using the Statewide Addressing and Mapping System (SAMS) dataset to the FCC BDC Fabric. The Fabric is a location-level dataset developed as part of the FCC's national broadband mapping initiative. The dataset provides a more granular, location-specific view of broadband availability and infrastructure with regularly occurring updates. The BEAD and Digital Equity programs rely on the Fabric to ensure that funding is directed to areas most in need of broadband infrastructure.

Location-level data is instrumental in driving funding decisions for broadband expansion; however, it also provides valuable insight for the Digital Equity Program to ensure vulnerable populations can access the digital world.

Broadband mapping is essential for achieving digital equity, as it provides the data necessary to identify and address connectivity gaps in communities across West Virginia. Integrating the Fabric and socioeconomic data together supports data-driven decisions for the Digital Equity program to pinpoint where broadband access, affordability, and digital literacy are lacking. By leveraging detailed broadband data, the Office's Digital Equity program has prioritized initiatives that will influence adoption to those most affected by the digital divide, ensuring that everyone can participate fully in the digital economy.

4.1.1 West Virginia Broadband Availability Map and Data

The state can consistently analyze and monitor broadband availability and adoption over time by using the Fabric to evaluate broadband access across West Virginia. This dataset provides a stable foundation for the state's analytical efforts, enabling more accurate tracking of progress

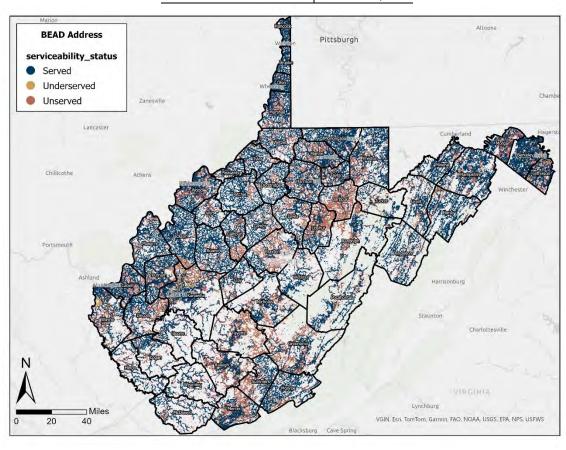
and trends in connectivity. As a reliable benchmark, the Fabric supports ongoing assessments, ensuring that data-driven strategies remain aligned with West Virginia's long-term goals for broadband expansion and digital equity.

The statistics in this section are derived from the December 31, 2022, vintage of the Fabric, which was implemented specifically for use in the BEAD program. This dataset provides a precise snapshot of broadband availability at that time, serving as a foundational reference for evaluating eligibility and guiding strategic investments in broadband expansion.

Following the approval of the Challenge Process and Initial Proposal Volume 2, the BEAD Program Full Application window opened with the following eligibility results:

Figure 7: BEAD Address Serviceability Status

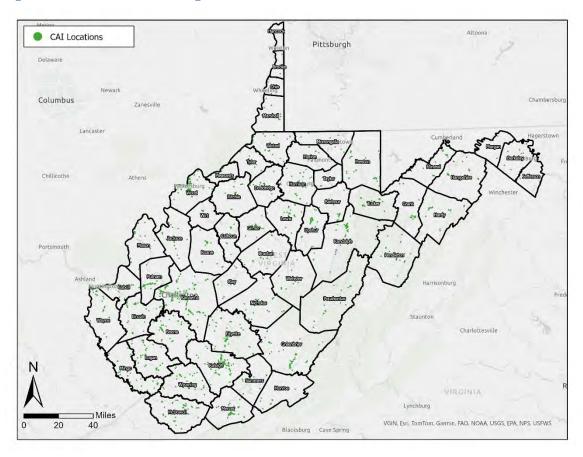
Serviceability Status	Count
Unserved	96,986
Underserved	14,850
CAI	2,342



Community Anchor Institutions (CAIs) for the BEAD program have funding goals separate from other eligible locations. CAIs without an active connection from gigabit symmetrical service are

considered eligible for BEAD funding. With the opportunity to improve the maps, the Office identified a total of 2,342 eligible CAI locations with 1,546 of those as non-Fabric locations included in the dataset.

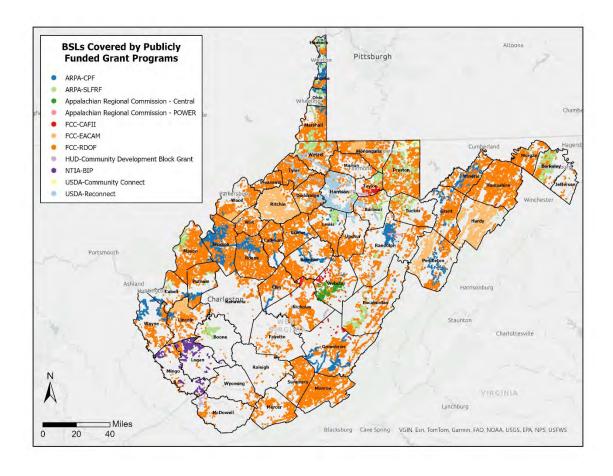
Figure 8: CAI Locations in West Virginia



Furthermore, the Office classified locations as funded that are currently served or will be served by a public funding program. There is a total of 204,538 BSLs covered by 11 funding programs in West Virginia for broadband infrastructure development. Figure 9 lists below all programs and the number of BSLs within the publicly funded service area.

Figure 9: BSLs Covered by Publicly Funded Grants

Program	BSL Count
FCC-RDOF	113,199
ARPA-CPF	32,358
ARPA-SLFRF	21,323
FCC-EACAM	18,267
FCC-EACAIM	10,207
USDA-Reconnect	7,128
NTIA-BIP	5,126
Appalachian Regional Commission -	
Central	3,275
Appalachian Regional Commission -	
POWER	1,359
HUD-Community Development Block	
Grant	1,052
FCC-CAFII	872
USDA-Community Connect	579



4.2 Broadband Growth

In the ever-evolving landscape of broadband deployment, public funding programs play an essential role in addressing connectivity gaps. Programs such as ARPA are instrumental in deploying projects that bring high-speed internet to communities previously left behind. In addition to these significant investments, private broadband deployment initiatives continue to play a pivotal role in expanding connectivity.

ISPs are actively investing in broadband infrastructure to meet growing demand, support economic opportunities, and stay competitive. Often, these private initiatives are seen in urban and suburban areas, where demand density promises higher returns on investment. In other cases, ISPs determined that focus on network expansion without public assistance provided opportunities to maintain their market presence and cater to customer needs.

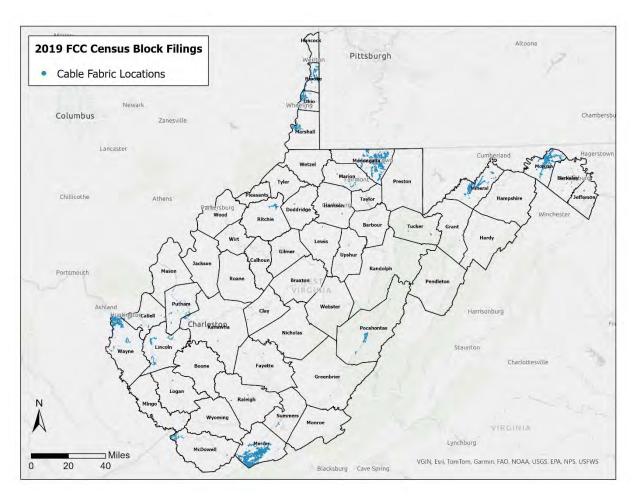
This ongoing private involvement reflects the broader market dynamics and challenges associated with broadband deployment.

The Office continues to measure broadband growth throughout the years to provide industry insight. Historically, accurate data identifying broadband availability has not been accessible. Now with location-level reporting with FCC BDC, growth over time can be measured sustainably.

To measure growth over the past five years, this section focuses on census blocks reported to have access to cable and fiber services through FCC Form 477 reporting in 2019 versus Fabric BSLs to have access to cable and fiber services through FCC BDC reporting in 2024. It is important to note that Form 477 was known to overreport the extent of available services; therefore, it is likely the actual number of BSLs identified in Form 477 census blocks in 2019 is lower than the total of locations within these census blocks.

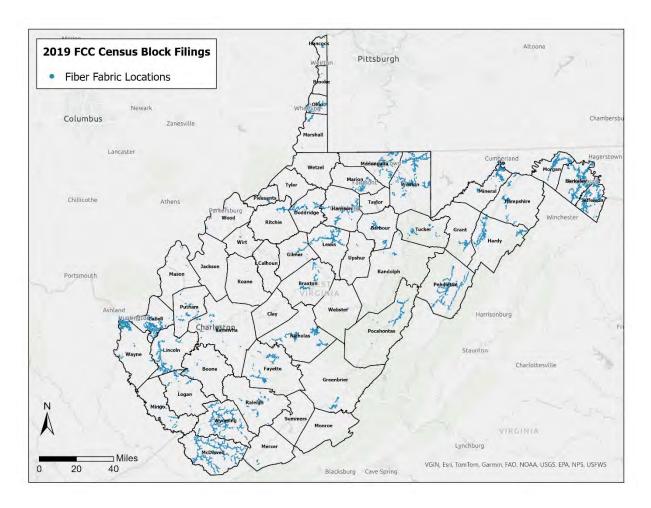
In 2019, FCC Form 477 reported 4,595 census blocks with cable services. Incorporating the BSLs from December 31, 2022, release of the Fabric, a total of 68,773 BSLs are located within a census block reported to have access to these services.

Figure 10: Cable Fabric Locations



In 2019, FCC Form 477 reported 12,547 census blocks with fiber services. Incorporating the BSLs from December 31, 2022, release of the Fabric, a total of 14,947 BSLs are located within a census block reported to have access to these services.

Figure 11: Fiber Fabric Locations



As of June 30, 2024, 618,901 locations were reported to have access to cable and 282,166 locations to have access to fiber. Identifying a total of 200,776 unique BSLs with access to either cable or fiber in 2019 and 684,443 unique BSLs in 2024, growth for broadband availability is estimated to be at 241%.

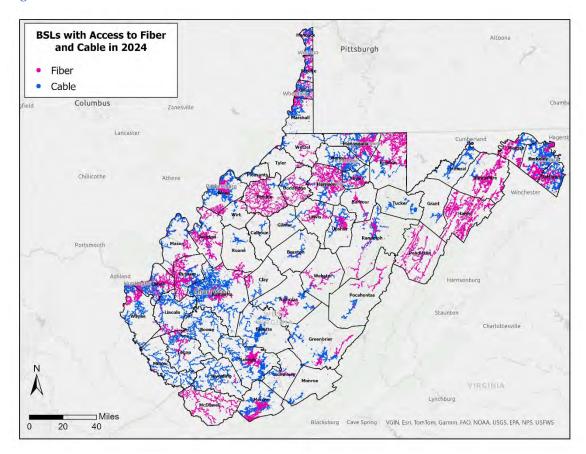


Figure 12: BSLs with Access to Fiber and Cable

4.3 Broadband Adoption

Mapping broadband adoption is essential for understanding the true reach and impact of broadband access in communities. While broadband availability maps indicate where infrastructure exists, adoption maps reveal how many households and businesses actively subscribe to broadband services. By examining adoption data, we can gauge whether broadband connections translate into meaningful engagement with digital platforms, applications, and services. This analysis helps identify areas where additional support may be needed, such as digital literacy programs, enhanced affordability options, or community outreach initiatives to promote awareness of available resources. Understanding broadband adoption levels allows us to quantify the effectiveness of digital infrastructure in supporting economic growth, educational advancement, and social inclusion.

In this way, mapping and analyzing adoption rates go beyond connectivity—they are crucial to ensuring that communities are empowered to fully utilize the tools and resources that broadband access brings.

Broadband adoption maps help identify areas where economic, educational, or digital literacy barriers may prevent residents from subscribing, even if the service is available. Policymakers, providers, and community advocates can gain a comprehensive view of digital equity challenges by combining data on infrastructure availability with adoption rates. This mapping effort enables targeted interventions, such as affordability programs, digital skills training, or awareness campaigns, to address gaps in adoption and ensure that connectivity is accessible to all.

The Office took several approaches to mapping broadband adoption. Analyzing Census and other survey data is one approach found to be instrumental in developing the WV Digital Equity Plan. Another approach is to compare performance data such as Speedtest® by Ookla® to locations reported to have access to broadband.

4.4 Ookla Speed Tests

WVDED has championed broadband speed testing for nearly a decade. The West Virginia Broadband Enhancement Council has licensed Speedtest® by Ookla®2 speed test data for West Virginia every year since the Council's inception in 2016. The Council values speed testing because it provides consumers with a voice and a method for reporting broadband data.

Ookla® performance data plays a pivotal role in evaluating broadband performance in West Virginia, offering valuable insights into the state's digital infrastructure. By measuring key metrics such as download and upload speeds, and latency, these tests provide a clear, quantitative assessment of internet connectivity across different regions. For policymakers, service providers, and consumers alike, the data supports data-driven decisions for identifying areas with inadequate broadband service, guiding infrastructure investments, and benchmarking improvements over time. The data provides insight into areas where official records may not reflect the actual user experience. The speed test results can highlight discrepancies in reported coverage, speeds, and service quality, enabling a more truthful representation of broadband accessibility in the state.

In a state like West Virginia, where topographical challenges and rural expanses pose unique obstacles to broadband deployment, these tests are especially important. They help in ensuring that efforts to expand and upgrade broadband networks are effectively targeted, thereby enhancing the digital inclusivity of communities and supporting the state's overall economic and technological growth. Moreover, the transparency and ease of access to Ookla's data empower consumers to make informed decisions about their internet service providers.

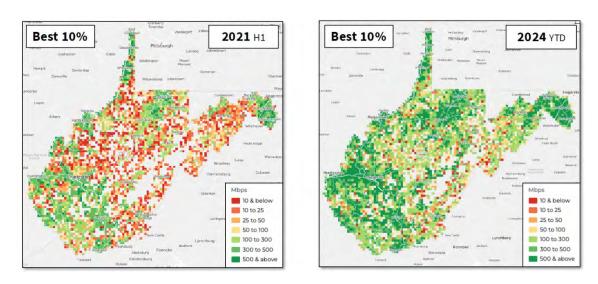
Performance data plays a key part in the FCC's Broadband Data Collection (BDC) challenge process. This initiative by the FCC aims to create a more accurate and comprehensive map of broadband coverage across the United States. Through leveraging the granular data from performance data, the Office actively contributed to this national effort by challenging and verifying the accuracy of the FCC's broadband deployment data. Leveraging data such as

Speedtest® was included in the set of criteria for developing a model to effectively challenge the maps and help influence the additional allocation of funding for BEAD from \$900 million to \$1.2 billion.

A critical indicator of broadband adoption is the active participation of end-users in testing their service. While broadband services may be available in certain areas, achieving widespread adoption presents a complex challenge influenced by various socioeconomic factors, such as affordability, digital literacy, and access to devices. Addressing these barriers is essential to ensure that the availability of broadband translates into meaningful connectivity for all residents.

Comparing broadband growth and adoption from 2021 to 2024, Figure 13 demonstrates endusers subscribing to services that provide adequate speeds and services. Figure 13 demonstrates a wider coverage of results with speeds of at least 100 Mbps. Here, the best 10% visualized are results typically captured in very good conditions such as the highest subscriber tier and close proximity to the gateway.

Figure 13: Broadband progress in West Virginia demonstrated by performance results from Speedtest® by Ookla®

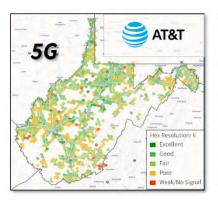


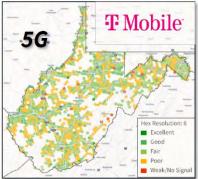
In mid-2023, the Broadband Enhancement Council approved the licensing of Ookla's Mobility data, including Cell Analytics and Tower Source Data. The Broadband Enhancement Council executed this license in anticipation of the Federal Communications Commission's Mobility Fund Phase II, and to assist the West Virginia Office of Broadband with any state challenges to reported mobile data.

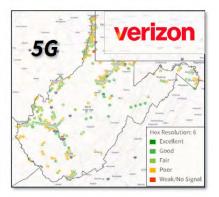
Although the Office's primary focus is expanding broadband services, mobile technology plays a critical role in providing essential communication services, supporting economic activity, and ensuring public safety, particularly in remote or underserved areas. Figure 14 below demonstrates aggregated coverage readings from July 1, 2023, through June 30, 2024.

The three mobile providers visualized in Figure 14 are AT&T, T-Mobile, and Verizon. These companies prioritize expanding 5G buildouts to improve service throughout West Virginia.

Figure 14: 5G coverage in West Virginia for 2023 demonstrated by performance results from Speedtest® by 0okla®







5. West Virginia Broadband Investment Plan

The West Virginia Department of Economic Development, Office of Broadband, in coordination with the West Virginia Broadband Enhancement Council, continues to administer the West Virginia Broadband Investment Plan (WVBIP), utilizing funds from the American Rescue Plan Act (ARPA) dedicated to expanding high-speed reliable broadband infrastructure to reach unserved locations in West Virginia. Enacted in 2021, ARPA consists of two funding sources: the \$136 million Capital Projects Fund (CPF) and the \$90 million State and Local Fiscal Recovery Fund (SLFRF). These funding sources (along with a \$10 million allocation of state funding) provide West Virginia with a combined total of \$236 million to administer competitive grant funding opportunities for broadband development. Both CPF and SLFRF funding sources are administered by the U.S. Department of the Treasury.

The allocation of SLFRF and General Revenue funding provided a historic \$100 million investment that will supplement West Virginia's allocation of funds through the Capital Projects Funds (CPF), also part of the ARPA. The ARPA CPF includes \$136 million for broadband development in West Virginia.

Program Overview

Under the West Virginia Broadband Investment Plan (WVBIP), the West Virginia Office of Broadband established four grant programs for broadband infrastructure development. Each program maximizes the potential of broadband availability and adoption in West Virginia. The programs are designed to meet the goals established in the West Virginia Broadband Enhancement Council's 2020-2025 Five-Year Plan and align with state and federal requirements. The WVBIP will also incorporate State funding, and other federal funds allocated or available to West Virginia. The WVBIP may be expanded through the addition of new or modified programs.

- Complete WVBIP program resources are available at: https://broadband.wv.gov.
- WVBIP Target Area Maps are available at: https://wv-capitol-wvbroadband.hub.arcgis.com.

The WVBIP contains four well defined infrastructure grant programs, each designed to specific broadband development needs. Programs launched in 2021 include:

- 1. LEAD: Line Extension Advancement and Development
- 2. GigReady: Technical Assistance or Implementation Phases
- 3. MBPS: Major Broadband Project Strategies
- 4. WIN: Wireless Internet Networks

Each WVBIP program emphasizes last mile connections. According to U.S. Treasury guidelines, each program places an emphasis on locations without access to reliable wireline service of 25/3

Mbps. Funded projects must be capable of delivering, or be scalable to deliver, symmetrical 100 Mbps service while encouraging the deployment of fiber networks.

In keeping with West Virginia's emphasis on publicprivate partnerships, the programs encourage private investment in cooperation with local development initiatives. To promote greater utilization of broadband service in West Virginia, the programs require participation in federal affordability programs and encourage the availability of a low-cost service.



Under LEAD and GigReady, the need for broadband expansion is analyzed at the individual address level. Conversely, the MBPS data focuses on the need for broadband expansion within eligible service areas as determined by the Office of Broadband. West Virginia's broadband maps can be found at: https://broadband.wv.gov/

Key Program Components

The WVDED established strong internal controls that include financial reviews, network validation, field inspections, and field verifications to ensure that networks perform as designed. Grantees may not begin construction until all permitting, and network design planning is completed. Grant funds are disbursed on a reimbursement basis following a thorough financial review of invoices and other supporting financial documentation.

Key components of the program include the following:

- Project Design Reviews
- Matching Funds and Grant
 Disbursement Request Reviews
- Quarterly Report Reviews
- Annual State Reports
- Federal Annual Reports
- Field Reviews



The Office ensures that each project phase is successfully completed. The key components of the grant life cycle include the following:

- Notice to Proceed with Exempt Activities
- Permitting and Engineering Design Phase
- Notice to Proceed with Construction Activities
- Construction Phase
- Network Lighting Phase and Is Ready to serve Targeted Locations
- Financial Technical Reviews
- Installation of services for customers

- Field Reviews
- Notice of Completion and request to close-out.

West Virginia was one of the first four states to secure approval of ARPA CPF funding. As of the third quarter of 2024, Governor Justice awarded over \$172 million of ARPA funds to 42 projects in West Virginia. This investment will deploy approximately 3,800 miles of broadband infrastructure to connect nearly 40,000 unserved locations.

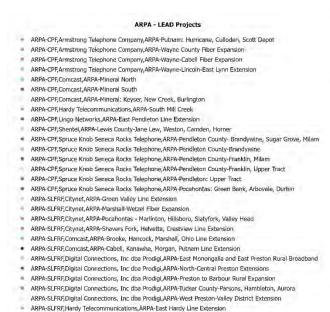
Line Extension Advancement and Development

The LEAD program awards competitive grants to internet service providers to expand their existing fiber and cable networks. LEAD projects typically are smaller in size; however, it incentivizes providers to expand to the end-of-the-line for locations previously difficult to reach.

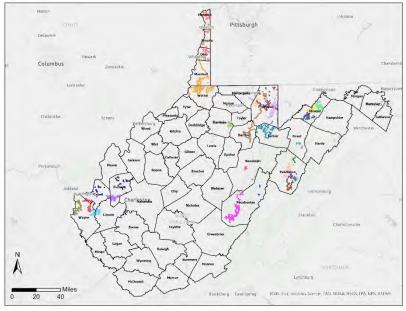
Three rounds of funding have been administered through the LEAD program resulting in a total of 29 awards. With a total of \$85,383,731 in grant funding and an additional \$16,190,429 in matching funds contributed by grantees, a total of \$101,574,160 is invested in the LEAD program.

Figure 15: ARPA LEAD Projects

Program Information	Totals
Projects	29
Grant Funds	85,383,731
Matching Funds	16,190,429
Total Investment	101,574,160
Targeted Locations	14,399
Miles of Fiber	1,730



ARPA-SLFRF, Shentel, ARPA-North Fork



Major Broadband Project Strategies

The Major Broadband Project Strategies Program (MBPS) is designed to fund larger scale projects to serve larger numbers of targeted locations. The MBPS program prioritizes expansion projects for new or existing networks.

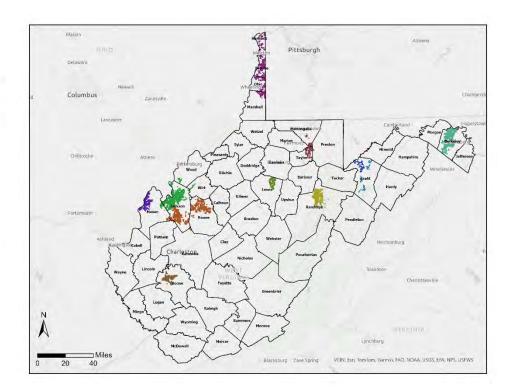
Two rounds of funding have been administered through the MBPS program resulting in a total of 11 awards. With a total of \$59,722,664 in grant funding and an additional \$41,451,676 in matching funds contributed by grantees, a total of \$101,174,339 is invested in the MBPS program.

Figure 16: ARPA MBPS Projects

Program Information	Totals
Projects	11
Grant Funds	\$59,722,664
Matching Funds	\$41,451,676
Total Investment	\$101,174,339
Targeted Locations	15,024
Miles of Fiber	1,655

ARPA - MBPS Projects

- CPF,Comcast,ARPA-Northern Panhandle Broadband Expansion ARPA-CPF, Frontier, ARPA-Ravenswood (Jackson Co) Broadband ARPA-CPF,Frontier,ARPA-Ripley (Jackson Co) Broadband CPF, Micrologic, ARPA-Grant County MBPS-Maysville, New Creek, Cabins, Keyser ARPA-CPF, Micrologic, ARPA-Randolph County Fiber Deployment Lewis County Broadband Project ARPA-CPF, Shentel, ARPA-Grant County MBPS-Gormania, Bismarck, Mount Storm
 - ARPA-SLFRF,Citynet,ARPA-Thornton, Gladesville & Morgantown South ARPA SLFRF, Frontier, ARPA-Berkeley County MBPS-Hedgesville, Gerrardstown, Martinsburg, Inwood, Bunker Hill ARPA-SLFRF, Frontier, ARPA-Boone County - Turtle Creek ARPA-SLFRF,Frontier,ARPA-West Mason ARPA SLFRF, Shentel, ARPA-



GigReady Incentive Program

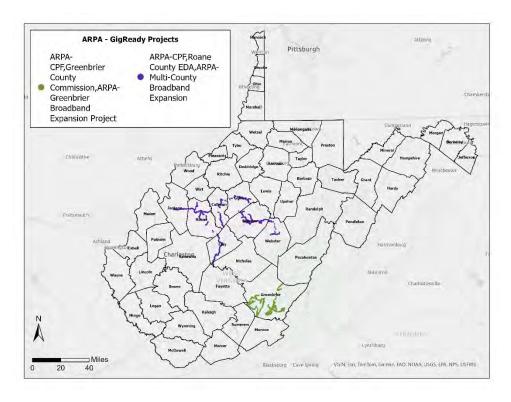
Public-private partnerships in broadband infrastructure represent a critical alliance in bridging the digital divide and enhancing connectivity, especially in unserved and underserved rural areas. By combining the efficiency and innovative capabilities of the private sector with the regulatory and financial support of public entities, these partnerships can effectively address the challenges of high infrastructure costs and logistical complexities associated with broadband deployment.

The GigReady program administered one round of funding resulting in a total of two awards. With a total of \$29,998,857 in grant funding and an additional \$9,999,619 in matching funds contributed by grantees, a total of \$39,998,476 is invested in the GigReady program.

Previously, three other awards were made to the counties of Raleigh, Summers, and Monroe; however, all parties have determined to shift their priorities to BEAD as it will provide better funding opportunities with greater capacity.

Figure 17: GigReady Projects

Program Information	Totals
Projects	2
Grant Funds	\$29,998,857
Matching Funds	\$9,999,619
Total Investment	\$39,998,476
Targeted Locations	10,194
Miles of Fiber	464



5.1 Capital Projects Fund

The CPF program provides \$10 billion nationwide for eligible governments to carry out critical capital projects that directly enable work, education, and health monitoring, including remote options, in response to the COVID-19 public health emergency. The CPF Guidance, available here, describes how governments may access and use these funds.

According to the U.S. Treasury: "The focus of the Capital Projects Fund on the continuing need for connectivity in response to the COVID-19 pandemic complements the broader range of uses, including for broadband infrastructure, of the American Rescue Plan's separate \$350 billion Coronavirus State and Local Fiscal Recovery Funds."

A total of 22 awards have been made for CPF. With a total of \$110,725,623 in grant funding and an additional \$39,751,643 in matching funds contributed by grantees, a total of \$150,477,266 is invested in the CPF program.

Figure 18: CPF Awards

Program Information	Totals
Projects	22
Grant Funds	\$110,725,623
Matching Funds	\$39,751,643
Total Investment	\$150,477,266
Targeted Locations	23,792
Miles of Plant	2,081

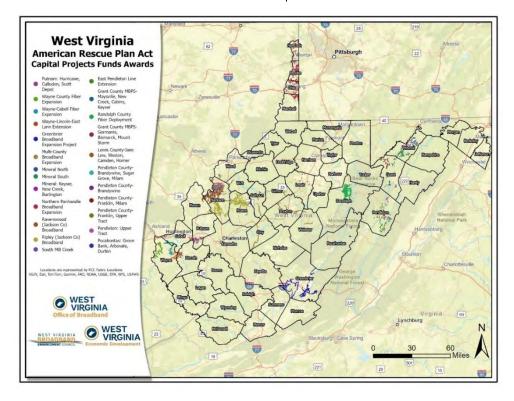


Table 6: Funding Data for Capital Project Funds Awarded Projects.

Program	Grantee	Project Name	Award Date	Grant Funding	Matching Funds	Total Project Cost	Targeted Locations	Miles of Plant
GigReady	Greenbrier County	Greenbrier Broadband Expansion Project	10/1/2022	\$12,940,988	\$4,313,663	\$17,254,651	5316	177
GigReady	Roane County EDA	Multi-County Broadband Expansion	10/1/2022	\$17,057,869	\$5,685,956	\$22,743,825	4878	287
LEAD	Armstrong Telecommunications	Wayne-Lincoln-East Lynn Extension	6/7/2023	\$3,400,931	\$399,500	\$3,800,431	551	56
LEAD	Armstrong Telecommunications	Putnam: Hurricane, Culloden, Scott Depot	6/13/2024	\$4,400,460	\$346,000	\$4,746,460	417	54
LEAD	Armstrong Telecommunications	Wayne-Cabell Fiber Expansion	6/13/2024	\$4,315,394	\$597,500	\$4,912,894	815	51
LEAD	Armstrong Telecommunications	Wayne County Fiber Expansion	6/13/2024	\$4,205,571	\$711,500	\$4,917,071	1281	56
LEAD	Comcast	Mineral North	6/13/2024	\$3,572,213	\$1,190,738	\$4,762,951	217	74
LEAD	Comcast	Mineral South	6/13/2024	\$3,355,443	\$1,774,553	\$5,129,996	319	76
LEAD	Comcast	Mineral: Keyser, New Creek, Burlington	6/13/2024	\$3,325,088	\$509,341	\$3,834,429	174	75
LEAD	Shentel	Lewis County-Jane Lew, Weston, Camden, Horner	7/26/2023	\$398,189	\$75,846	\$474,035	144	7
LEAD	Spruce Knob	Pendleton County-Franklin, Milam	7/26/2023	\$1,254,945	\$77,000	\$1,331,945	83	23
LEAD	Spruce Knob	Pendleton County-Franklin, Upper Tract	7/26/2023	\$1,277,412	\$113,400	\$1,390,812	123	30
LEAD	Spruce Knob	Pendleton County- Brandywine, Sugar Grove, Milam	7/26/2023	\$888,620	\$91,700	\$980,320	114	19
LEAD	Spruce Knob	Pendleton: Brandywine	2/7/2024	\$401,025	\$120,400	\$521,425	119	5
LEAD	Spruce Knob	Pendleton: Upper Tract	2/7/2024	\$899,007	\$105,700	\$1,004,707	122	16
LEAD	Spruce Knob	Pocahontas: Green Bank, Arbovale, Durbin	2/7/2024	\$611,315	\$82,000	\$693,315	117	9
MBPS	Comcast	Northern Panhandle Broadband Expansion	7/6/2022	\$14,726,012	\$6,265,607	\$20,991,619	1402	304
MBPS	Frontier	Ravenswood (Jackson Co) Broadband	1/12/2024	\$7,642,581	\$7,642,581	\$15,285,162	1635	238
MBPS	Frontier	Ripley (Jackson Co) Broadband	1/12/2024	\$5,471,280	\$3,921,793	\$9,393,073	899	144
MBPS	Micrologic	Randolph County Fiber Deployment	9/16/2022	\$16,597,041	\$2,979,000	\$19,576,041	3991	284
MBPS	Micrologic	Grant County MBPS-Maysville, New Creek, Cabins, Keyser	7/26/2023	\$2,868,035	\$956,012	\$3,824,047	266	55
MBPS	Shentel	Grant County MBPS-Gormania, Bismarck, Mount Storm	7/26/2023	\$1,116,204	\$1,791,853	\$2,908,057	809	41

5.2 State and Local Fiscal Recovery Fund

The Office enters its fourth year administering the WVBIP with dedicated funding from the ARPA State and Local Fiscal Recovery Fund (SLFRF) program. In October 2021, the West Virginia Legislature created the Broadband Development Fund and allocated \$90 million of SLFRF funds and \$10 million in General Revenue funds to this initiative. This total was added to CPF funding for a total investment of \$236 million.

A total of 22 awards have been made for SLFRF. With a total of \$64,379,629 in grant funding and an additional \$27,890,081 in matching funds contributed by grantees, a total of \$92,269,709 is invested in the SLFRF program.

Table 7: SLFRF Program Information

Program Information	Totals
Projects	22
Grant Funds	\$110,725,623
Matching Funds	\$39,751,643
Total Investment	\$150,477,266
Targeted Locations	23,792
Miles of Plant	2,081

Progress reports are collected from grantees and submitted to the U.S. Treasury on a quarterly basis. As of the third quarter of 2024, a total of 3,045 locations are now served by SLFRF funded networks.

Figure 19: SLFRF funded project

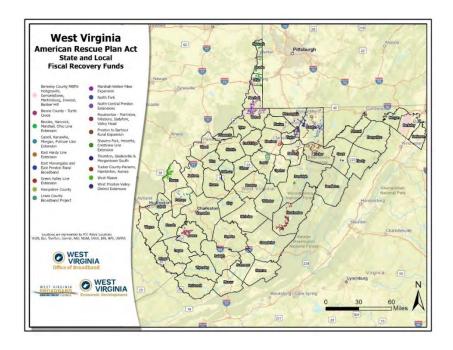


Table 7: Funding data for SLFRF funded projects.

Program	Grantee	Project Name	Grant Funding	Matching Funds	Total Project Cost	Targeted Locations	Miles of Plant
LEAD	Citynet	Green Valley Line Extension		\$188,500	\$1,380,034	265	26
LEAD	Citynet	Shavers Fork, Helvetta, Crestview Line Extension	\$713,560	\$162,500	\$876,060	96	14
LEAD	Citynet	Pocahontas - Marlinton, Hillsboro, Slatyfork, Valley Head	\$5,516,500	\$789,500	\$6,306,000	601	150
LEAD	Citynet	Marshall-Wetzel Fiber Expansion	\$7,488,000	\$1,725,000	\$9,213,000	1,357	211
LEAD	Comcast	Brooke, Hancock, Marshall, Ohio Line Extension	\$4,721,590	\$2,064,978	\$6,786,568	1,462	132
LEAD	Comcast	Cabell, Kanawha, Morgan, Putnam Line Extension	\$2,855,246	\$1,111,628	\$3,966,874	716	59
LEAD	Hardy Telecommunications	East Hardy Line Extension	\$201,565	\$108,645	\$310,210	58	10
LEAD	Hardy Telecommunications	South Mill Creek Road Line Extension	\$416,984	\$140,000	\$556,984	117	5
LEAD	Lingo	East Pendleton Phase 1 Line Extension	\$2,257,834	\$297,000	\$2,554,834	86	31
LEAD	Prodigi	North-Central Preston Extensions	\$4,592,645	\$870,500	\$5,463,145	1,203	93
LEAD	Prodigi	West Preston-Valley District Extension	\$3,840,913	\$803,500	\$4,644,413	1,455	60
LEAD	Prodigi	East Monongalia and East Preston Rural Broadband	\$4,362,723	\$661,500	\$5,024,223	799	103
LEAD	Prodigi	Tucker County-Parsons, Hambleton, Aurora	\$7,906,924	\$111,000	\$8,017,924	644	141
LEAD	Prodigi	Preston to Barbour Rural Expansion	\$6,591,470	\$722,500	\$7,313,970	803	135
LEAD	Shentel	North Fork	\$420,630	\$238,500	\$659,130	141	9
MBPS	Citynet	Thornton, Gladesville & Morgantown South	\$2,200,635	\$733,545	\$2,934,180	376	86
MBPS	Frontier	Boone County - Turtle Creek	\$671,385	\$1,993,688	\$2,665,073	1,566	83
MBPS	Frontier	West Mason	\$984,095	\$2,952,286	\$3,936,381	1,092	108
MBPS	Frontier	Berkeley County MBPS-Hedgesville, Gerrardstown, Martinsburg, Inwood, Bunker Hill	\$6,326,283	\$11,748,811	\$18,075,093	2,531	286
MBPS	Shentel	Lewis County Broadband Project	\$1,119,113	\$466,500	\$1,585,613	457	27

5.2.1 Wireless Internet Networks

The State Legislature allocated approximately \$10 million to the WIN Program to fund extensions or upgrades of existing last mile wireless broadband networks that can be constructed quickly. WVDED provided interested applicants with a set of targeted state parks and addresses, and its prioritized projects that



benefited both at the same time. The application period ran from May to June 2022. As of December 2024, WVDED provided \$250,000 in funding for one project.

5.2.2 Guide to Reporting and Compliance Obligations for West Virginia ARPA Broadband Investment Plan Grant Recipients

To assist project teams in the implementation of federally funded projects, the West Virginia Office of Broadband has issued an ARPA-Subrecipient-Compliance-and-Reporting-Guidance-Document-for-Awardees. The West Virginia Office of Broadband developed this document in cooperation with the West Virginia Broadband Enhancement Council and Tilson Technology Management, Inc. This Guide to Reporting and Compliance Obligations for West Virginia ARPA Broadband Investment Plan Grant Recipients covers three different programs administered by the West Virginia Department of Economic Development, Office of Broadband (WVDED). These programs are the GigReady Incentive Program (GigReady), the Line Extension Advancement and Development Program (LEAD), and the Major Broadband Project Strategies Program (MBPS).

The document is intended as a guide, not as a substitute for a thorough knowledge of state and Federal laws and regulations referenced in this document. This document may be updated to more fully incorporate requirements. In the event of any discrepancy, Federal regulations will prevail. The Grantee is responsible for compliance with the most current and stringent of any applicable local, State or Federal law or regulation(s).

5.3 2024 Project Announcements

Throughout 2024, Governor Justice issued the approval of 11 LEAD awards. These awards will result in deploying over 600 miles of fiber infrastructure to connect over 4,900 locations. Projects announced through 2024 are funded through the following ARPA programs:

- \$25,085,516 in CPF funding dedicated to 9 projects
- \$7,488,000 in SLFRF funding dedicated to 1 project

Internet Service Providers in West Virginia continue to demonstrate their value of partnership in West Virgina's broadband expansion initiative. During 2024, providers have dedicated a total of \$7,162,732 in matching funds resulting in a total investment of \$39,736,248 into the LEAD program.

Table 8: Funding data for APRA projects announced in 2024.

Funding Source	Program	Grantee	Project Name	Grant Funding	Matching Funds	Total Project Cost	Targeted Addresses	Miles of Plant
ARPA-CPF	LEAD	Armstrong Telecommunications	Putnam: Hurricane, Culloden, Scott Depot	\$4,400,460	\$346,000	\$4,746,460	417	54
ARPA-CPF	LEAD	Armstrong Telecommunications	Wayne- Cabell Fiber Expansion	\$4,315,394	\$597,500	\$4,912,894	815	51
ARPA-CPF	LEAD	Armstrong Telecommunications	Wayne County Fiber Expansion	\$4,205,571	\$711,500	\$4,917,071	1281	56
ARPA-SLFRF	LEAD	Citynet	Marshall- Wetzel Fiber Expansion	\$7,488,000	\$1,725,000	\$9,213,000	1357	211
ARPA-CPF	LEAD	Comcast	Mineral North	\$3,572,213	\$1,190,738	\$4,762,951	217	74
ARPA-CPF	LEAD	Comcast	Mineral South	\$3,355,443	\$1,774,553	\$5,129,996	319	76
ARPA-CPF	LEAD	Comcast	Mineral: Keyser, New Creek, Burlington	\$3,325,088	\$509,341	\$3,834,429	174	75
ARPA-CPF	LEAD	Spruce Knob	Pendleton: Brandywine	\$401,025	\$120,400	\$521,425	119	5
ARPA-CPF	LEAD	Spruce Knob	Pendleton: Upper Tract	\$899,007	\$105,700	\$1,004,707	122	16
ARPA-CPF	LEAD	Spruce Knob	Pocahontas: Green Bank, Arbovale, Durbin	\$611,315	\$82,000	\$693,315	117	9

6. FCC Rural Digital Opportunity Fund

Administered by the Federal Communications Commission (FCC) and funded by the Universal Service Fund (USF) High-Cost Program, the Rural Digital Opportunity Fund (RDOF) is an effort to modernize how USF funds are distributed and utilized. RDOF offers internet service providers an opportunity to compete for funds that were previously earmarked as subsidies for regulated, incumbent telephone companies.

RDOF distributes funding using a competitive, reverse auction in which internet service providers compete for subsidy funding to connect unserved and underserved locations in "High Cost" Census blocks, generally rural areas where the cost to connect customers is higher than average. High-Cost census blocks are awarded to the internet service provider that can connect all locations within it with the least amount of requested federal funding. Winning bidders receive a monthly subsidy, based on their lowest bid, for a 10-year term.

The FCC outlined plans to award up to \$20.4 billion over the course of a two phase RDOF program to support fixed broadband development nationwide. The FCC conducted Phase 1 of the RDOF reverse auction in October and November 2020 with up to \$16 billion of the total budget available. Of the \$16 billion, \$9.2 billion, or 57.5%, was awarded through a competitive, reverse auction designed to reduce costs through the multi-round reverse auction. The FCC announced provisional winning bidders on December 7, 2020, and subsequently fully authorized bidders to receive their monthly subsidy during 2021 and 2022. Remaining program funds may be used in a second phase of the RDOF program; however, the FCC hasn't yet announced any information regarding RDOF Phase 2.



Figure 20: WV RDOF Timeline

West Virginia's initial auction eligibility profile, as determined by the FCC, included 120,506 locations. The maximum statewide award possible was slightly more than \$766 million, or \$76 million per year, for 10 years. This figure was the maximum potential subsidy to be awarded by the FCC to carriers that competed in the auction process. However, through the reverse auction process, the ultimate subsidy amount awarded in West Virginia was \$362 million, approximately

47.2% of the maximum amount. Additionally, of the 120,506 initially eligible locations, 119,267 (98.9%), were 'won' by auction participants.¹

Of these, six service providers serving 109,087 RDOF locations in West Virginia have been approved to provide broadband service under RDOF. All six will offer service that meets the fully served BEAD classification.² Of these, approximately 80,000 of those are assigned to Frontier.³

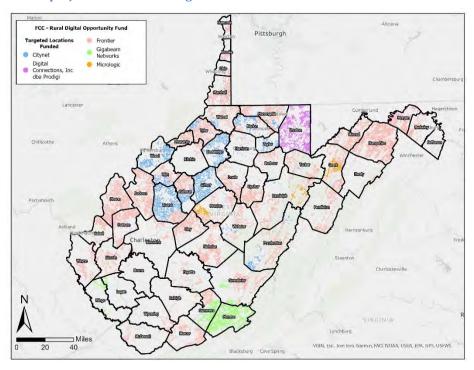


Figure 21: RDOF project areas in West Virginia.

All six service providers bid and won in the auction's Gigabit Performance Tier, specifying the use of "Optical Carrier – Fiber to the End-User" as the technology to be utilized to satisfy deployment obligations. All auction winners must fulfill deployment obligations to serve 40% of the total locations won in a state by the end of year three (starting when the FCC announces final approval of auction winners to receive Universal Service Funds) and an additional 20% of auction subsidized locations per year until 100% completion by the end of year six.

The specification of "Optical Carrier – Fiber to the End User" as a technology necessitates the deployment of a Gigabit Passive Optical Network (GPON) as a fiber-to-the-home (FTTH) network that can provide service to each of the subsidized locations in West Virginia.

¹ WVOB, West Virginia Broadband Enhancement Council, 2022 Annual Report, https://www.wvlegislature.gov/legisdocs/reports/agency/B19 CY 2022 15837.pdf, p. 52

² "Auction 904: Rural Digital Opportunity Fund," Federal Communications Commission, accessed May 19, 2023, https://www.fcc.gov/auction/904.

³ WVOB, West Virginia Broadband Enhancement Council, 2022 Annual Report, https://www.wvlegislature.gov/legisdocs/reports/agency/B19 CY 2022 15837.pdf, p. 52

All auction winners must fulfill deployment obligations to serve 40% of total locations won across West Virginia by the end of the third year from RDOF Final Approval. An additional 20% must be served each following year until 100% completion is achieved by the end of year six.⁴ See Table 9 for each.

These deployment milestones apply to all auction participants and represent a significant investment in broadband infrastructure in West Virginia.

Table 9: WV RDOF Summary

					Three Year Service	Four Year Service	Five Year Service	Six Year Service
				Final FCC	Milestone	Milestone	Milestone	Milestone
	Total Subsidy	Locations	Tier	Authorization	(40%)	(60%)	(80%)	(100%)
Citynet	\$53,486,649.80	13,448	Gigabit	11/12/2021	12/31/2024	12/31/2025	12/31/2026	12/31/2027
Micrologic	\$10,036,047.70	2,076	Gigabit	2/14/2022	12/31/2025	12/31/2026	12/31/2027	12/31/2028
Digital Connections	\$8,583,001.40	4,771	Gigabit	3/15/2022	12/31/2025	12/31/2026	12/31/2027	12/31/2028
Frontier	\$247,538,077.60	79,334	Gigabit	5/12/2022	12/31/2025	12/31/2026	12/31/2027	12/31/2028
GigaBeam	\$27,972,938.90	8,956	Gigabit	12/15/2022	12/31/2025	12/31/2026	12/31/2027	12/31/2028

Table 10: Completed RDOF locations reported in USAC's HUBB Portal

	Locations Reported in USAC HUBB as	HUBB Portal Reporting
	of March 6, 2024	Deadline
Citynet	0	3/1/2023
Micrologic	0	3/5/2024
Digital Connections	1195	3/3/2024
Frontier	6121	3/2/2024
GigaBeam	0	3/4/2024

⁴ "Rural Digital Opportunity Fund," Universal Service Administrative Company, accessed May 19, 2023, https://www.usac.org/high-cost/funds/rural-digital-opportunity-fund/.

7. FCC Affordable Connectivity Program

The Federal Communications Commission (FCC) administered the Affordable Connectivity Program (ACP). The ACP helped ensure that households can afford the broadband they need for work, school, healthcare, and more by providing a \$30 discount on monthly internet bills. The FCC estimated that about 48 million families were eligible for the program—nearly 40 percent of households in the United States.

The FCC announced ended the ACP in early 2024, fully depleting its \$14.2 billion allocation by April. Both chambers of Congress introduced multiple pieces of legislation to continue the ACP with renewed funding in Spring 2024. However, no efforts were successful. WVDED had prioritized increased ACP enrollment as a key objective in the State Digital Equity Plan to continue its positive impact. In addition, WVDED was awarded \$400,000 through the FCC's National Competitive Outreach Program (NCOP) to continue ACP promotion in West Virginia. Promotional advertisements were well underway in January 2024 before being scaled back and ending in early February. Before ACP ended:

- West Virginians enrolled 128,571 households in ACP.
- WV Counties with the highest number of enrolled households were: Kanawha (15,999), Cabell (8,718), Raleigh (6,317), Mercer (6,313), and Harrison (6,298).
- ACP Provided \$8.61 million to West Virginians.
- From January 2022 to May 2024, the ACP provided over \$81.6 million in support to West Virginians for both internet service and internet enabled devices.⁵

There is not yet a good alternative for West Virginians who relied on the ACP for affordable internet service. The FCC's Lifeline program is insufficient for many: it only provides a monthly benefit of \$9.25 toward broadband and phone service for qualifying individuals. Multiple ISPs offer low-cost internet plans, with some committing to lower plan prices in the ACP's absence. West Virginians can learn about these lower-cost, affordable internet plans through:

- The FCC's National Broadband Map and BroadbandNow;
- The National Digital Inclusion Alliance (NDIA)'s resources, which include scoring based on price and speed.

For now, WVDED is amending its Digital Equity Plan to reflect the end of the ACP. Until a successor program becomes a reality, WVDED will spread awareness of low-cost internet plans and other relevant consumer information. WVDED will continue research and data collection on internet affordability in West Virginia.

⁵ Universal Service Administrative Company (USAC), https://www.usac.org/about/affordable-connectivity-program/

8. Key Infrastructure Projects

8.1 AEP Logan-Mingo Broadband Project

In 2019, Appalachian Power Company and Wheeling Power Company (AEP) prepared a Broadband Feasibility Study for the construction of a middle mile fiber optic network in Logan and Mingo Counties, known as the Logan-Mingo Broadband Project. Studies must be reviewed and approved by the Broadband Council and the West Virginia Public Service Commission.

NTIA - Applatchian Power
Logan-Mingo Broadband Project
Gigabeam Networks, LLC

Targeted Locations
Funded

Chancey

Chancey

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Figure 22: AEP Logan-Mingo Project

The network will provide utility communications and contain fiber optic strands that AEP could lease to internet service providers who would provide broadband internet service to end-user, "last mile" customers through the construction of more than 400 new fiber miles and the utilization of approximately 200 existing fiber miles to reach more than 13,000 unserved and underserved locations.

AEP's study included a review of statutory requirements authorizing electric utilities to prepare such studies. It also identified regulatory and public policy hurdles, a number of which were addressed in legislation enacted into law in 2020. In 2020, the West Virginia Legislature passed

HB 4619, which amended §24-2-1 of the W. Va Code and added a new section, §24-2-10, both of which concern the powers and duties of the West Virginia Public Service Commission (WVPSC). HB 4619 allows electric utilities to install "middle mile" broadband fiber on their existing infrastructure to facilitate the expansion of broadband service into unserved and underserved areas of the State.

AEP conducted a Request for Proposal process and selected GigaBeam Networks, LLC, as an internet service provider partner. The project continued with formal submission to the WVPSC, in 2020.

In 2022, NTIA announced the award of \$19.6 million to complete a fiber to the premise project to bring qualified broadband to more than 12,000 unserved households across the region. This application was submitted by the Logan County Commission in partnership with the Mingo County Commission and GigaBeam Networks, LLC. The project team held an official construction kickoff event in July 2022.

Following the success of the Logan-Mingo project, AEP developed a second feasibility study in 2022 which included five counties in southeastern West Virginia, including Raleigh, Mercer, Wyoming, McDowell, and Summers counties. The West Virginia Broadband Enhancement Council approved this study in March 2023.

AEP applied to the NTIA Middle Mile Expansion Program and received a \$25 million grant for this project in June 2023 locations; however, with the rollout of BEAD, AEP made the decision to prioritize the Logan-Mingo project.

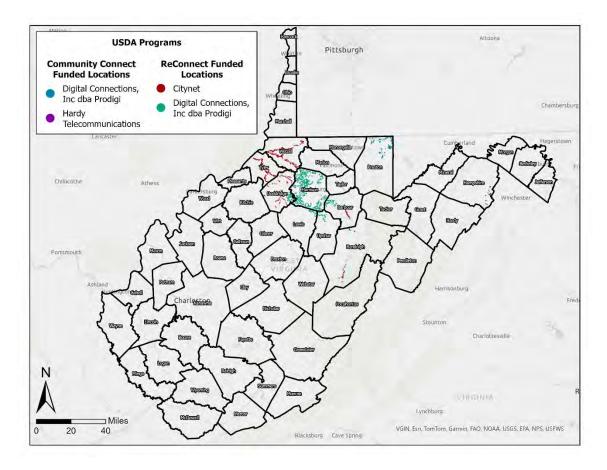
9. USDA Broadband Programs

In anticipation of increased funding for broadband expansion in rural areas, the U.S. Department of Agriculture (USDA), West Virginia Rural Development team partnered with the West Virginia Broadband Enhancement Council to conduct a series of workshops in West Virginia with a focus on increasing the number of USDA project proposals from West Virginia. This focused initiative resulted in numerous successful proposals through which project teams secured USDA funds for broadband expansion projects in West Virginia. The USDA awarded significant funds to projects in West Virginia through three broadband programs listed below. WVDED's involvement in two of the three USDA programs is detailed subsequently.

- USDA ReConnect
- USDA Community Connect
- USDA Distance Learning and Medicine

Infrastructure projects awarded under ReConnect and Community Connect are in active construction. These projects brought connectivity to unserved and underserved communities in 2024 and will continue to deploy services in 2025.

Figure 23: USDA Programs



10. Appalachian Regional Commission

The Appalachian Regional Commission (ARC) is a partnership between states and the Federal Government. Covering 423 counties across 13 states, ARC works with local Appalachian communities to improve overall quality of life. ARC has a variety of grant programs that local governments can use for efforts that align with its Strategic Plan, including building and improving Appalachian businesses, workforce ecosystem, infrastructure, culture and tourism, and community leaders and capacity. In many cases, funds can be used for broadband-related projects. For instance, in January 2023, ARC awarded \$6.3 million to bolster broadband access across 50 communities through its Appalachian Regional Initiative for Strong Communities (ARISE). ARC can either directly fund projects itself or it can provide the funds to states, such as West Virginia, for state-level grant programs. Funding opportunities are ongoing and are available each fiscal year.

ARC funds broadband through three programs in West Virginia: Partnerships for Workforce and Economic Revitalization (POWER), Central Appalachian Broadband, and North Central Appalachian Broadband. WVDED administers most ARC-funded broadband infrastructure projects in West Virginia. WVDED may accept applications and recommend approval of projects under the latter two funding sources. ARC grants are unique in that POWER projects are approved directly by ARC whereas Central Appalachian and Northcentral Appalachian funds are granted to WVDED for administration of a state-led program in which WVDED has a more direct role in project selection. In either scenario, WVDED is the Responsible State Basic Agency (RSBA) for ARC broadband infrastructure projects.

Eight ARC grants are commitments to provide broadband service meeting or exceeding the requirements for full service as defined under the BEAD program.

10.1 ARC POWER

The ARC launched the (Partnerships for Opportunity and Workforce and Economic Revitalization) <u>POWER Initiative</u> to help communities and regions that have been affected by job losses in coal mining, coal power plant operations, and coal-related supply chain industries due to the changing economics of America's energy production. The West Virginia Department of Economic Development, Office of Broadband, administers ARC POWER broadband projects in West Virginia.

For Program Year 2023, ARC awarded POWER funds to the Wyoming County EDA. In 2022, ARC awarded POWER funds to the Boone County Economic Development Authority and the Summers County Commission. Projects funded in 2020 and 2021 include the Pocahontas County

⁶ Appalachian Regional Commission (ARC), Appalachia Envisioned: ARC's 2022-2026 Strategic Plan, Accessed April 10, 2023, https://www.arc.gov/strategicplan/.

⁷ ARC, Appalachian Regional Initiative for Stronger Economies (ARISE), Accessed April 10, 2023, https://www.arc.gov/ARISE/.

Commission, Wayne County Commission, Woodlands Development Group, and the Thundercloud Inc. Project. No additional broadband projects were awarded by ARC in 2024. Recent ARC POWER projects are briefly described below:

- **Pocahontas County Commission:** received \$2,500,000 to build FTTH to over 1,000 households in Pocahontas County.
- **Woodlands Development Group**: a non-profit entity received \$2,500,000 to construct a 33-mile middle-mile fiber route along Route 33, from Elkins to Davis.
- Boone County Community and Economic Development Corporation: received \$1,692,507 to build an 8.2 fiber network with one wireless tower. This initiative will support the redevelopment of surface coal mines with businesses that rely on connectivity including a 3,000-acre solar field and other diversified industries.
- **Thundercloud, Inc:** a 25-mile fiber loop developed in downtown Huntington.

After consultation with ARC Coordinators, the following projects are currently on hold status and may have the opportunity to be alternatively funded through the BEAD program.

- **Summers County Commission** received \$2,400,000 to build 28 miles of fiber to connect 489 homes and 179 businesses in Summer County.
- Wayne County Commission received \$1,551,000 to build a 16-mile middle-mile route along WV-152 connecting households and businesses along the route with fiber. The project also targets last-mile FTTH in Lavallette, Beech Fork, and Arden. The future potential of this middle-mile route can expand FTTH to rural areas of Wayne County.
- **Wyoming County EDA** received \$545,065 to build 10.5 miles of fiber to connect 89 households and seven businesses in the Huff Creek area of the county.

10.2 Central Appalachian Broadband

In addition to ARC POWER funding, the Office of Broadband administers the ARC Central Appalachian Broadband program through designation as a Responsible State Basic Agency (RSBA).

The goal of this ARC funding initiative is to provide funding for the deployment of broadband that will increase economic and business development or provide service to unserved customers. Funding is limited to ARC-designated distressed counties in West Virginia that have been most negatively impacted by the downturn in the coal industry. Eligible counties are Boone, Clay, Logan, Lincoln, McDowell, Mingo, Webster, and Wyoming.

West Virginia currently has one project funded through the Central Appalachian Broadband grant program.

• Webster County EDA received \$4,620,864 for their Broadband Initiative Phase II to build an all-fiber network in rural and mountainous areas of the country. Eight-hundred thirty households and 80 businesses in 5 local communities will be served.

10.3 Community Development Block Grant

Congress established the Community Development Block Grant (CDBG) through the Housing and Community Development Act of 1974. The West Virginia CDBG provides grants to local governments that do not receive CDBG direct funding from the U.S. Department of Housing and Urban Development (HUD). The grants focus on providing decent housing, a suitable living environment, and expanded economic opportunities principally for persons of low to moderate income. In response to COVID-19, HUD also granted West Virginia approximately \$20 million for a supplementary program called CDBG-CV. CDBG-CV funding can be used for broadband projects focused on closing the digital divide. Funding opportunities are available each fiscal year.

Through 2021, the CDBG dedicated approximately \$8.8 million in funding to broadband planning and infrastructure projects. Twenty CDBG projects, covering 41 counties, involved broadband planning and community outreach. Twelve projects specifically focus on broadband infrastructure deployment, of which eight are commitments to provide broadband service matching or exceeding the requirements to be fully served under the BEAD program.

The State utilized HUD's CDBG funding for initial broadband planning and construction activities throughout the rural communities. The CDBG program will continue to fund other types of infrastructure and community development projects in the future and no further broadband projects are expected to be funded. The WVDED Office of Broadband will utilize other funding sources to build on progress made with CDBG. Additional broadband resources of funding include ARC and the NTIA's BEAD programs.

⁸ Congress.gov. "S.3066 - 93rd Congress (1973-1974): Housing and Community Development Act of 1974." August 22, 1974. https://www.congress.gov/bill/93rd-congress/senate-bill/3066.

11. State and Federal Policy Updates

West Virginia's leaders continue to develop policies that encourage broadband development throughout the State. The West Virginia Legislature has advanced innovative broadband policies, developing an ideal environment for broadband infrastructure expansion. These policies encourage competition, discourage monopolies, and enhance the business environment for Internet Service Providers within the State of West Virginia.

State, federal and local policies and regulations must recognize broadband as essential economic infrastructure and align in support of broadband infrastructure expansion. The West Virginia Broadband Enhancement Council and the West Virginia Office of Broadband will continue to advocate for policies and regulations that support efforts to expand broadband throughout West Virginia.

11.1 West Virginia Economic Development Authority Broadband Loan Insurance Fund

Since 2018, West Virginia has provided incentives for investors to support the deployment of broadband infrastructure, through a non-lapsing fund administered by the West Virginia Economic Development Authority ("WVEDA").

As outlined in W. Va. Code § 31-15-8, et seq, the **Broadband Loan Insurance Program** (BLINS) ensures the repayment of debt on capital costs related to broadband service which is provided either:

- a) to unserved or underserved areas of the State; or
- b) by linking a segment of a network operator's core network to a local network plant that serves an unserved area or an area with no more than two wireline providers.

The BLINS program is essential to broadband expansion in West Virginia. One of the requirements of the RDOF process was for winning bidders to post a letter of credit with the FCC for up to 30% of the award amount to secure performance. To support this requirement, Governor Justice issued Executive Order (EO) 66-20 on September 3, 2020, pursuant to his authority to suspend statutory regulations during a state of emergency. EO 66-20 suspended the per-recipient and per-program dollar limits in the BLINS program and directed the WVEDA to make modifications to the BLINS program consistent with the EO.

The WVEDA, in consultation with the Council, completed modifications to its guidelines for the BLINS program, providing insurance to banks for letters of credit to winning RDOF bidders.

Statutory changes were implemented in the 2021 Legislative Session enabling the BLINS program to support applicants proposing broadband expansion in West Virginia using funds from RDOF and other federal programs.

Under the BLINS program prior to the Governor's Executive Order, the WVEDA could insure up to 80% of a bank loan for a broadband infrastructure or development project. The insured portion could not exceed \$10 million and had a maximum term of 20 years. The WVEDA's revised guidelines issued in November 2020, permit the BLINS program to insure up to 100% of a letter of credit, and the cap of \$10 million per recipient has been eliminated. This change will further encourage and support broadband projects.

Prior to the Governor's Executive Order, the program required the certification of eligibility by the Council. Since the FCC and other federal programs have extensive vetting processes, the Council recognized this certification under a federal broadband expansion program.

Public notice is required for all projects, except those that plan to provide a downstream data rate of at least 1 Gbps throughout the proposed project service area. The process for funding has detailed requirements for as-built plans, mapping, modifications, project completion, and closeout.

The Legislature amended the BLINS program statutes in October 2024 during the 2024 Second Extraordinary Session. Among other things, the amendments:

- Expand the definition of "Federally funded broadband expansion program" to include the "Broadband Equity, Access, and Deployment Program of the National Telecommunications and Information Administration" ("BEAD"), confirming that BEAD-funded projects are eligible for BLINS program support;
- Authorize the WVEDA's Insurance Fund (formerly the sole funding source for the BLINS program) to receive moneys from the WVEDA's separate Economic Development Project Fund "in an amount not to exceed \$125 million annually," more than doubling the amount of funds available for BLINS program support; and
- Increase the amount of loan insurance that the WVEDA may award to any one broadband provider in any single calendar year, from \$20 million to \$50 million.

To be eligible for BLINS program assistance, a project must be certified by the West Virginia Broadband Enhancement Council as having met the requirements for providing broadband service to an unserved or underserved area of the state. Moreover, the project must have written certification from the participating financial institution that, but for the BLINS program, the financial institution would not otherwise make the loan based solely on the creditworthiness of the broadband provider.

BLINS program applications to the WVEDA originate with and are submitted by the financial institution making the bank loan or providing a letter of credit in support of a broadband project.

11.2 West Virginia Attorney General Consumer Complaint

As directed by House Bill 2002, and in compliance with W.Va. Code §31G-1A-2(b)(9), the West Virginia Office of Broadband coordinated with the West Virginia Attorney General Consumer Complaint Division to establish procedures for consumer complaints related to broadband service.

Consumers who believe that they have been the victim of unlawful practices in the purchases of goods and services are first encouraged to fill out the appropriate form and return it to the West Virginia Attorney General's (WVAGO's) Consumer Protection Division. The office provides three options for submitting complaints:

- Option 1: Download and print the forms, complete and mail (with any copies of documents related to the complaint) to: Office of the Attorney General, Consumer Protection Division, P.O. Box 1789, Charleston, WV 25326-1789.
- Option 2: Download and fill out the appropriate PDF form and email the form and any additional documents related to the complaint in PDF format to <u>complaint@wvago.gov</u>. (25MB limit on attachments)
- Option 3: Complete an online version of the General Consumer Complaint form.

Individuals who need assistance may call the WVAGO Consumer Protection Hotline at 1-800-368-8808. Clicking the links below will download a PDF of the form in a separate tab.

- Instructions for Filing a Consumer Complaint Form
- Documents Needed for Filing a General Consumer Complaint Form
- <u>Broadband Complaint Form</u>

11.3 Dig Once Policy

In 2018, the West Virginia Legislature enacted a Dig Once Policy, passing legislation aimed at creating incentives over the long term to create spare conduit or opportunities to lay fiber in a joint trench. HB 4447 created a new article of code, §17-2E-1 et seq., that established the "Dig Once" policy. It directed the West Virginia Division of Highways (WVDOH) to install vacant broadband conduit during highway construction projects. As part of the policy, interested ISPs apply to the Council for approval to use the conduit. Conduit is leased at cost-based rates.

The Council was also charged with creating a strategy to facilitate the timely and efficient deployment of broadband infrastructure on state-owned lands and buildings, and to assist local governments with development of similar Dig Once and deployment policies.

In 2019, Senate Bill 270 amended the Dig Once Policy, W. Va. Code §17-2E-1 et seq., in addition to W. Va. Code §17-2A-17a, which governs utility accommodation leases. Section 17-2A-17a provides that the Commissioner (Commissioner) of the WVDOH may lease real property held by the Division to accommodate any utility providing telecommunications or broadband services if the Commissioner finds that entering said lease is in the public interest. The code section as it was amended further provides that while the utility is required to pay fair market value for the real property interest under the lease, Senate Bill 270 amended this section to provide that the fair market value of such property interest was established to be \$0 in monetary compensation. However, the current version of the law does not prohibit in-kind compensation if the lease concerns multiple districts within the Division.

11.4 DOH Right of Way

The West Virginia Legislature determined that it is in the public interest to accommodate telecommunications facilities in Division of Highways ("DOH") rights-of-way where the use does not adversely affect the traveling public's safety, impair the highway, or conflict with existing law and policy. In this connection, the *Dig Once Policy Act* in the West Virginia Code authorizes the DOH to receive applications and issue permits for the in-ground construction or installation of telecommunications facilities in DOH owned or controlled rights-of-way.

DOH's review of applications considers whether the planned construction or installation adversely affects the safety, design, construction, operation or maintenance of the state road system; interferes with or impairs the present or planned future use of the highway or bridge; conflicts with DOH policy on performing work in rights-of-way; or violates applicable state or federal law. If deficiencies are identified by DOH in the application, the *Dig Once Policy Act* gives the applicant an opportunity to correct them and resubmit the application. A specific district level construction authorization permit is issued by DOH where an application is approved.

Importantly, the *Dig Once Policy Act* does not apply to the relocation or modification of existing telecommunications facilities in DOH rights-of-way or to aerial telecommunications facilities or equipment in DOH rights-of-way. Successful in-ground applicants are responsible for complying with applicable environmental laws.

Senate Bill 270 and House Bill 2002 in 2021 amended § 17-2E-5 of the Dig Once Policy by eliminating the newspaper notice requirements, and by reducing the notice period from thirty (30) days to fifteen (15) days. HB 2002 in particular amended § 17-2E-3 of the policy to address installations serving a public purpose in rights of way owned or controlled by the Division, and the process for review and processing of such applications, timing, and compliance with applicable environmental laws for new installations. SB 270 and HB 2002 also provided new exemptions from the Dig Once Policy's requirements with regard to the telecommunications carrier initiated construction and joint use process, including exempting the following types of projects from the requirements of § 17-2E-5:

- Projects where the total continuous length of the trench is less than 1,000 feet;
- Projects that use the direct bury of cable or wire;
- Projects that are solely for the service of entities involved in national security matters;
 and
- Projects where the carrier installs an amount of spare conduit or innerduct equal to
 what is being installed for its own use and which is made available for lease to
 competing carriers on a nondiscriminatory basis at rates established by the FCC.

The current § 17-2E-7 amended in 2021 allows the WVDOH to enter into agreements and issue permits consistent with 17-2E-3 to allow any carrier to use excess telecommunications facilities owned or controlled by the Division unless such excess facilities are also subject also to the Vertical Real Estate Management and Availability Act (§31G-5-1). Under the current § 17-2E-8, WVDOH, with the Governor's written approval, may transfer or assign ownership, control, or any rights related to any excess telecommunications facilities owned or controlled by the Division to any other state agency.

The West Virginia Division of Highways (WVDOH) has updated <u>guidance</u> as part of the implementation of the State's Dig Once Policy Act. <u>The Dig Once Application Submission Checklist</u> is now available online.

The *Dig Once Policy Act* requires applicants to notify the Office of Broadband and telecommunications carriers on record with the Office of applications that are submitted to DOH. This gives those carriers the opportunity—specifically afforded by the *Act*—to share access to the applicant's trench. Where notice of interest to share in a trench occurs, the telecommunications carriers are required to negotiate an agreement outlining their responsibilities and financial obligations. The DOH may join in this agreement to the extent it also wishes to use the trench. The *Act* empowers the PSC to adjudicate trench sharing disputes, and it vests the Office of Broadband with the responsibility for ensuring applicant compliance with the *Act's* trench sharing requirements.

Based on WVDED's experience and findings, there are few, if any, instances of trenches being shared as a result of the Dig Once program. The program may require modifications to be more effective. As part of its BEAD planning process, WVDED proposed a Broadband Middle Mile Infrastructure Study (Middle Mile Study) for the State of West Virginia. As a component of broader goals, the study will incorporate a review of existing Dig Once policies. Included in the West Virginia BEAD Plan is the goal to improve Dig Once policies to fully take advantage of their unharnessed potential. WVDED will recommend improvements to the State's Dig Once policy, including establishing guidelines for laying conduit during major highway construction or reconstruction.

11.5 Policy Concerning Bridge Attachments

Bridge Attachments are governed by the WVDOH Utility Manual, available here.

11.6 One-Touch Make-Ready

Integral to broadband network expansion, pole attachment regulations can provide a defined process to attach poles owned by electric or telecommunications utilities. As noted by NTIA, pole attachment regulations "...are a potential barrier to entry if they make a proposed project economically nonviable, particularly in unserved rural areas."

Over the years, attachers have sought to improve this process. At the federal level, the FCC issued the One Touch Make Ready (OTMR) order in 2018, which set out rules to streamline the make-ready and attachment processes. However, FCC regulations only apply to so-called "FCC states." States are permitted to reverse-preempt federal regulations and adopt comparable regulations. West Virginia's Public Service Commission has adopted rules addressing the pole attachment application process, including detailed deadlines for distinct steps, and a complaint process modeled on the FCC's pole attachment complaint process. Under the West Virginia Public Service Commission's pole attachment complaint process, an attacher can have the Public Service Commission adjudicate the reasonableness of a pole owner's decision to approve, reject, or approve subject to conditions a pole attachment application, and the reasonableness of the charge proposed by the pole owner. The Public Service Commission made revised Rules for the Government of Pole Attachments effective as of January 13, 2023.

The Public Service Commission of West Virginia opened a "show cause" proceeding on its own initiative in 2022 to eliminate the practice of the State's largest electric utility and its largest incumbent local exchange carrier which had been requiring pole attachers to make applications to both entities separately for poles that were jointly used by the ILEC and the electric utility. In June 2023, the Public Service Commission approved a Joint Stipulation by the electric utility, the ILEC, and several intervening broadband providers which eliminated the dual application process, replacing it with a single application to be made to the electric utility, and establishing distinct deadlines for steps to be taken by the electric utility in responding to an application to attach.

W. Va. Code §31G also addresses pole access. W.Va. Code §31G-6-2 preempts local government pole attachment ordinances in favor of broadband service for pole attachments. Furthermore, §31G-6-2(b) states explicitly that the pole attachment policies of Investor-Owned Utilities, Incumbent Local Exchange Carriers, and Competitive Exchange Carriers will be "strictly construed in favor of encouraging and assisting broadband installation and deployment."

West Virginia's pole attachment regulations are comparable to those at the FCC and have similar OTMR timeframes. Regarding make-ready charges, pole owners must provide detailed estimates on a pole-by-pole basis and:

"...may not charge a new attacher to bring poles, attachments, or third-party equipment into compliance with current published safety, reliability, and pole owner construction standards

guidelines if such poles, attachments, or third-party equipment were out of compliance because of work performed by a party other than the new attacher prior to the new attachment."

While pole attachment regulations set a framework for attaching, companies must negotiate pole attachment agreements directly with pole owners. These agreements must comply with state regulations, and if a pole owner refuses to negotiate in good faith and/or follow the regulations, a company may file a complaint with the Public Service Commission, even before it has an agreement with the pole owner.

While West Virginia's current statutes and rules addressing pole attachments are conducive to the deployment of broadband infrastructure, in practice there is still some room for potential roadblocks. One of these areas relates to make-ready cost recovery: West Virginia's Pole Attachment Rule is explicit that new attachers should not be responsible for the costs to replace an already failing pole. There is a mechanism to address disputes like these via the Public Service Commission's FCC-modeled dispute resolution process under the Public Service Commission's Pole Attachment Rules. The Public Service Commission's Pole Attachment Rules require that pole owners provide a "detailed, itemized estimate" of make ready charges to attachers.

11.7 Trench Sharing/Pole Attachment Rules

The June 16, 2022, Commission Orders adopting and implementing trench sharing rules also proposed revisions to the Rules for the Government of Pole Attachments, which Rules appear at 150 W. Va. C.S.R. 38. The revisions were necessitated by 2021 legislative amendments to the Make-Ready Pole Access Act in Chapter 31G, Article 4 of the West Virginia Code. Among other things, the amendments require the PSC to promulgate rules to address "abandoned cable, conductor, and related facilities attached to utility poles." They also require the promulgation of rules governing the "timely transfer of facilities from an old pole to a new pole and the removal of utility poles that have had electric facilities moved to new poles but continue to have other facilities attached in the telecommunications space on the old existing poles." Further, the amendments require the rules to include "the right and mechanism of the pole owner itself to transfer the facilities to the new pole, to remove the old pole, and to recover its costs fully and timely from the owner of the facilities transferred."

The PSC's proposed revisions to the Rules for the Government of Pole Attachments are attached to the Commission Order, which directs the revised Rules to be filed with the West Virginia Secretary of State and promulgated as proposed rules for comment. The Commission Order notes that the revised Rules do not enjoy the unanimous support of all members of the Task Force with respect to one issue. That issue is whether pole owners are mandated by the legislative amendments to the Make-Ready Pole Access Act to transfer abandoned attachments or facilities on an old pole.

The Commission Order notes that PSC staff interprets the amendments to require pole owners to make such a transfer, whereas certain telecommunications carriers and utilities on the Task

Force read the amendments as being permissive. The PSC accepts the view of its staff, and this is reflected in the Commission Order and in the revised Rules for the Government of Pole Attachments attached thereto.

Following the conclusion of the comment periods on the proposed rules, on November 14, 2022, the Commission adopted the rules proposed in its June 16, 2022 orders without modification.

On August 23, 2024, the PSC established a Task Force to make recommendations for the modification of its legislative *Rules for the Government of Pole Attachments*. The Task Force—which is comprised of utilities, internet service providers, and the West Virginia Broadband Enhancement Council and Office of Broadband—was ordered by the PSC to consider issues and impediments that cause delays in processing requests for access to a utility's poles, ducts, conduits, or rights-of-way, and recommendations to address those issues and impediments. The PSC also ordered the Task Force to consider processes for expediting pole attachment disputes that may delay broadband deployment projects.

The Task Force's initial meeting occurred on November 20, 2024. Its members discussed the possible adoption of an accelerated pre-complaint dispute resolution mechanism similar to the FCC's Rapid Broadband Assessment Team ("RBAT") process. The members also discussed whether electric utilities and ILECs might be able to jointly approve a list of engineers and outside contractors that are authorized to review proposed pole modifications and perform modifications to both the power and communications space and how to best facilitate that process.

Future Task Force meetings will address potentially incorporating the FCC's new requirement that utilities and pole owners share pole inspection information in accordance with 47 C.F.R. §1.1411, and potentially requiring periodic reporting by pole owners to the PSC regarding compliance with the *Rules*.

The Task Force will make its final report and recommendations on or before December 16, 2024. It is anticipated that the PSC will revise its *Rules* to conform with the Task Force's final report and recommendations.

11.8 Show Cause Petition

As referenced above, in November 2022, the West Virginia Public Service Commission entered a Commission Order in Case No. 22-0885-T-E-SC, a show cause proceeding initiated by PSC staff to require Frontier West Virginia, Inc. ("Frontier") to show cause why the PSC should not prohibit Frontier from requiring duplicative pole attachment applications, timelines, and fees.

The proceeding arose out of telecommunication carrier complaints about the time and cost impediments they face attempting to attach to poles that are jointly used by Frontier and Monongahela Power Company/Potomac Edison Company ("MP/PE"). These "joint use poles"

are subject to a 1988 Joint Use Agreement. The Joint Use Agreement gives Frontier the right to license space on the poles to third-parties for the installation of telecommunications facilities, including broadband fiber. Frontier and MP/PE required the third-party telecommunication carriers to submit applications for attachment to both Frontier and MP/PE, and to pay associated costs and fees to both Frontier and MP/PE. The carriers asserted that this duplicative application process, and the duplicative costs and fees, were unreasonable, unnecessary, and delayed the efficient deployment of broadband.

The Commission Order granted staff's Petition and required Frontier and MP/PE to file a proposed new or amended joint use agreement expediting the pole attachment process and reducing the costs and fees imposed on third-party attachers. The Commission Order also required MP/PE to file with the PSC their policies and procedures for the review of pole attachment applications, and it directed Frontier and MP/PE to file with the PSC information on, among other things, the number of joint use poles the companies operate. Additionally, the Commission Order granted Citynet, LLC's ("Citynet") petition to intervene as a third-party telecommunication carrier that was prejudiced by the 1988 Joint Use Agreement and Frontier's ineffective responses to Citynet's pole attachment requests.

On December 15, 2022, MP/PE filed with the PSC proposed amendments to the Joint Use Agreement, amended policies and procedures for the review of pole attachment applications, and the pole count information requested by the PSC.

As noted above, in June 2023, the Public Service Commission approved a Joint Stipulation by the electric utility, the ILEC, and several intervening broadband providers which eliminated the dual application process, replacing it with a single application to be made to the electric utility, and establishing distinct deadlines for steps to be taken by the electric utility in responding to an application to attach.

11.9 Vertical Real Estate Management and Availability Act

In 2020, HB 4015 created a new article of the W. Va. Code, § 31G-1-3; §§ 31G-5-1-4, known as the Vertical Real Estate Management and Availability Act, which requires the West Virginia Department of Administration to request proposals to manage state-owned Vertical Real Estate. "Vertical Real Estate" is defined as towers or other structures mounted on rooftops or other prominent places, and any facilities associated with that structure, including ground facilities.

All funds in excess of management fees will be deposited by the West Virginia Office of Technology (WVOT) as follows: 50% to the Technology Infrastructure Reinvestment Fund for reinvestment in Vertical Real Estate or other infrastructure supporting broadband on state-owned property, and 50% to the Broadband Expansion Fund established in § 31G-1-5 and under the control of the Council.

WVOT is currently researching opportunities and potential relationship links of the vertical real estate initiative with other state technology initiatives, such as modernization of the State Interoperable Radio Network (SIRN) and the State's Wide Area Network. WVOT hired a professional services firm to address the full range of requirements to be completed as part of this project.

11.10 Wireless Technology Business Property Valuation Act

This act of the Legislature created a new article of the West Virginia Code, designated as § 11-6L-1 et seq. and known as the Wireless Technology Business Property Valuation Act. It provides for the valuation of towers constructed or erected between July 1, 2019, and July 1, 2024, that host antenna or other equipment used for transmitting cellular or wireless communications signals.

Under this article, for the five years immediately following the tower's erection, the value of the tower is its "salvage value," or five percent of its original cost. Thereafter, the value of the tower is determined in accordance with existing West Virginia Code § 11-6-1 et seq.

11.11 Small Wireless Facilities Deployment Act

Senate Bill 3 also created a new chapter of the West Virginia Code, designated as § 31H-1-1 *et seq.* and known as the **Small Wireless Facilities Deployment Act**. The Legislature found that small wireless facilities, also known as small cells and distributed antenna systems, are often deployed most effectively in public rights-of-way. Therefore, this chapter allows wireless providers to collocate small wireless facilities and install, modify, or replace utility poles for such facilities in public rights-of-way.

This chapter also sets rates for the occupancy and use of the rights-of-way and provides some zoning and permitting guidelines.

11.12 Establishment of Broadband Cooperatives

The State of West Virginia also provides a statutory mechanism for residents, businesses, and political subdivisions in West Virginia who have no good options for internet service providers to create a cooperative association to address their community's connectivity problems. These coops are authorized to establish a service provider focused on their communities, bond or finance the building of infrastructure, and engage in other related activities (W. Va. Code § 31G-2-1 et seq.).

To assist communities considering this option, the West Virginia University Entrepreneurship & Innovation Law Clinic has developed a Broadband Toolkit. The Toolkit contains a diagram detailing options for broadband network development in West Virginia. The Broadband

Enhancement Council will continue its partnership with the Law Clinic to assist communities in the formation of cooperatives. Communities pursuing this option are encouraged to contact the Broadband Enhancement Council for additional information.

11.13 Permitting Microtrenching

West Virginia Code § 31G-3-1 *et seq.* establishes the ability of fiber network builders to utilize microtrenching in the State of West Virginia, an innovative lower-cost, lower-impact option for installing underground fiber facilities. It also requires the installation of vacant conduit when a provider is performing microtrenching operations.

11.14 Nonregulation of VoIP Services

West Virginia also has legislation clarifying that the Public Service Commission does not have jurisdiction over companies that offer Voice over Internet Protocol (VoIP) telephony services. W. Va. Code § 24-2-1(e).

11.15 Oversight of Cable Franchising

Cable franchising in West Virginia is subject to licensing by the State or municipality under W. Va. Code § 24D-1-1 *et seq.* The Commission determines the appropriate authority for issuance of a license, prescribes the standards for construction, operation, and safe, adequate, and reliable service to subscribers. The municipality in which the cable system will be located usually serves as the permitting authority.

11.16 Compatible Use

West Virginia's *Broadband Enhancement and Expansion Policies Act* authorizes broadband operators to construct or operate broadband systems over public rights-of-way. It also empowers operators to construct or operate broadband systems through easements within the areas to be served by the broadband systems and which have been dedicated for "compatible uses."

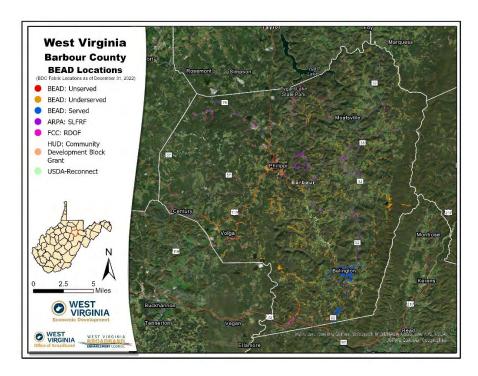
The Act defines an "easement dedicated for compatible uses" as "a public or private easement for electric, gas, telephone, or other utility transmission." W. Va. Code § 31G-3-4(f).

In installing and operating broadband facilities, operators must avoid all unnecessary damage to trees, structures, and improvements in and along the routes utilized. The *Act* also requires operators to indemnify the state, county, or municipality from personal injury and property damage claims.

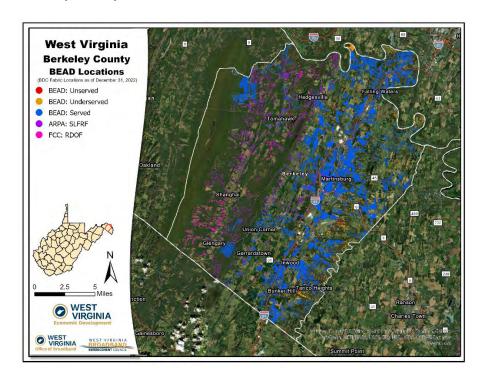
Where a broadband operator uses easements dedicated for compatible uses, it must justly compensate the property owner for any damages caused by the installation, construction, operation, or removal of broadband facilities.

Appendix 1: County Broadband Maps

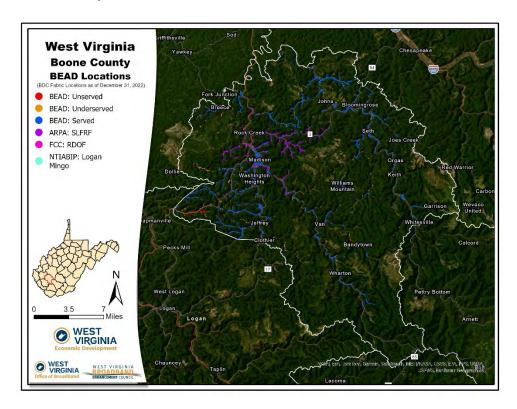
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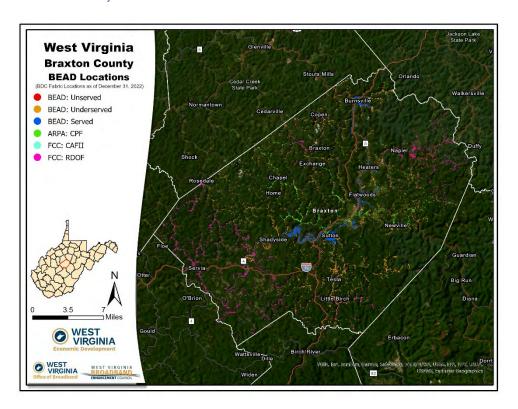
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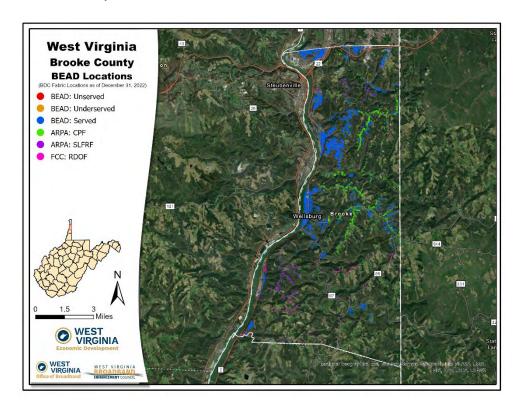
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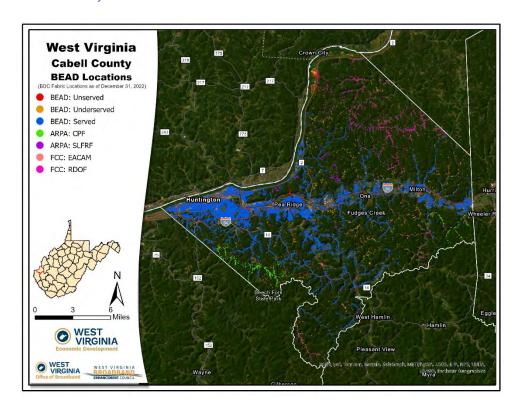
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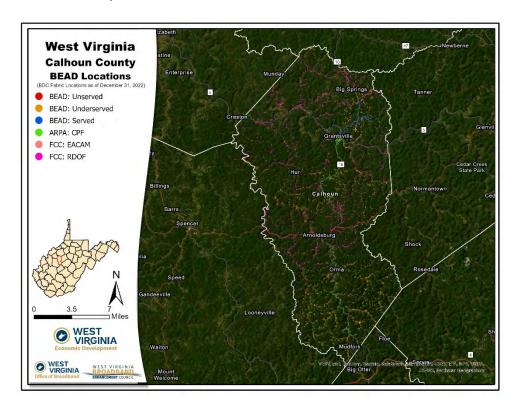
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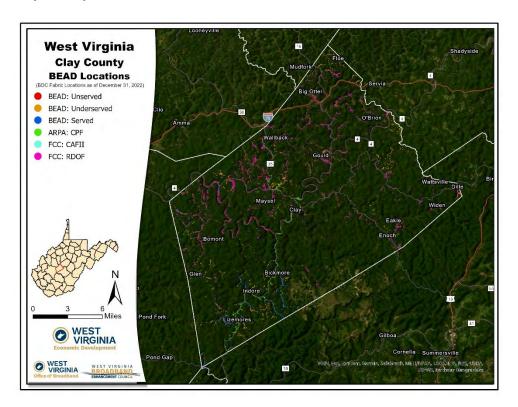
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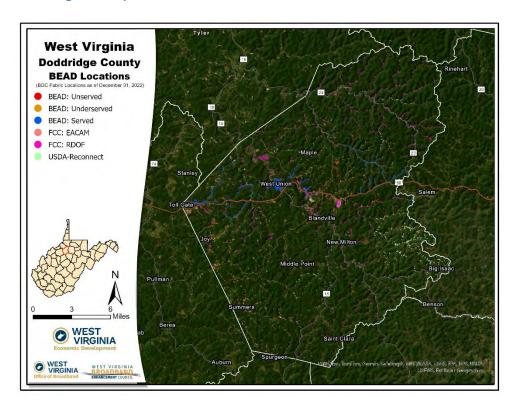
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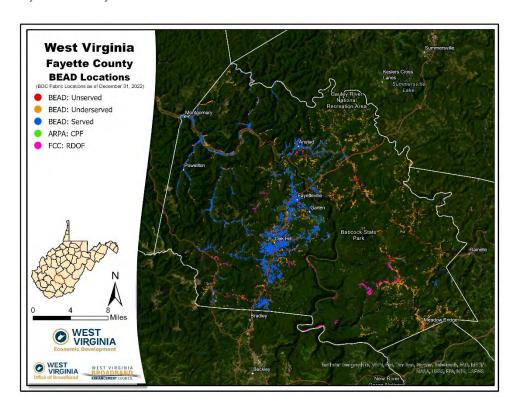
Clay County



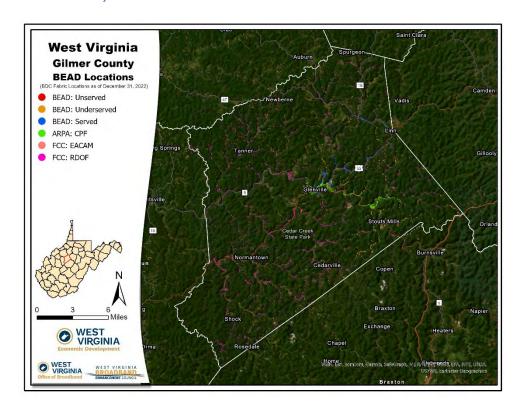
Doddridge County



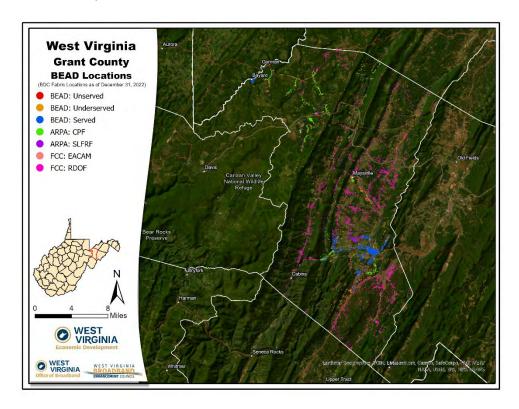
Fayette County



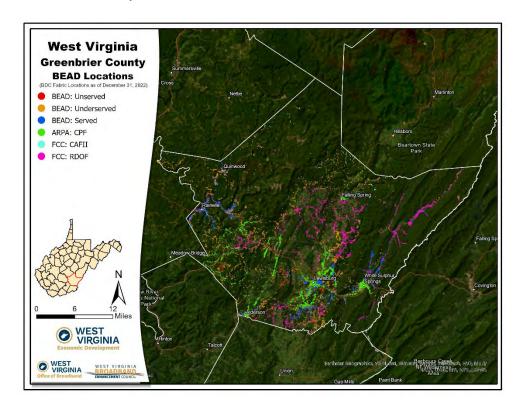
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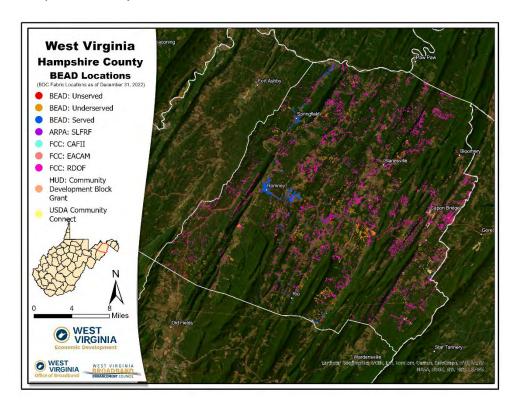
Grant County



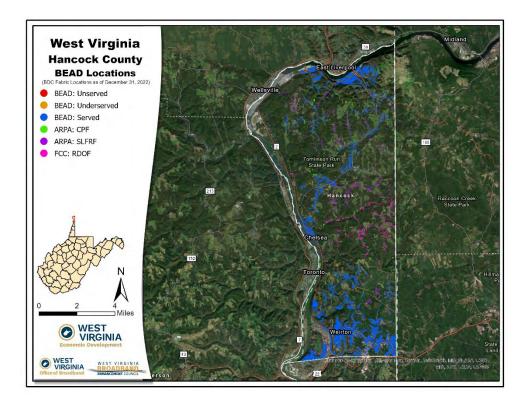
Greenbrier County



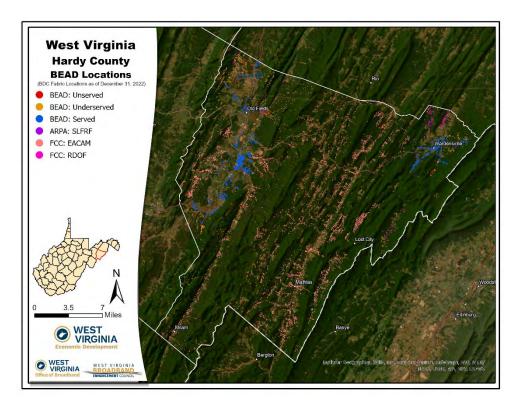
Hampshire County



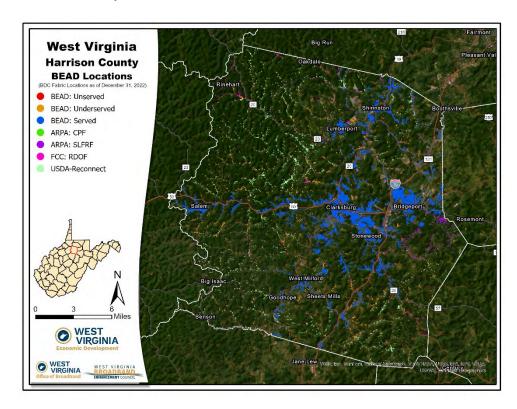
Hancock County



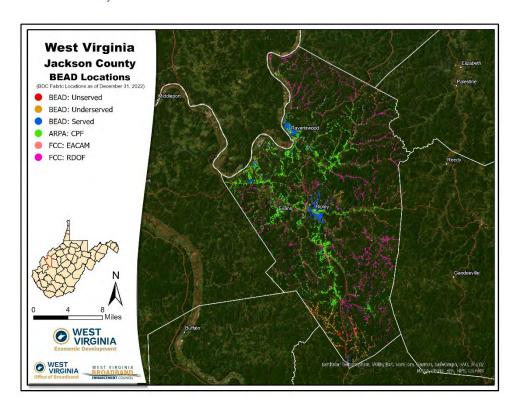
Hardy County



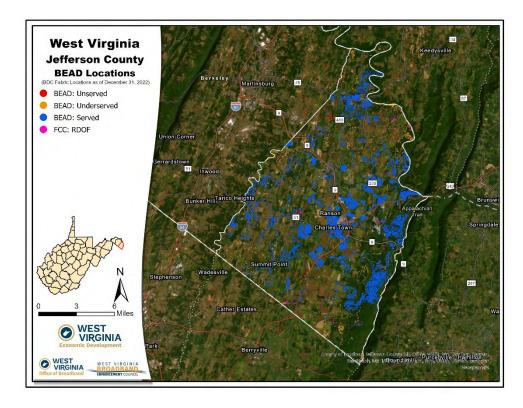
Harrison County



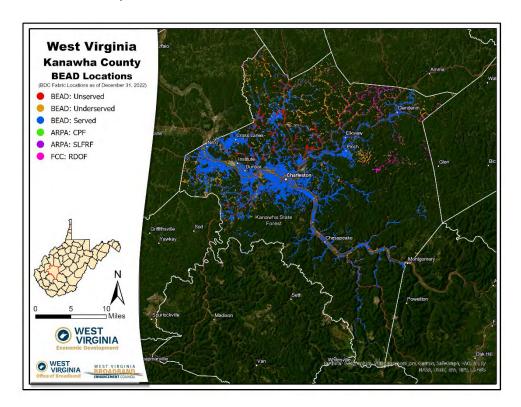
Jackson County



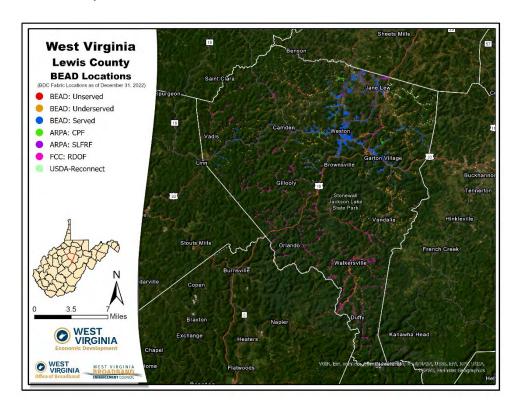
Jefferson County



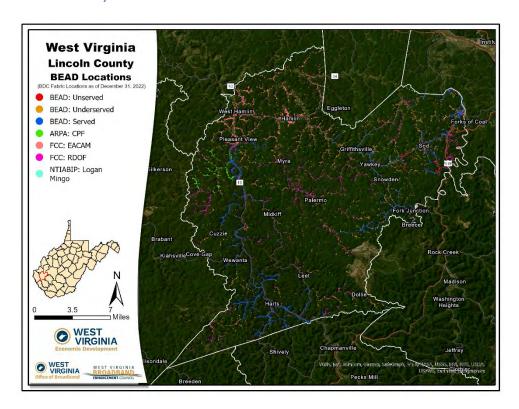
Kanawha County



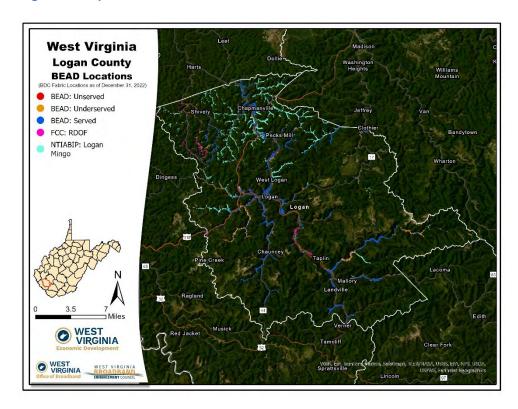
Lewis County



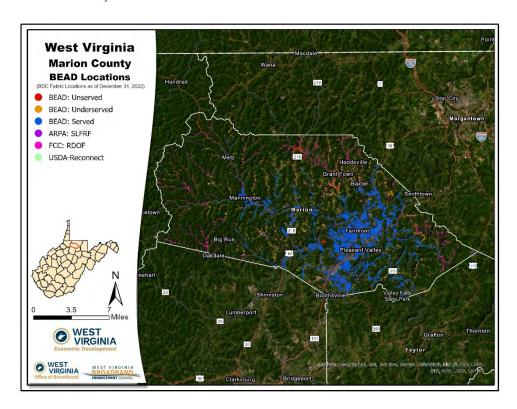
Lincoln County



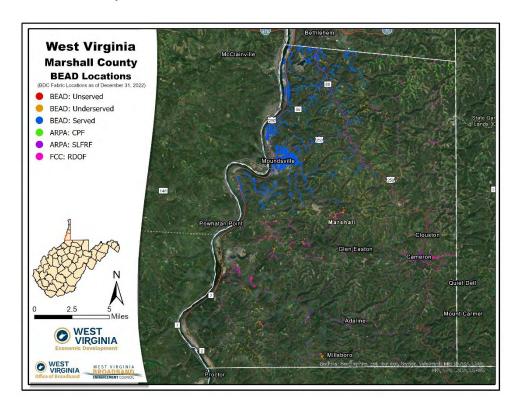
Logan County



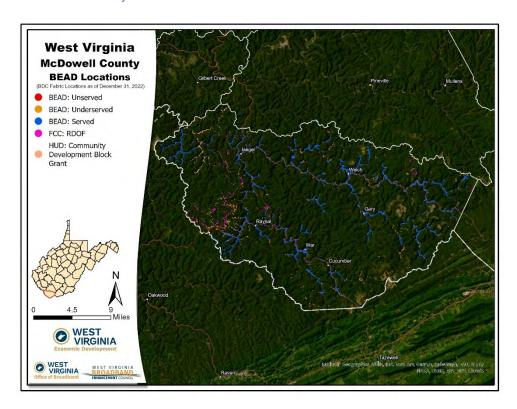
Marion County



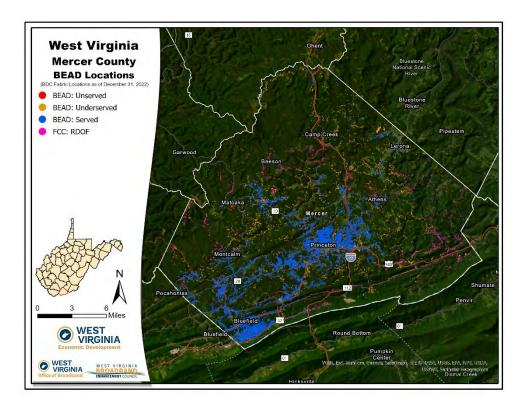
Marshall County



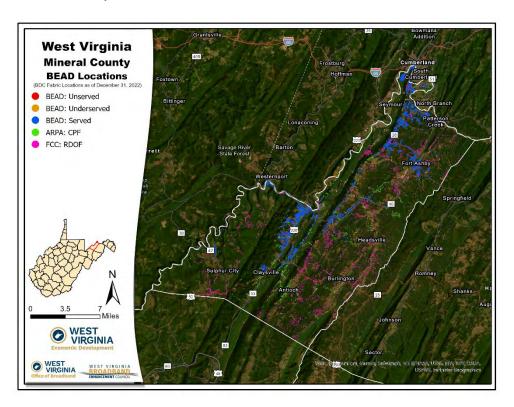
McDowell County



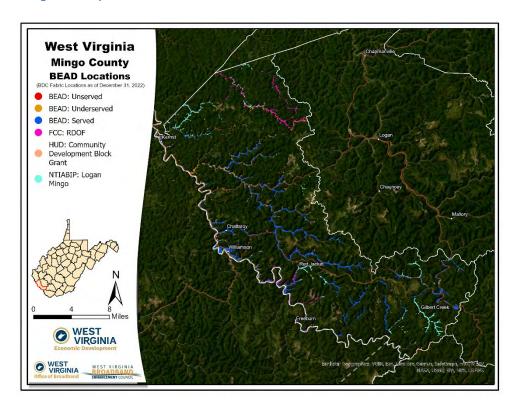
Mercer County



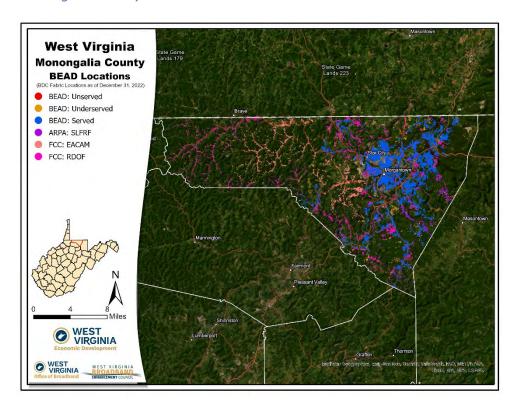
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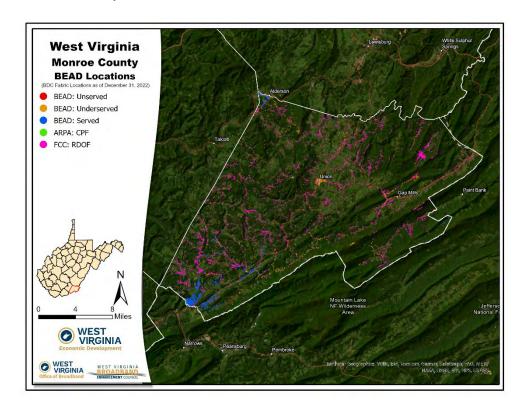
Mingo County



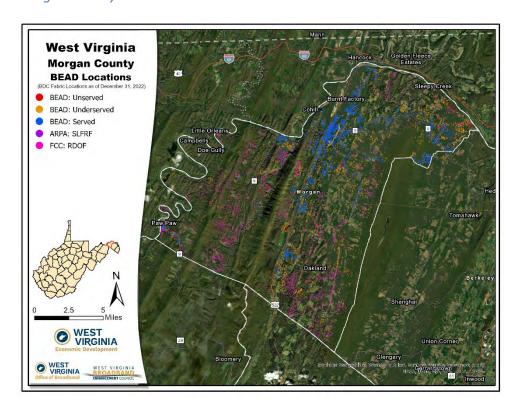
Monongalia County



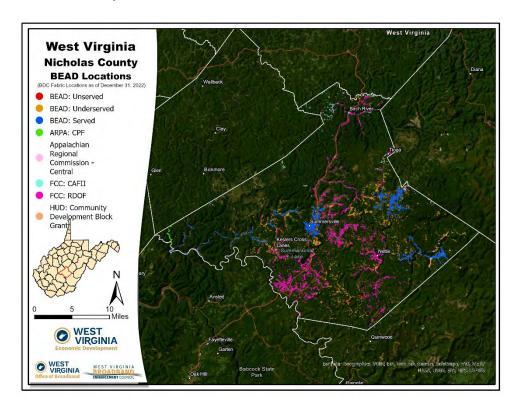
Monroe County



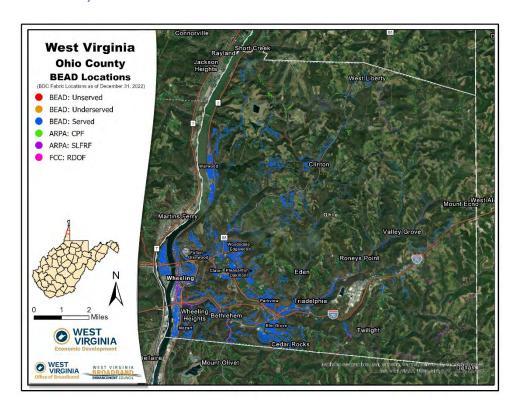
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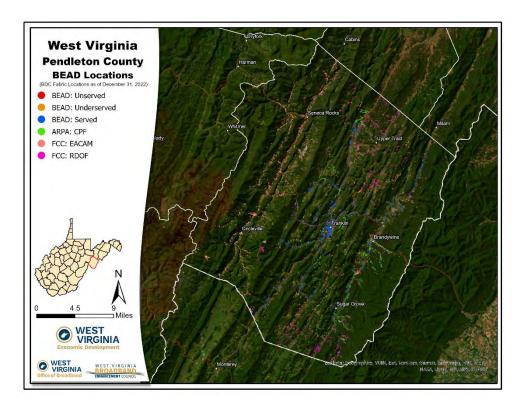
Nicholas County



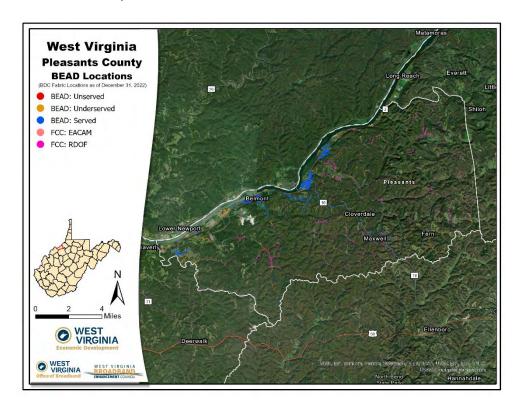
Ohio County



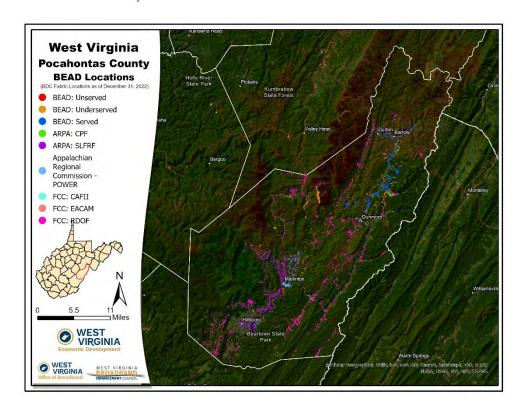
Pendleton County



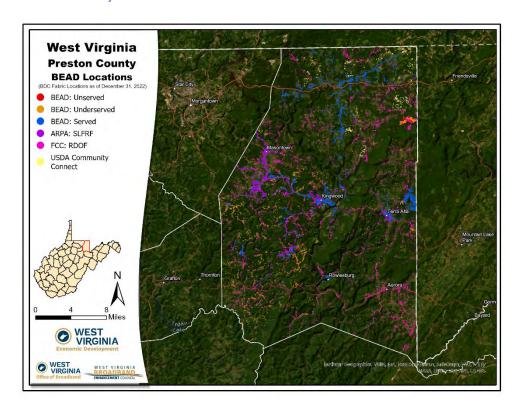
Pleasants County



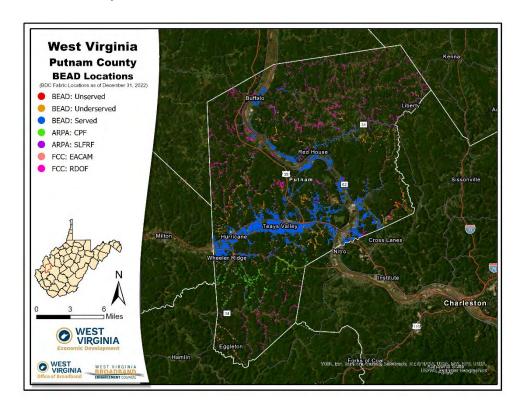
Pocahontas County



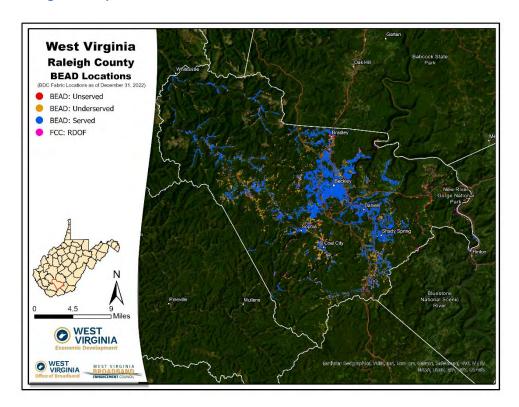
Preston County



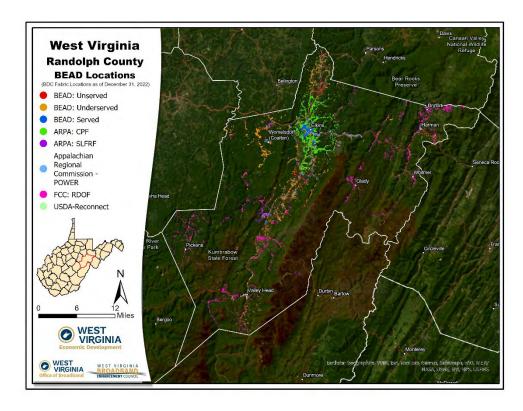
Putnam County



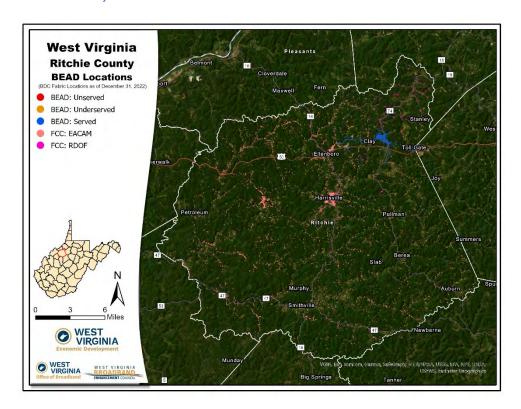
Raleigh County



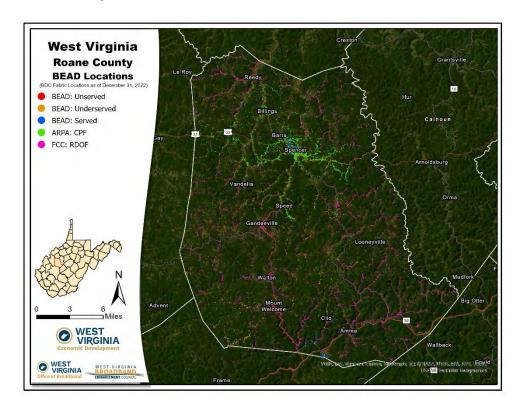
Randolph County



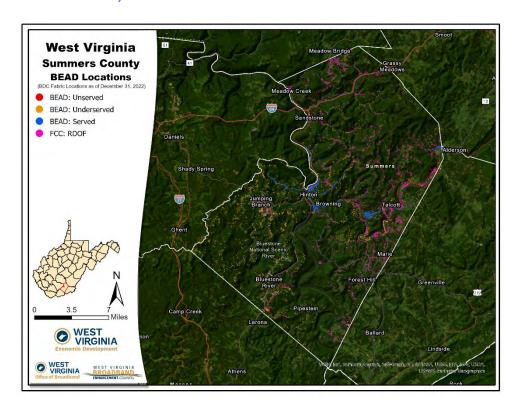
Ritchie County



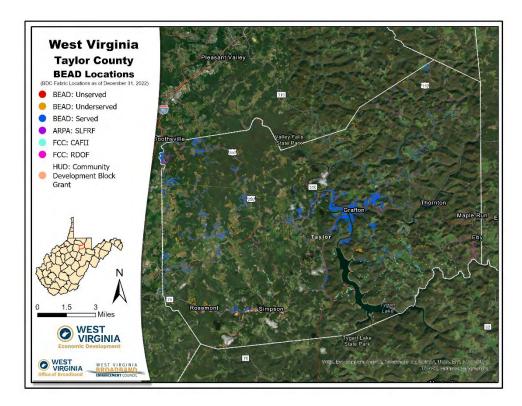
Roane County



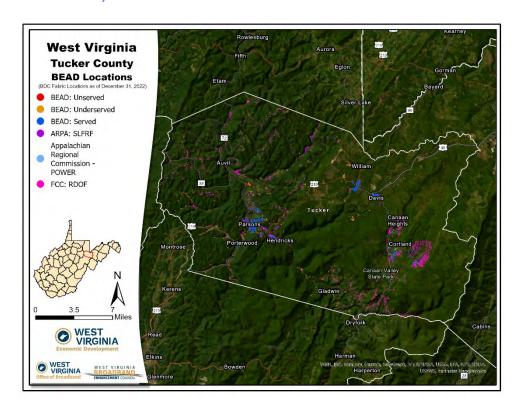
Summers County



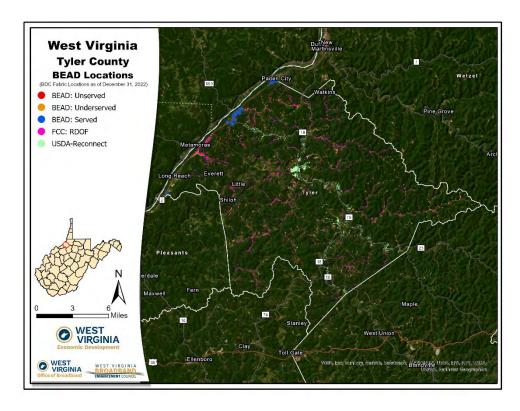
Taylor County



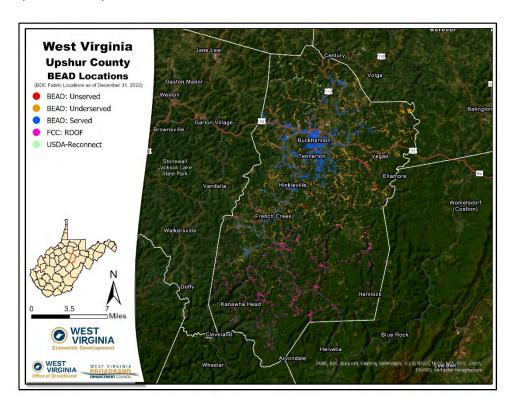
Tucker County



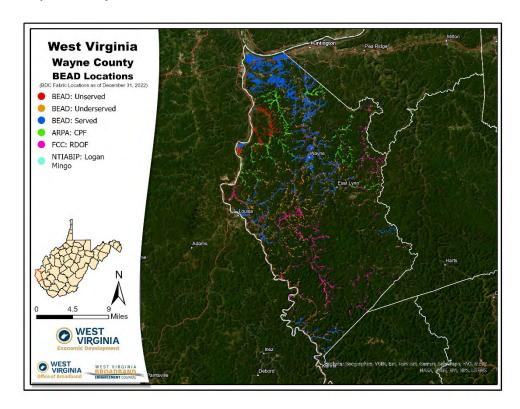
Tyler County



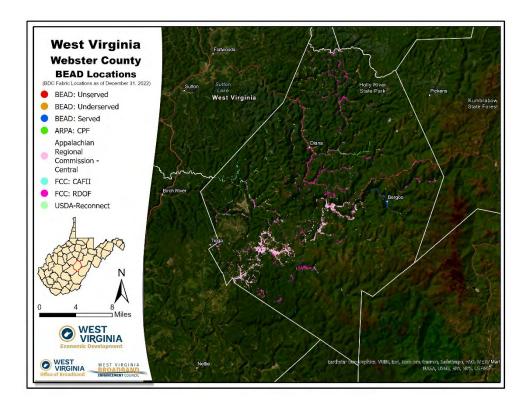
Upshur County



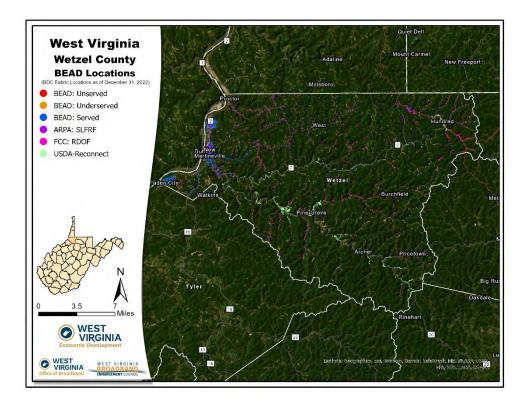
Wayne County



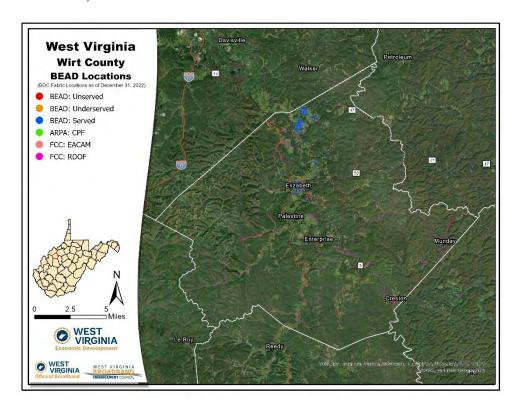
Webster County



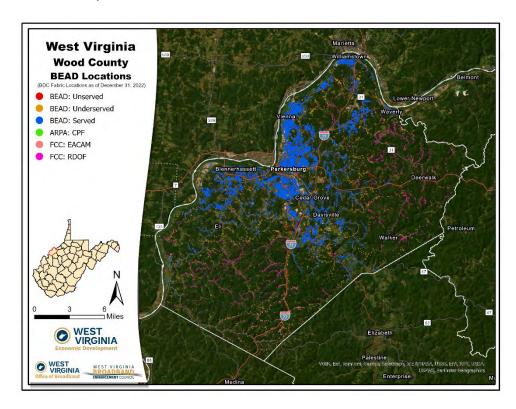
Wetzel County



Wirt County



Wood County



Wyoming County

