

Application to DHCD Submitted through CAMS

Giles County

MegaNet-Gigabeam

Application ID: 95708122022130644
Application Status: Pending
Program Name: Virginia Telecommunication Initiative 2023 - Application
Organization Name: Giles County
Organization Address: 315 North Main Street
Pearisburg, VA 24134
Profile Manager Name: Missy Bray
Profile Manager Phone: (540) 921-2525
Profile Manager Email: mbray@gilescounty.org

Project Name: MegaNet-Gigabeam
Project Contact Name: Chris McKlarney
Project Contact Phone: (540) 921-2525
Project Contact Email: cmcklarney@gilescounty.org
Project Location: 315 N. Main St.
Pearisburg, VA 24134-1522
Project Service Area: Giles County

Total Requested Amount: \$27,901,719.00

Required Annual Audit Status: Accepted

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Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	\$27,901,719.00	\$22,400,000.00	\$50,301,719.00
Administration	\$300,000.00	\$0.00	\$300,000.00
Construction	\$22,453,008.00	\$22,400,000.00	\$44,853,008.00
Construction Related Soft Costs	\$5,148,711.00	\$0.00	\$5,148,711.00
Total:	\$27,901,719.00	\$22,400,000.00	\$50,301,719.00

Budget Narrative:

The total cost of this project is estimated to be \$50,301,719.00. Gigabeam (co-applicant) is proposing to cover 44.53% of the project costs, \$22,400,000.00, using match funds from Appalachian Power. The requested grant funds total \$27,901,719.00.

Questions and Responses:

1. Project Description and Need

Describe why and how the project area(s) was selected. Describe the proposed geographic area including specific boundaries of the project area (e.g. street names, local and regional boundaries, etc.). Attach a copy of the map of your project area(s). Label map: Attachment 1 – Project Area Map.

Answer:

Giles County, Virginia, has 92.4 square miles of national forest within the county and mountainous topography portions of the county are uninhabitable. Houses and businesses are clustered into small communities, but these areas are spread apart and often present challenges when building broadband infrastructure; identifying un-served and under-served populations, however, is straightforward.

The project location is rural and very mountainous, populated by small family farms and homesteads, and includes the upper portion of Wolf Creek, along Route 42 into White Gate. For more information, see Attachment 1-Project Area Map.

In 2018, a Broadband Assessment was conducted within the county to identify priority areas for broadband in Giles. County officials have prioritized expanding access and capacity to the unserved and underserved areas. Efforts to broaden broadband access have been ongoing.

The county received a VATI 2018 grant in partnership with Gigabeam, LLC, to increase broadband access in the identified project area - the western part of the county, particularly Wolf Creek and Walker Valley as well as areas west of Route 100 and south of Route 460. The proposed project will update the 2018-funded project to a fiber-to-the-home solution and speeds of 100/20 Mbps not presently available. Additional private-public partnerships with local internet service providers and local and regional representatives are being developed to expand broadband within the county.

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2. List existing providers in the proposed project area and the speeds offered. Describe your outreach efforts to identify existing providers and how this information was compiled with source(s).

Answer:

The broadband providers who the FCC reports are active in Giles County are as follows:

- Frontier West Virginia DSL
- Paetec DSL
- Pentel DSL
- US LEC DSL
- Verizon DSL
- SuddenLink Cable
- Citizen's Fiber
- All Points Fixed Wireless
- WVVA.Net Fixed Wireless (Gigabeam)

According to the Giles County Broadband Assessment, the primary providers actively offering broadband internet services to customers within the county are SuddenLink Cable, Pentel DSL, and WVVA.net Fixed Wireless (Gigabeam).

The upper Wolf Creek Area has access to fixed wireless is available from Gigabeam, who presently offer top speeds of 50/3Mbps when conditions are ideal. This area was funded under a 2018 VATI grant to receive fixed wireless infrastructure. Due to multiple delays, the project has been extended many times, and substantive progress has not been made in this area to complete broadband implementation. The county has decided to stop this grant without finishing, and the uncompleted portion of the 2018 Grant has been added as a fiber-to-the-home build as part of this grant application. Gigabeam plans to partner with AEP and extend fiber-to-the-premise to ensure that this area will have a consistently reliable network with speeds meeting the 100/20 Mbps VATI standard for broadband.

U.S. Cellular also offers fixed wireless in the area at speeds, as reported by the FCC, of 2/.064 Mbps. U.S. Cellular is also the only wireless provider within the proposed route 42 towards White Gate areas and only offers a 2/.064 Mbps service there, too.

The information regarding broadband speeds was obtained from the FCC Fix Broadband Deployment database and was verified with the co-applicant for accuracy concerning their infrastructure.

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3. Describe if any areas near the project have received funding from federal grant programs, including but not limited to Connect America Funds II (CAF II), ACAM, ReConnect, Community Connect, and Rural Digital Opportunity Funds (RDOF). If there have been federal funds awarded near the project area(s), provide a map showing these areas, verifying the proposed project area does not conflict with these areas. Label Map: Attachment 2 – Documentation on Federal Funding Area.

Answer:

Several grants within the county are active or recently completed. Gigabeam was a recipient of a 2018 VATI grant. This grant was funded to bring fixed wireless to the western part of the county, particularly Wolf Creek and Walker Valley, as well as areas west of Route 100 and south of Route 460.

A Community Connect grant was awarded in 2017 to Pemtel. The grant's project covered Green Valley, Bane, and Trigg areas. Pemtel also received another Community Connect grant in 2021. The build area is Bear Spring and Springdale. In 2020, the New River Valley Regional Commission, in partnership with PemTel, was awarded an ARC broadband implementation grant to provide fiber to the home and the node within the community around Commissary Hill Road and Rocky Hollow Road near Pembroke, Virginia. PemTel is also receiving federal funds through the ACAM program. See Federal Funded areas within the County on Attachment 2-Documentation of Federal Funding.

4. Overlap: To be eligible for VATI, applicants must demonstrate that the proposed project area(s) is unserved. An unserved area is defined as an area with speeds below 100/20 Mbps and with less than 25% service overlap within the project area for wireless projects and 20% for wireline projects. Describe any anticipated service overlap with current providers within the project area. Provide a detailed explanation as to how you determined the percentage overlap. Label Attachment: Attachment 3 – Documentation Unserved Area VATI Criteria.

Answer:

Per the definition of unserved as stated in the VATI grant, all proposed service areas receive less than 100/20 Mbps and less than 20% overlap for wireline. As stated above:

- Wolf Creek receives 50 Mbps down and 3 Mbps up.
- Route 42 area receives 2 Mbps down and 0.064 up.

These areas are eligible for VATI funding, and overlap within the service providers is permitted as competitor speeds are low enough to classify the areas as unserved. Within PemTel's Route 100 service area, Gigabeam maintains a narrow corridor adjacent to Route 100. This corridor connects fiber from their service area in other counties to their Giles County service area.

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5. Total Passings: Provide the number of total serviceable units in the project area. Applicants are encouraged to prioritize areas lacking 25 Megabits per second download and 3 Megabits per second upload speeds, as they will receive priority in application scoring. For projects with more than one service area, each service area must have delineated passing information. Label Attachment: Attachment 4 – Passings Form.
- a. Of the total number of VATI passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area.
- b. If applicable, of the total number of RDOF passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area.
- c. If applicable, provide the number of passings that will require special construction costs, defined as a one-time fee above normal service connection fees required to provide broadband access to a premise. Describe the methodology used for these projections.
- d. If applicable, provide the number of passings included in the application that will receive broadband access because special construction costs have been budgeted in the VATI application. Describe the methodology used for determining which passings with special construction costs were budgeted in the application.
- e. Provide the number of passings in the project area that have 25/3 Mbps or less. Describe the methodology used for these projections. (up to 15 points)

Answer:

a) Residential= 3,916

Business= 311

Non-Residential= 54

Community Anchors= 33

Total Passings= 4,314

More information is available in Attachment 4-Passing Form.

b) Not applicable. No, RDOF passings are in the proposed project area.

c) Not Applicable, None of the proposed passings will require special construction costs.

d) Not applicable; no special construction costs have been budgeted for this application.

e) 929 passings in the project area only have access to the internet, which is 25/3 Mbps or less. The data used to determine these passings are taken from Giles County solid waste billing data and mapped in ArcGIS.

6. Describe if any blocks awarded in Rural Digital Opportunity Fund (RDOF) are included in the VATI application area. If RDOF areas are included in the VATI application, provide a map of these areas and include information on number of passings in RDOF awarded areas within the VATI application area, and Census Block Group ID number for each block group in the project area. Label Attachment: Attachment 5 – RDOF Awarded Areas Form in VATI Area

Answer:

Not Applicable, None of this project area is covered by a Rural Digital Opportunity Fund. See Attachment 5-RDOF awarded Areas Form in VATI Area.

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7. **For wireless projects only:** Please explain the ownership of the proposed wireless infrastructure. Please describe if the private co-applicant will own or lease the radio mast, tower, or other vertical structure onto which the wireless infrastructure will be installed.

Answer:

The proposed project is wireline, so this question is not applicable.

8. **Network Design:** Provide a description of the network system design used to deliver broadband service from the network's primary internet point(s) of presence to end users, including the network components that already exist and the ones that would be added by the proposed project. Provide a detailed explanation of how this information was determined with sources. Provide information on how capacity for scalability, or expansion, of how the network can adapt to future needs. If using a technology with shared bandwidth, describe how the equipment will handle capacity during peak intervals. For wireless projects, provide a propagation map for the proposed project area with a clearly defined legend for scale of map. Label Map: Attachment 6 – Propagation Map Wireless Project.

Answer:

This project is a collaborative effort between Appalachian Power Company (Apco), an investor-owned utility, and GigaBeam Networks to construct a fiber-to-the-premise network for internet access. Apco will construct fiber to support their "smart grid" infrastructure for electrical service. This network will be overbuilt, and the excess fiber will be leased by GigaBeam to provide internet connectivity to the unserved locations throughout both counties. Apco will build this last/middle mile infrastructure, including fiber, splicing, and RTDs.

GigaBeam Networks operates a hybrid fiber-to-the-premise and fixed wireless network throughout southern West Virginia and southwestern Virginia. The proposed network design for the Giles County Project is a fiber-to-the-premise network utilizing XGS-PON (10Gbps Symmetrical Passive Optical Network) technology.

GigaBeam will supply the drops and necessary electronics for the network. The Apco fiber will be constructed in the "power space" of the pole, which allows for faster installation at a lower cost with make-ready costs significantly lower than a standard telecom deployment. Fiber also leased from Apco will connect the head end to our current network infrastructure providing connectivity to data centers in Ashburn, Atlanta, Columbus, and Richmond, VA.

In agreement with Apco, Gigabeam is standardizing a network design involving plug-and-play multiport terminals to connect drop cables to the Apco fiber infrastructure. This simplifies the installation of the drop cables, minimizes the splicing needed to install the drops, and decreases the timeframe required for completion. The diagrams depicting the basic layout of the network construction can be found on Attachment 7-Project Management Plan.

100 Gigabit transport will be terminated to the service router at the head end. The service router will be connected to each OLT located throughout the network via 10 Gigabit connections (upgradable to 100 Gigabit). The OLT is the origination point for the definition of the XGS-PON network. OLT, much like network switches, contains cards with ports. Each port represents a PON. 10 Gigabits of available broadband traffic is spread amongst cards containing four to eight individual PON ports. GigaBeam has chosen to keep the customer per PON ratio at 32:1 in a distributed split network design. This distributed split allows for minimum fiber count usage to optimize the usage of Apco fiber for the network. The 32:1 standard allows 32 customers per PON port and the capability of sharing 10Gbps of traffic per 32 customers. Traffic flows from these PON ports connecting to a passive optical splitter(s) located close to the customer within a fiber cabinet. Each of the 32 splitter ports connects directly to a customer premise device or optical network terminal (ONT). ONTs are attached directly to the customer's premise location. A single fiber connects to the ONT and from the ONT via ethernet to a wireless router or customer network. The ONT facilitates the transmission of data into customers' devices. Each customer can receive up to a maximum of 10Gbps service. Apco fiber will provide service availability to a large portion of the unserved locations in the county. However, additional fiber will be constructed to extend the network and connect the final unserved customers, not within range of their fiber build.

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9. Speeds: Describe the internet service offerings, including download and upload speeds, to be provided after completion of the proposed project. Detail whether that speed is based on dedicated or shared bandwidth, and detail the technology that will be used. This description can be illustrated by a map or schematic diagram, as appropriate. List the private co-applicant's tiered price structure for all speed offerings in the proposed project area, including the lowest tiered speed offering at or above 100/20 Mbps. (up to 10 points)

Answer:

The symmetrical 10 Gbps speed and compatible architecture of XGS-PON has made it a viable option for high-speed data, voice, and Internet requirements for years to come. Services like video conferencing, gaming, and cloud storage are all gaining popularity, making the demands on upstream delivery speed equally relevant. Other applications, such as 5G front/mid-haul, can also reap the performance and efficiency benefits of symmetrical XGS-PON. Since XGS-PON can co-exist on the same fiber plant as G-PON without changes to the passive architecture and is capable of higher split ratios, it provides a logical and cost-effective expansion option.

With streaming, high definition, 5G, and other emerging technologies continually pushing bandwidth demands, the development of XGS-PON and other standards has proven essential for ensuring network capacity. Simultaneous upstream and downstream transmission over the same fiber is made possible through wavelength division multiplexing (WDM). This technology allows one XGS-PON wavelength or color of light transmission upstream and another downstream, which makes the proposed fiber capable of broadband speeds up to 10-Gbps.

Gigabeam intends to offer the following planned speed and pricing in the project area:

100Mbps x 100Mbps - \$59

250Mbps x 250Mbps - \$79

500Mbps x 500Mbps - \$99

1Gbps x 1Gbps - \$109

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10. Explain how the proposed project achieves universal broadband coverage for the locality or fits into a larger plan to achieve universal broadband coverage for the locality. If applicable, explain the remaining areas of need in the locality and a brief description of the plan to achieve universal broadband coverage. (up to 50 points)

Answer:

In 2018, a Broadband Assessment was conducted within the county to identify priority areas for broadband in Giles. County officials have prioritized expanding access and capacity to the unserved and underserved areas. Efforts to broaden broadband access have been ongoing. As part of this study, a number of existing providers were identified, and service areas were broadly mapped based on the FCC Form 477 from 2016. These maps are known to be overstated service areas; a citizen survey deployed with this study also evaluates likely coverage areas of various internet access technologies.

Since that assessment, Giles County has been actively seeking ISP partners to achieve universal coverage - RFPS were issued in advance of the 2018 VATI and ARC grant applications and in support of the 2023 VATI application process. As a result of ongoing conversations and the RFP processes, Giles County has been working with two internet service providers, PemTel and Gigabeam, to implement universal coverage to populated county areas.

The county received a VATI 2018 grant in partnership with Gigabeam, LLC, to increase broadband access in the western part of the county, particularly Wolf Creek and Walker Valley, as well as areas west of Route 100 and south of Route 460. Additional private-public partnerships with local internet service providers and local and regional representatives are being developed to expand broadband within the county.

Several rural communities within the county still remain underserved or unserved by broadband. Giles County is partnering with Gigabeam Networks, LLC to implement broadband access in rural areas of Giles County to contribute to this goal.

This application is one of two submitted for 2023 VATI funding. Together these applications will fund the final phase of broadband implementation to un-served populated areas within the county. These projects will introduce broadband to previously un-served homes in Glen Lyn, East River Mountain, Powell Mountain, Virginia Line Road, Wolf Creek, and Route 100 corridor and improve internet connectivity in underserved areas such as Maybrook, Whitegate, and Clendennin.

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11. Project Readiness

Describe the current state of project development, including but not limited to: planning, preliminary engineering, identifying easements/permits, status of MOU or MOA, and final design. Prepare a detailed project timeline or construction schedule, identifying specific tasks, staff, contractor(s) responsible, collection of data, etc., and estimated start and completion dates. Applicants are encouraged to extensively discuss, where applicable, easements relating to railroad crossings, federally-owned lands and parks, partnerships with the Virginia Department of Transportation, and mobile home parks. Applicants must include Memorandums of Understanding (MOUs) or Memorandums of Agreement (MOAs) between applicants (drafts are allowable). Label Attachments: Attachment 7 – Timeline/Project Management Plan; Attachment 8 – MOU/MOA between Applicant/Co-Applicant; (up to 10 points)

Answer:

The design of this project is consistent with other successful fiber to the home deployments that Gigabeam has undertaken in the past. The process of initial field data collection and design. Activities that coincide with field design include site surveys and the acquisition of any required permits and easements. Shortly after, designs are finalized, and fiber installation and testing begins. As this is completed, distribution and transport of fiber, along with fiber splicing and testing, begins. Finally, drops are installed and tested. Customers are connected, and speeds are tested. The project is expected to take approximately three years to complete since there are a large number of proposed subscribers, and the area is mountainous and rural. Gigabeam has completed preliminary engineering for this project. For more information regarding the proposed project timeline and responsible persons, please refer to Attachment 7- Timeline/Project Management Plan.

A draft MOU (Attachment 8- MOU/MOA between Applicant/Co-Applicant) has been provided for this grant application. If the VATI grant is awarded, Giles County and Gigabeam will enter into a formal agreement/contract upon a funding announcement for the proposed project.

12. Has the applicant or co-applicant received any VATI grants? If so, provide a list of these grants, with a detailed summary of the status of each.

Answer:

Giles County, in partnership with Gigabeam, was a recipient of a 2018 VATI grant. The project funded by this grant has experienced delays. The most significant delay has been difficulty obtaining land rights from property owners within the project area. As a result, the project needed to be redesigned multiple times. The Covid-19 Pandemic also delayed progress as workers were unable to enter customers' homes to connect them. Supply chain issues also made securing build materials extremely difficult, and materials often had delayed arrivals resulting in further project delays. This proposed project would be a modification of work remaining in the 2018 grant.

In addition to the Giles County VATI grant, Gigabeam has worked with several other localities on VATI Projects, including

- Bland County's Hollybrook Project(2017)
- Grayson County's FTTx Project (2020)
- Montgomery County's Elliston/Shawsville Project (2021)
- Montgomery and Bland Counties' FTTx Project (2022)

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13. Matching funds: Complete the funding sources table indicating the cash match and in-kind resources from the applicant, co-applicant, and any other partners investing in the proposed project (VATI funding cannot exceed 80 percent of total project cost). In-kind resources include, but are not limited to: grant management, acquisition of rights of way or easements, waiving permit fees, force account labor, etc. Please note that a minimum 20% match is required to be eligible for VATI, the private sector provider must provide 10% of the required match. If the private co-applicant cash match is below 10% of total project cost, applicants must provide financial details demonstrating appropriate private investment. If applicants and co-applicants are seeking to include prior expended funds as matching funds, Attachment 11 must be completed. Label Attachments: Attachment 9 - Funding Sources Table; Attachment 10 – Documentation of Match Funding; Attachment 11 - Prior Expended Match Form

Answer:

See Attachments 9 and 10 for match funding information.

Attachment 11 is not applicable

14. Leverage: Describe any leverage being provided by the applicant, co-applicant, and partner(s) in support of the proposed project. (up to 10 points)

Answer:

The total cost of this project is estimated to be \$50,301,719.00. Gigabeam (co-applicant) is proposing to cover 44.53% of the project costs, \$22,400,000.00, using match funds from Appalachian Power. The requested grant funds total \$27,901,719.00.

15. Communications Plan: Describe efforts to keep the public informed of project progress and the broadband adoption plan.

a. Explain how you plan on communicating the project status to stakeholders, including but not limited to County leadership, project area residents, etc. (Up to 10 points)

b. Explain how you plan to promote customer take rate, including marketing activities, outreach plan, and other actions to reach the identified serviceable units within the project area. Provide the anticipated take rate and describe the basis for the estimate. (up to 10 points)

c. Describe any digital literacy efforts to ensure residents and businesses in the proposed project area sufficiently utilize broadband. Please list any partnering organizations for digital literacy, such as the local library or cooperative extension office.

Answer:

a) GigaBeam is currently developing and deploying a more elaborate and expanded communications plan for all of our current and future projects. Included in this plan is a new and enhanced website that will include project timelines, projections, simplified signup process, and other information about every aspect of our projects. GigaBeam is working with local government partners and APCO in developing this plan to present a complete and well-informed message to our customers from not only our channels of marketing but also APCO's and the localities. GigaBeam will also provide regular updates to our partners and county leadership on the status of our projects.

GigaBeam anticipates the following elements of a plan that has been developed with other NRV partners may be used for communicating project status and progress with Giles County, stakeholders, and the general public.

Monthly Reporting: GigaBeam will provide Giles County with a written report each month, detailing GigaBeam's progress against established project milestones and an expenditures update as needed. Progress against milestones will be reported across four activity categories, including Preconstruction Activities, Construction, Installations, Other CAPEX as incurred.

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Monthly Coordination Meetings: The project team will participate in monthly coordination meetings during which GigaBeam will present a report on progress against established project milestones in the previous month, and an update on project activities anticipated in the next month.

Customer Updates / Preregistration: All project stakeholders will be able to direct interested locations to GigaBeam's project-specific website, which will allow interested locations to subscribe to location-specific project updates, to pre-register for service, to select their preferred contact method for project updates and scheduling, and to schedule service installation when it becomes available at their location. GigaBeam will contact pre-registered locations approximately 30 days in advance of service availability to invite those locations to schedule installation windows. GigaBeam will confirm installation appointments via the preferred communication method selected by each location.

Public Events / Media Availability: In coordination with Giles County and other project team members, a minimum of two public events will be held, with Giles County selecting the public events most appropriate for their communities and stakeholders, which events could include:

Commencement of Construction / Groundbreaking, Lighting of First Fiber Distribution Area / Initial Customer Access, Completion of Utility Middle-Mile Fiber, Completion of Distribution Network, Other County Selected Events. In addition to events open to the general public, local media will be invited for project tours/construction ride-outs during construction.

Board of Supervisors Reporting: The project team will make a report and project update to the County Board of Supervisors on a semi-annual basis, on a timeframe coordinated with the County's project lead.

b) GigaBeam also recently hired a Marketing Director who is launching multiple campaigns

to increase outreach to project area communities. These campaigns include in-person events to inform customers, answer questions, and give updates on gigabeam projects.

Gigabeam has also developed marketing materials to distribute throughout its service area and social media platforms. Most of this is accomplished through our marketing cloud, a product of Calix that we have purchased to assist in these efforts.

These marketing efforts are designed to educate and promote customer take rates. Gigabeam's marketing plan includes efforts to identify and acquire new subscribers by leveraging behavioral and demographic data to give a 360-degree view of customers and enable Gigabeam to anticipate customer needs. This predictive modeling will allow them to focus our marketing strategies more effectively and result in increased take rates.

GigaBeam estimates a 60% take rate on this project. This estimation is based on our historical project data of selling services for the past 18 years of fixed wireless and fiber deployments.

c) Gigabeam digital literacy plans to address barriers to digital literacy by partnering with libraries, schools, and other community organizations located within the project area. They plan to coordinate with these partners to provide adequate educational materials, training sessions on the beneficial uses of broadband connectivity, and other general outreach sessions to further educate the community on all the benefits that will be available to them.

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16. Project Management: Identify key individuals who will be responsible for the management of the project and provide a brief description of their role and responsibilities for the project. Present this information in table format. Provide a brief description of the applicant and co applicant's history and experience with managing grants and constructing broadband communication facilities.

Answer:

Name Responsibilities	Title	Organization	Role &
Chris McKlarney for permitting, technical assistance	County Administrator	Giles County	Local government lead
Kevin Byrd Commission	Executive Director Project Oversight	New River Valley Regional	
Michael Clemons operational oversight.	Owner and President	Gigabeam	System construction and
Adam Blankenship System construction and operations	COO	Gigabeam	Day-to-day
Summer Bork Commission	Economic Recovery Planner Day-to-day project management and grant administration	New River Valley Regional	
Christy Straight Commission	Director of Environmental Resources Day-to-day project management and grant administration	New River Valley Regional	
Greg Hendrick Services APCo	Director of Construction Project and Field Oversees Project Management		

Giles County has been the recipient of a 2018 VATI project with Gigabeam as the ISP partner. This project experienced several obstacles. However, the county continues to doggedly make progress toward its completion and has diligently reported project information to DHCD. The county has also received a number of non-VATI grants to complete projects within the county.

Giles County has been working with the New River Valley Regional Commission for the completion of this grant application and will continue working with them for grant administration should this project be funded. The Regional Commission is currently overseeing a multi-county 2022 VATI grant, as well as providing assistance for Giles' 2018 VATI. The New River Valley Regional Commission was also awarded a 2020 ARC Broadband Implementation Grant, which they are partnering with Pentel to complete.

Gigabeam also has considerable experience working with VATI grants from as early as the Bland County 2017 VATI project. They are currently working on VATI Projects in Grayson, Montgomery, Bland, and Giles County.

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17. Project Budget and Cost Appropriateness

Budget: Applicants must provide a detailed budget that outlines how the grant funds will be utilized, including an itemization of equipment, construction costs, and a justification of proposed expenses. If designating more than one service area in a single application, each service area must have delineated budget information. For wireless projects, please include delineated budget information by each tower. Expenses should be substantiated by clear cost estimates. Include copies of vendor quotes or documented cost estimates supporting the proposed budget. Label Attachments: Attachment 12 – Derivation of Costs; Attachment 13 - Documentation of Supporting Cost Estimates. (up to 10 points)

Answer:

The budget has been broken into nine categories of costs (see Attachment 12 – Derivation of Costs):

- Engineering and permitting
- Project and construction management
- Make ready
- Aerial construction
- Contingency
- OTL construction
- Drops construction
- Subscriber installation
- Grant administration

These Categories have been broken down into funding mechanisms, VATI and Gigabeam/APCo.

18. The cost benefit index is comprised of state cost per unit passed. Individual cost benefit scores are calculated and averaged together to create a point scale for a composite score. Provide the following:
- a. Total VATI funding request

b. Number of serviceable units
(up to 125 points)

Answer:

a) \$27,901,719.00

b) 4,314 serviceable units

19. Commonwealth Priorities (Up to 50 points)

Additional points will be awarded to proposed projects that reflect Commonwealth priorities. If applicable, describe the following:

a. Businesses, community anchors, or other passings in the proposed project area that will have a significant impact on the locality or region because of access to broadband.

b. Unique partnerships involved in the proposed project. Examples include electric utilities, universities, and federal/state agencies.

c. Digital equity efforts to ensure low to moderate income households in the proposed project area will have affordable access to speeds at or above 100/20 mbps, include information regarding the internet service provider's participation in the Affordable Connectivity Program

d. The co-applicant's efforts to mitigate supply chain constraints, including labor shortages and order-to-delivery delays on telecommunications materials required to construct broadband networks.

e. The applicant's and co-applicant's efforts to promote broadband adoption, including, but not limited to: telehealth, smart farming, e-entrepreneurship, and distance learning.

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a) A total of 87 community anchors and non-residential passings are located within the project area. These anchors include

- 6 school facilities,
- 3 libraries,
- 14 medical/healthcare centers,
- 10 public safety,
- 48 churches
- 6 community service locations.

375 businesses are also located within the project area. These establishments are essential to the economic and social fabric of the communities in the proposed project area. This project would enable opportunities in education, business operation, and community safety by connecting them to reliable internet service.

b) GigaBeam Networks is partnering with Apco for this project. Working with a major electric utility will save time during deployment and reduce costs. Gigabeam and Apco have successfully partnered on projects in Grayson County, VA; Logan County, WV; and Mingo County, WV.

c) Efforts to ensure digital equity will be addressed by partnering with project area schools and developing a digital equity model. A digital literacy program will be created using the framework available through Learning.com, which includes ensuring digital equity to all interested community members. This grant project will provide Fiber to the Home (FTTH) for citizens in the project area, many of whom have not had access to broadband internet.

Many households in Giles County are considered low or moderate-income; economic access is as important as physical access to high-speed internet. The proposed project is designed to make the construction of needed infrastructure as cost-effective as possible so that additional build costs will not be passed onto the consumer. Giles County is also working with the local Department of Social Services, public schools, internet service providers, and other civic organizations to develop solutions that will address individual cases of need. GigaBeam Networks is a participant in the ACP program, and qualifying households will receive 100/100Mbps service for \$29 a month.

d) GigaBeam Networks and Appalachian Power are leveraging their buying power to achieve consistent equipment supplies. Supply chain issues are ongoing and are expected to continue for the next several years. These difficulties are primarily due to the nationwide demand for supplies to build the fiber networks.

We are working directly with our manufacturers to ensure supplies will continue to flow steadily. GigaBeam is also working directly with local educational institutions for our labor pool. They have been successful in adding staff from several local programs that specialize in fast-paced certification for linemen, fiber optic technicians, and other specialized fields.

e. GigaBeam has recently hired a Marketing Director whose primary role is to inform regional communities about the services offered and the impact broadband access can have for customers in the areas of telehealth, employment, and entrepreneurship. Gigabeam and the County are developing and hosting workshops and community outreach programs to further educate the

Application to DHCD Submitted through CAMS

Giles County

MegaNet-Gigabeam

region.

20. Additional Information

Please attach any letters of support from stakeholders. If the applicant is not a locality(s) in which the project will occur, please provide a letter of support from that locality.

Attachment 14 – Letters of Support.

Provide the two most recent Form 477 submitted to the FCC, or equivalent, as well as point, polygon, and, for wireless providers, RSSI shapefiles for the project area **in .zip file form**. With attachments 17 through 20, attach any other information that the applicant desires to include. Applicants are limited to four additional attachments.

Label Additional Attachments as:

- a. Attachment 15 – Two most recent Form 477 submitted to the FCC or equivalent
- b. Attachment 16 - Point and Polygon shapefiles, in .zip file form, showing proposed passings and project area
- c. Attachment 17 - For wireless applicants: shapefiles, in .zip file form, indicating RSSI projections in the application area
- d. Attachment 18 – XXXXXXXX
- e. Attachment 19 – XXXXXXXX
- f. Attachment 20 – XXXXXXXX

Answer:

Attachment 17 is not applicable.

Attachments:

Map(s) of project area, including proposed infrastructure

Attachment1ProjectAreaMap825202265720.pdf

Documentation of Federal Funding (CAF/ACAM/USDA/RDOF, etc...) in and/or near proposed project area.

Attachment2FederalFundingArea825202265803.pdf

Documentation that proposed project area is unserved based on VATI criteria

Attachment3Documentationofunderservedarea825202265829.pdf

Application to DHCD Submitted through CAMS

Giles County

MegaNet-Gigabeam

Passings Form (Use template provided)

Attachment4PassingForm825202281342.pdf

Timeline/Project Management Plan

Attachment7timelineandprojectmanagementplan825202265920.pdf

MOU/MOA between applicant/co-applicant (can be in draft form)

Attachment8MOUbetweenGilesandGigabeamDRAFT825202265955.pdf

Funding Sources Table (Use template provided)

Attachment9FundingSourceTable825202281941.pdf

Documentation of Match Funding

Attachment10DocumentationofMatch825202270059.pdf

Derivation of Cost/Project Budget (Use template provided)

Attachment12DerivationofCosts825202270133.pdf

Documentation of Supporting Cost Estimates

Attachment13DocumentationDerivationofCost825202270159.pdf

Letters of Support

Attachment14LettersofSupport825202270239.pdf

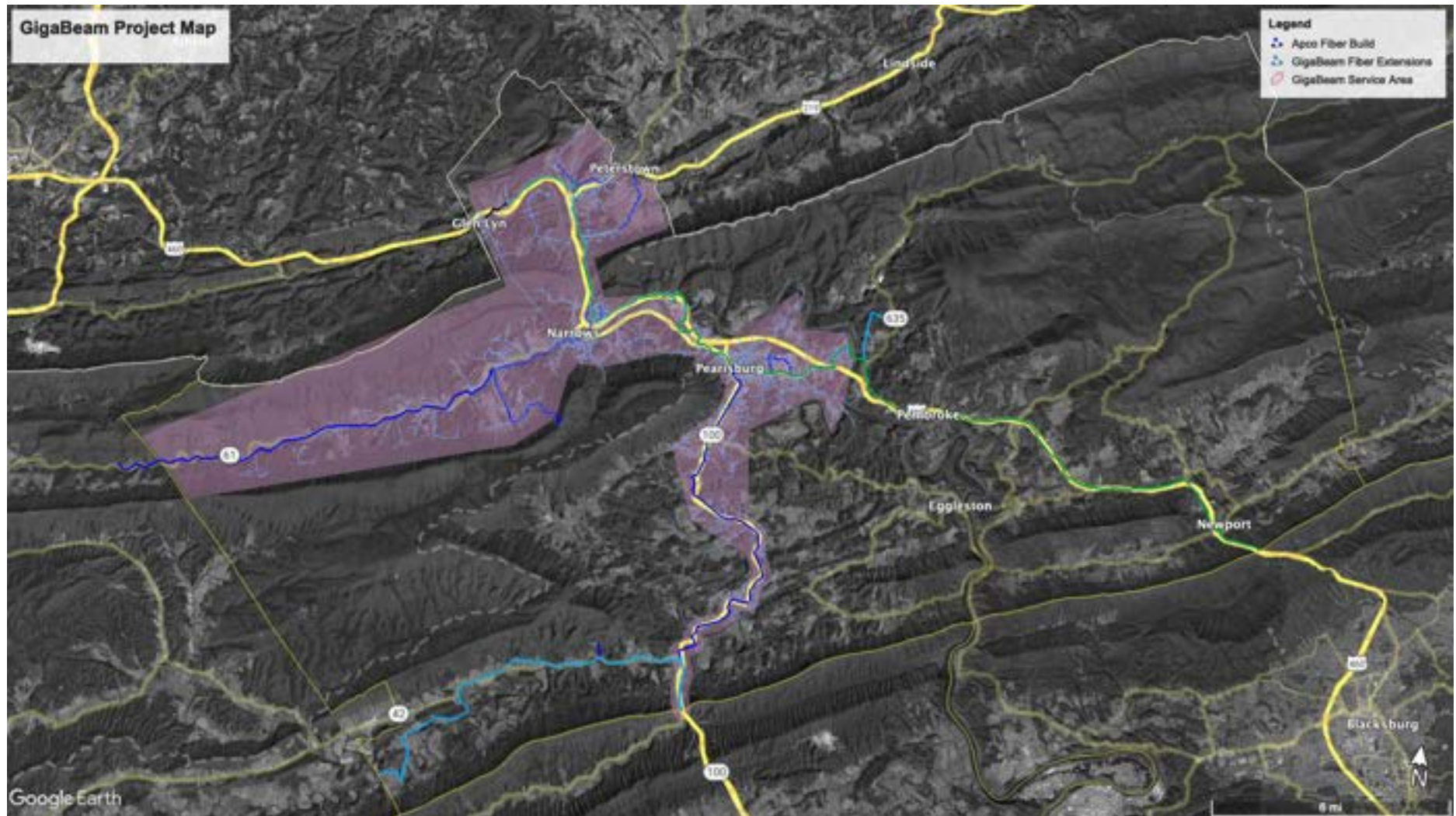
Two most recent Form 477 submitted to the FCC or equivalent

Attachment15MostrecentFCC477Form825202270311.pdf

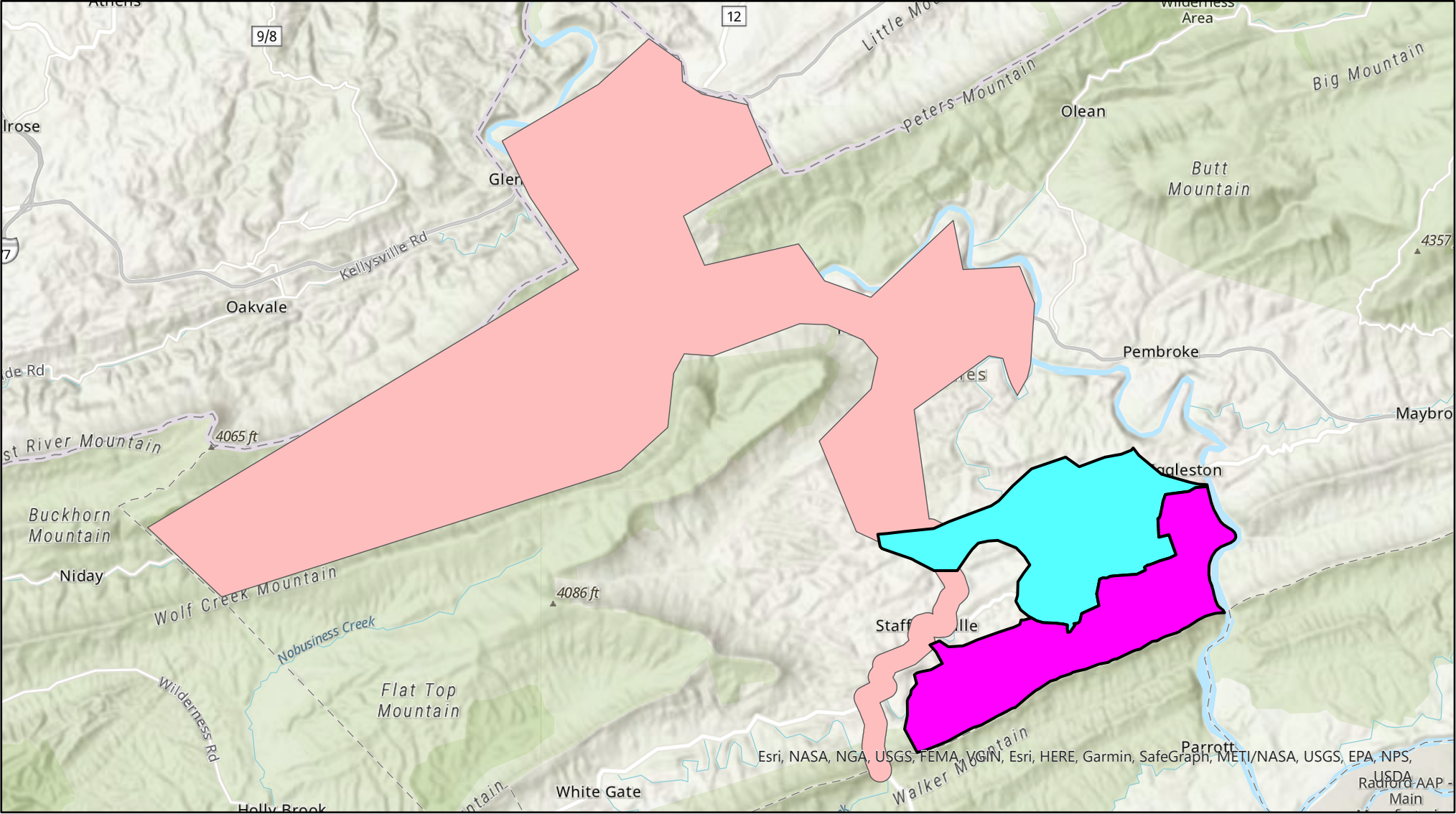
Point and Polygon shapefiles, in.zip file form, showing proposed passings and project area

Attachment16PointandPolygonShapefiles825202270358.zip

Attachment 1 – GigaBeam Project Area and Proposed Infrastructure

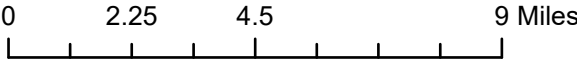


Community Connect Grants

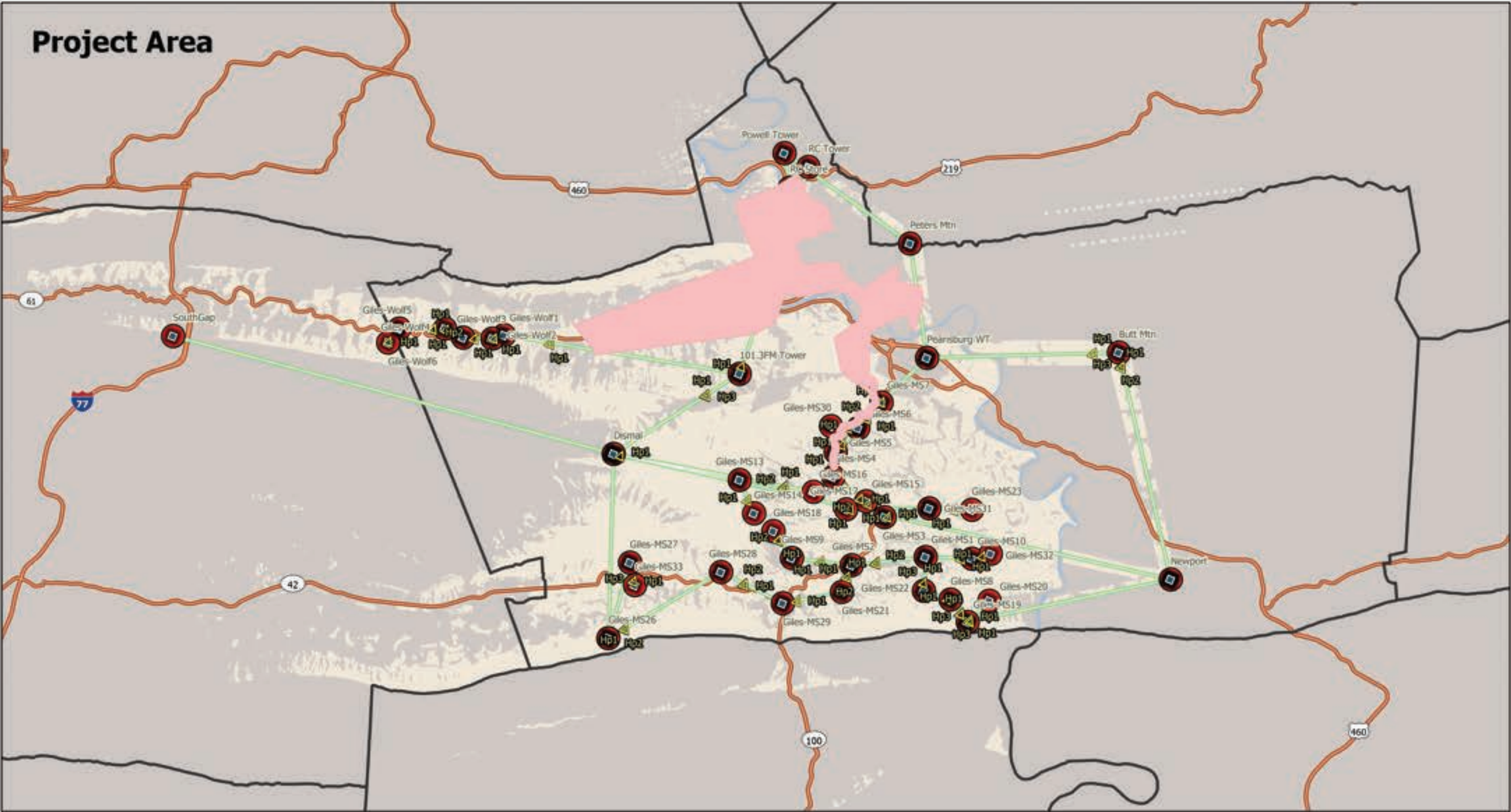


Legend

- 2021 Community Connect Grant
- 2018 Community Connect Grant
- Gigabeam Project Area



VATI 2018

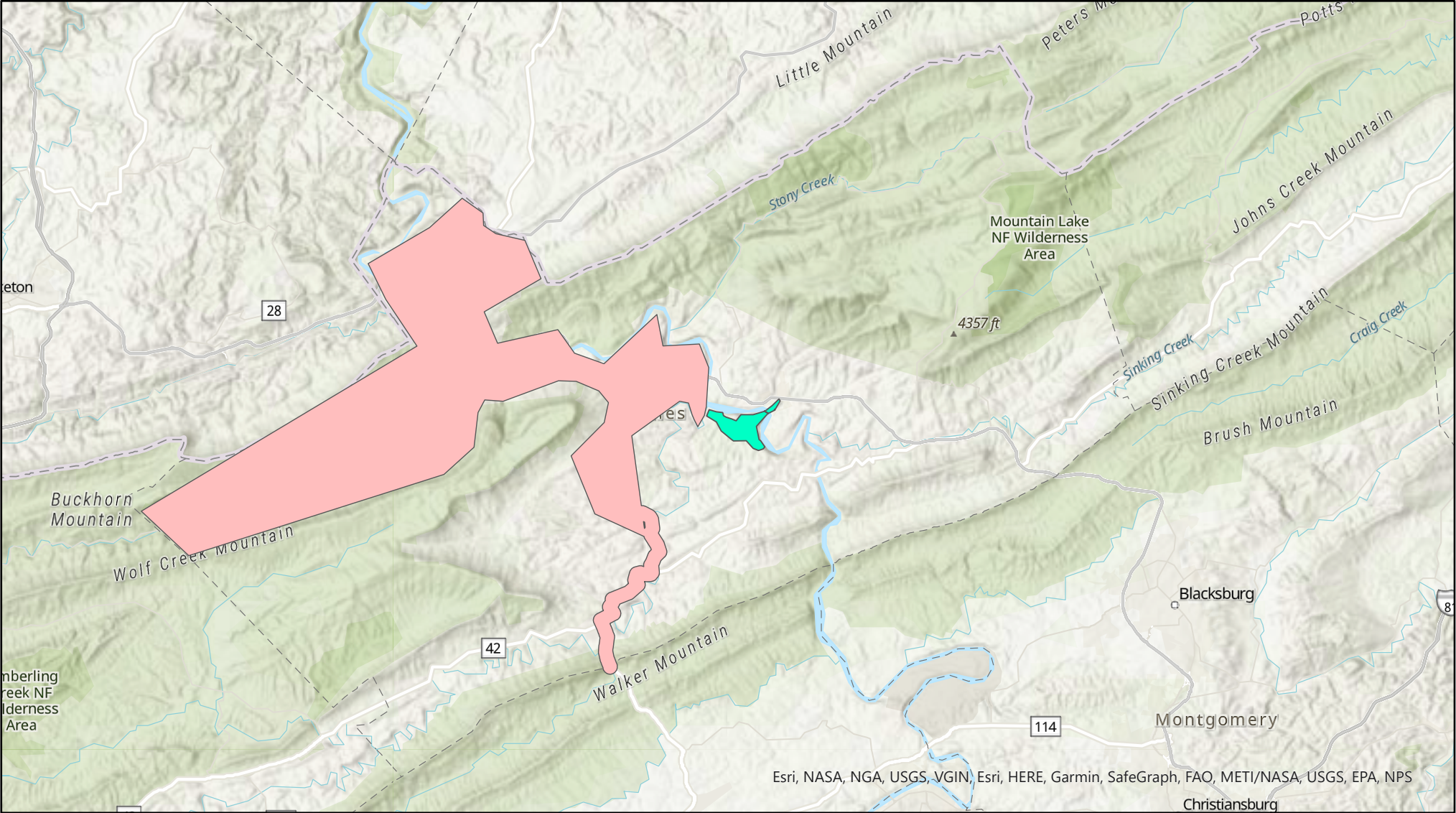


Created by NRVRC, 2018. Sources: Virginia Geographic Information Network, Virginia Department of Transportation, West Virginia Department of Transportation.

- County Boundaries
- Outside Project Area
- New River
- Coverage
- Roads
- Gigabeam VATI 2023 Project Area



ARC Broadband Implementation Grant

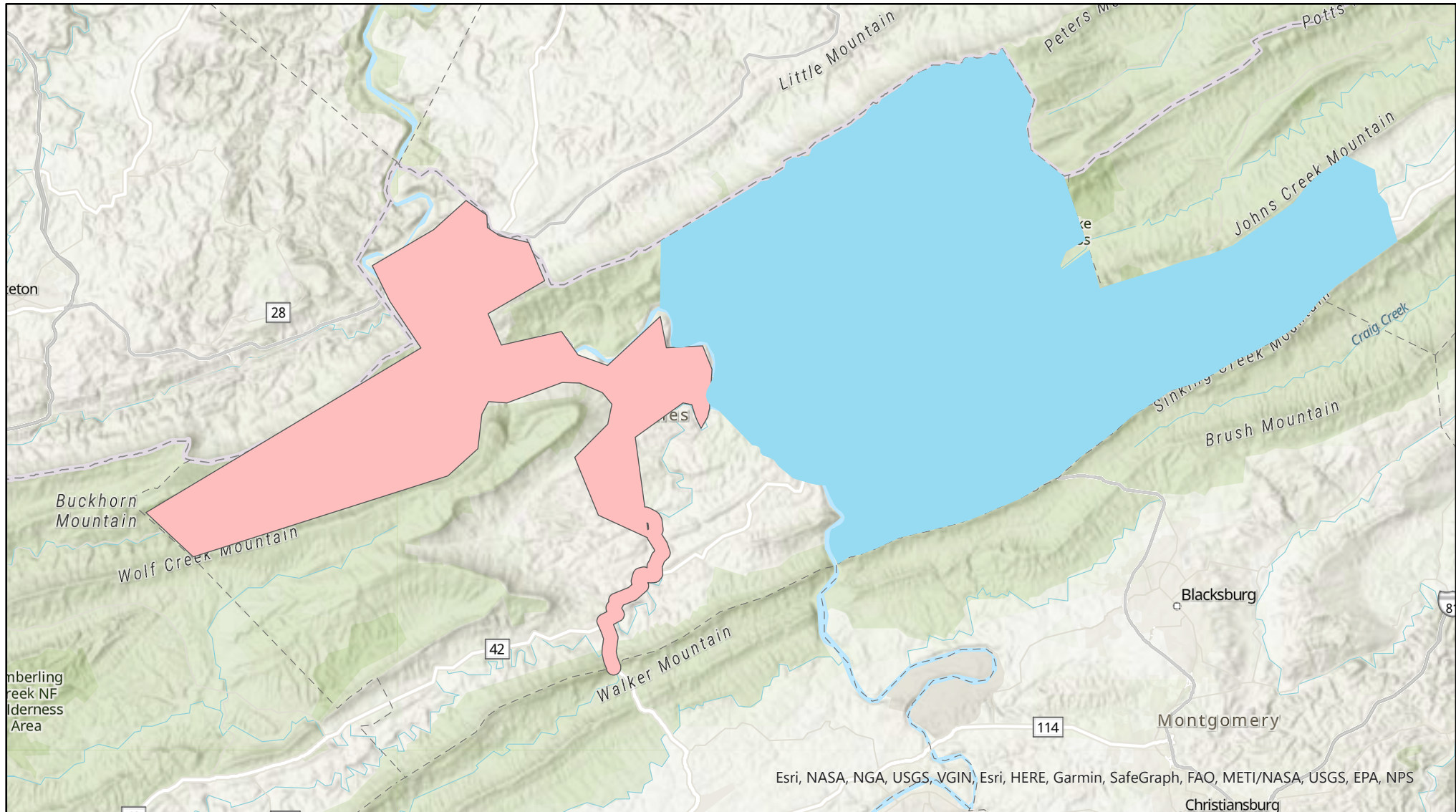


Legend

- Gigabeam Project Area
- ARC Grant Area



PemTel's A-CAMS Area



Legend

-  A-CAMS
-  Gigabeam Project Area



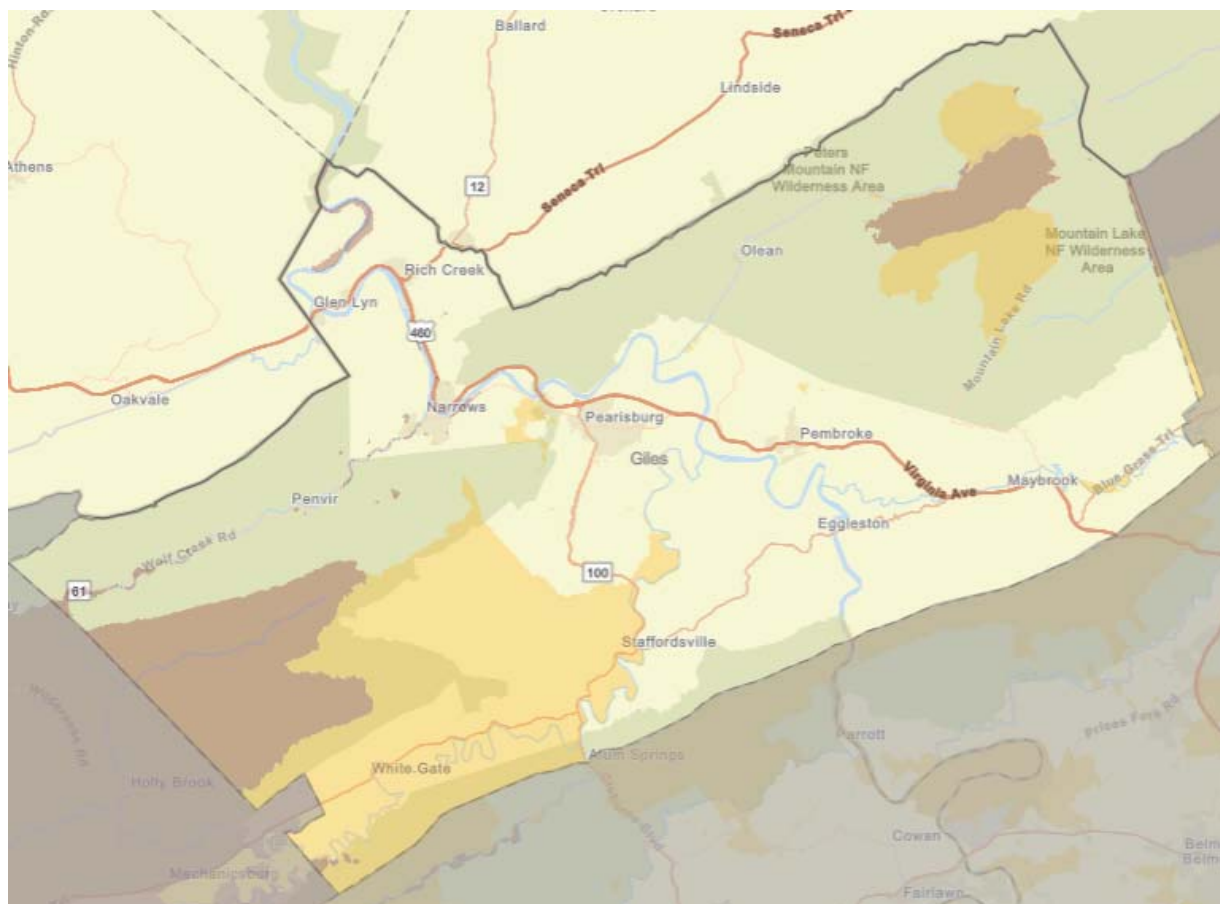
0 3.5 7 14 Miles

Giles Un/Underserved Areas

Giles Household coverage

stats: Source: FCC 477 Dec 2016

- 1.3% have access at less than 4 Mbps (Includes no coverage)
- 0% have access ≥ 4 Mbps and < 10 Mbps
- 7.3% have access at ≥ 10 Mbps and < 25 Mbps
- 91.4% have access at ≥ 25 Mbps

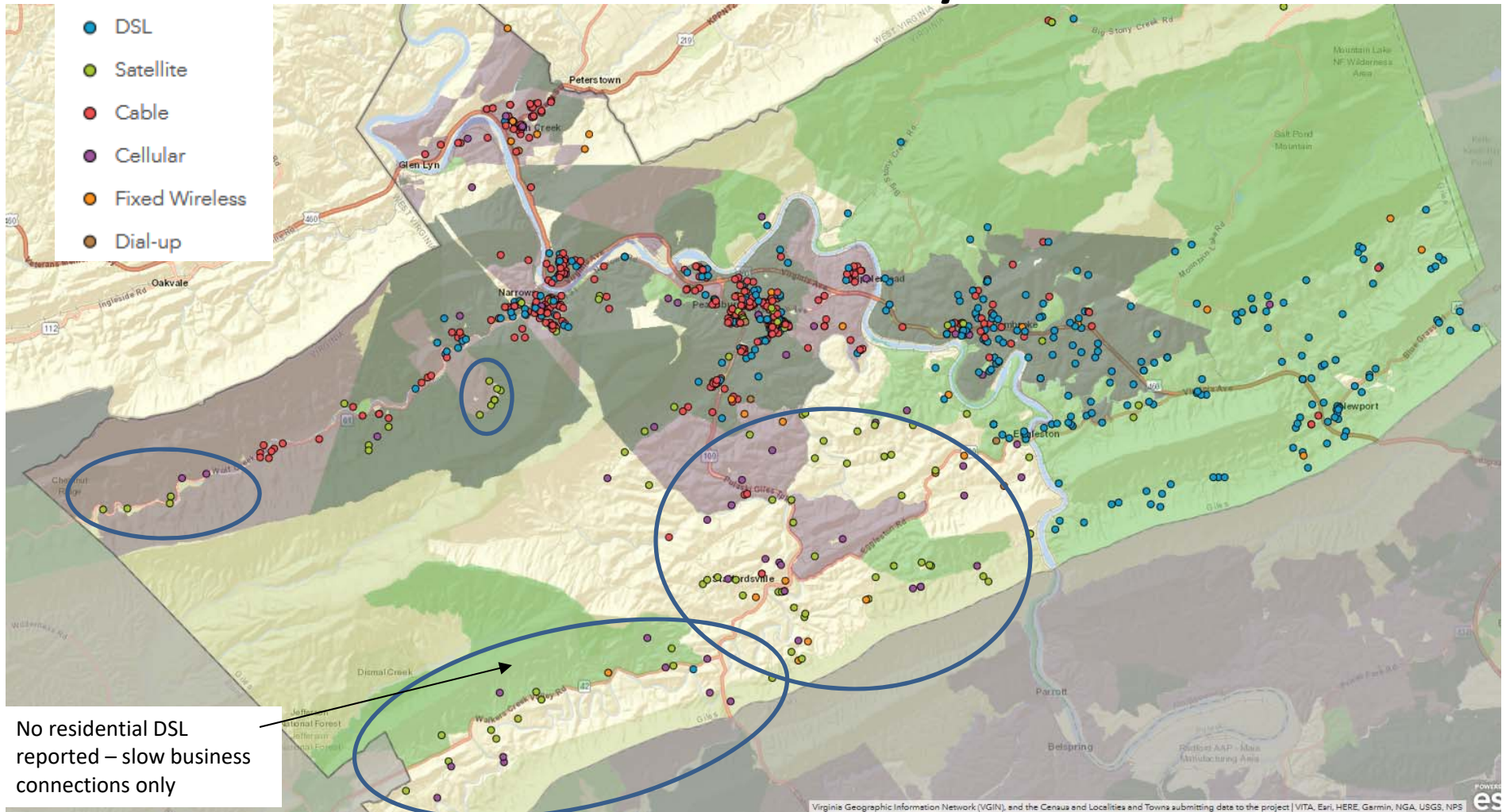


● Unserved = Broadband speed below 10/1 Mbps Download/Upload speed

● Underserved = Broadband speed between 10/1 Mbps Download/Upload speed and 25/3 Mbps Download/Upload speed

Giles County

RESIDENTIAL CONNECTION TYPES



- DSL coverage
- Cable coverage
- DSL/Cable overlap

Areas of where only satellite and cellular responses exist within DSL or Cable coverage areas, likely exposes overstated coverage. Fixed wireless is reported in the circled areas but few reported responses. The fixed wireless provider West of Rt. 100 does not provide broadband speeds for residential services.

2023 Virginia Telecommunication Initiative (VATI) Passing Form

Type of Passings	Total Number of Passings in the Project Area ¹	Passings in the Project Area, without Special Construction Costs Required ²	Passings with Special Construction Costs budgeted in the Application ³	Number of Passings with Speeds at 25/3 or below in Project Area ⁴
Residential	3,916	0	0	531
Businesses (non-home based)	306	0	0	20
Businesses (home-based)	5	0	0	5
Community Anchors	33	0	0	33
Non-residential	54	0	0	54
Total	4,314	0	0	643

Note: The Total Number of Passings **MUST** be equal to the Residential, Business (non-home based), Non-residential and Community Anchors sum.

Note: Do not include passings in RDOF awarded areas that were awarded to the co-applicant; these passings should be included in the RDOF Passings Form. Passings included in this application in RDOF awarded areas that were not awarded to the co-applicant, unless successfully challenged, are considered unserved and should be counted as passings in this form.

¹The total number of structures in the project area that can receive service. See definition of passing below for more detail.

²The number of structures in the project area that will not require special construction costs to provide service to. These passings fall within the broadband provider's standard service connection drop length and do not require nonstandard equipment or any additional fees above normal service connection fees required to provide broadband access to a premise.

³The number of structures in the project area with all construction costs budgeted in the application. These passings will not require any additional special construction costs beyond those budgeted for in the VATI application.

⁴The number of structures in the project area that do not have access to internet at speeds of at least 25 mbps download and 3 mbps upload.

Definitions

Passing – any structure that can receive service. Multi-unit structures may be counted as more than 1 passing, provided individual connections and account are planned at that structure.

Business – An organization or entity that provides goods or services in order to generate profit. Businesses based in residential homes can count if they are a registered business (BPOL, LLC, etc.).

Community Anchor - schools, libraries, medical and health care providers, public safety entities, community colleges and other institutions of higher education, and other community support organizations and agencies that provide outreach, access, equipment, and support services to facilitate greater use of broadband service by vulnerable populations, including low-income, unemployed, and the aged.

Non-Residential Passing – places of worship, federal, state, or local facilities or other potential customers that are neither a residence, business or a community anchor as defined above.

Giles VATI 2023 Fiber Project

[illegible]

**Draft Memorandum of Agreement
Between County of Giles and Pembroke Telephone Cooperative
for the Expansion of Broadband in the County**

This MEMORANDUM OF AGREEMENT ("agreement") entered into this _____ day of _____, 2022 by the County of Giles, Virginia, located at 315 N Main St, Pearisburg, VA 24134 (the "county") and Gigabeam Networks, LLC, located at 387 Old Virginia Avenue, Rich Creek, Virginia 24147 ("Gigabeam"). These are the "Parties" to this agreement which pertains to the application for 2023 Virginia Telecommunication Initiative ("VATI") funds granted by the Virginia Department of Housing and Community Development ("DHCD") pursuant to an Agreement between DHCD and the county for the expansion of broadband into the unserved areas of Giles County ("project") (see Project Area Map attached as Attachment 1).

Section 1--Funding and Scope of Work

Project Funds

Giles County is requesting funding in the amount of \$27,901,719.00 from VATI funds ("DHCD Grant") for the purpose of expanding broadband service to 4,314 serviceable units, including 311 businesses and 33 community anchors for unserved areas throughout Giles County as depicted on the Project Area Map. The county is contracting with Gigabeam as the developer of the project. Gigabeam is in close coordination with the county, and DHCD shall perform all professional services and construction needed to complete the project's development in full compliance with the terms of this agreement.

Gigabeam shall also provide 44.53% or \$22,400,000.00 in matching funds toward the project ("Gigabeam Grant").

Budget

Gigabeam shall utilize the DHCD Grant and Gigabeam Grant on eligible costs as outlined in the approved budget, which is hereby incorporated into this agreement and attached as Attachment 2. Gigabeam and the County shall prepare a detailed budget that outlines how the grant funds shall be utilized, including an itemization of equipment, construction costs, and a justification of proposed expenses. Each service area shall have delineated budget information.

Project Scope of Work

This project includes making broadband services available through the utilization of fiber-to-the-premise technology to underserved 4,314 units, including 33 community anchors in Giles County, as depicted by the project area map. The project will utilize XGN-PON equipment cable to deliver 10Gbps symmetrical speeds to end users throughout the coverage area. Based on PON (passive optical network), the design of the network will be in a 32:1 split ratio for customer access, and speeds from 100Mbps to 1Gbps symmetrical will be initially offered.

The project utilizes existing AEP fiber that is located near the project areas, as well as new Gigabeam fiber, to provide the primary internet connections. This fiber point of presence provides connectivity to the network with initial capacities up to 10Gbps. OLT cabinets are installed throughout the services territory that distributes to the service locations and interconnects to the middle mile fiber.

End users connect using XGS-PON ONT's capable of up to 10Gbps symmetrical speeds. Also provided to the customer is a Wi-Fi 6 capable wireless router with enhanced services, including parental controls and network security.

All the proposed fiber to the home and wireless infrastructure for this project shall be owned or leased by Gigabeam.

Gigabeam shall initiate the Field Engineering on MM/YYYY, with the construction of the project beginning no later than MM/DD/YYYY. The project is estimated to take two and one-half (2.5) years, and Gigabeam shall complete the project on or before MM/DD/YYYY. If the project is not completed by that date and the County and DHCD have granted no written extension, all DHCD Grant funds and County Grant funds and this agreement shall be terminated. Gigabeam shall return to the County all DHCD grant funds required by DHCD and all County Grant funds required by the county. The parties agree that a written extension of the time to perform shall not unreasonably be withheld.

Gigabeam shall carry out the following specific activities in the implementation of the project:

- 1) Oversee the performance of all vendors, general contractors, and subcontractors that are involved in the development of the project to assure compliance with this agreement and all applicable federal, state, and local laws and regulations, including the following, which shall be incorporated and made a part of this agreement:
 - a) CDBG General Management Manual
 - b) Project Management Plans/Project Plans
 - c) Terms and Conditions in the Agreement between DHCD and the County
- 2) Process payments to vendors, contractors, and subcontractors in accordance with the approved budget in a commercially reasonable and timely manner
- 3) Assure that funds provided under this agreement are only used for eligible purposes as outlined in the approved budget and must take proactive steps to prevent misuse and/or mismanagement of funds.

The county shall be responsible for hiring the New River Valley Regional Commission ("regional commission") to administer the DHCD Grant. The county and Gigabeam shall meet with the representative(s) for the Regional Commission serving as the Project Grant Administrator at least monthly to monitor the project's progress properly. The Project Management Plan shall be reviewed by Gigabeam, the County, and Grant Administrator to determine if the project is being implemented according to the Project Management Plan. The Project Management Plan shall be updated to recognize any deviation from the approved Plan, and DHCD shall be notified.

Performance Measures

[Add section about meeting project performance measures, with time frames, and county recourse if non-compliant]

Section 2—Reimbursement of Expenses

The county shall provide the DHCD funds and County funds to Gigabeam on a pay-for-performance basis. Gigabeam shall perform the work first and then seek reimbursement from the county's grant administrator through the DHCD grant funds. It is expressly agreed and understood that the county's total amount to be paid to Gigabeam under this agreement should not exceed the DHCD grant and county grant.

The county's grant administrator shall process Gigabeam's claims for payment in a timely and reasonable manner upon determining that Gigabeam submitted all required and properly completed supporting documentation as required by DHCD and the county. All claims for reimbursement for work performed shall be in conformance with the latest approved budget and be supported by properly executed payrolls, time records, invoices, contracts, or vouchers evidencing in proper detail the nature and propriety of the claim for reimbursement.

A five percent (5%) retainage shall be withheld from each payment by the county. The retainage shall be disbursed within thirty (30) days once the county receives notice from DHCD that the project is complete and in conformity with DHCD grant requirements. If the project is not constructed in conformity with the DHCD grant requirement, the county may use the retainage funds to complete any items identified by the county or DHCD should Gigabeam fail to do so.

Section 3—Initial Broadband Services, Offerings, and Marketing

Gigabeam agrees that the initial residential/business offerings for Broadband Services within the project area, once the project is completed, shall be as follows:

Initial small business/residential offerings per month shall include:

- 100Mbps x 100Mbps - \$59
- 250Mbps x 250Mbps - \$79
- 500Mbps x 500Mbps - \$99
- 1Gbps x 1Gbps - \$109

Marketing

Gigabeam agrees to market the residential and business broadband service once available in the project map area using the following:

- Newsletter Updates
- Social Media
- Direct Marketing (Letters and Phone Calls to Customers)
- Newspaper Ads
- Word of Mouth
- Mailers

Section 4—Insurance Requirements

- 1) Gigabeam shall maintain for the duration of construction, at Gigabeam's expense, insurance that includes "Occurrence" basis wording and is issued by a company or companies qualified to do business in the state of Virginia acceptable to the county. Gigabeam shall name the county as an additional insured on all liability policies and acknowledges that any insurance maintained by the county shall apply in excess of and not contribute to insurance provided under Gigabeam's policy to the extent county's insurance would apply. Gigabeam agrees to maintain insurance policies commensurate with all County contract requirements within the scope of this agreement as follows:

- a) Commercial Liability Insurance, including premises liability, bodily injury, and product/completed operations coverage with a combined single limit of \$1,000,000.00 per occurrence, with a \$3,000,000.00 aggregate, and
- b) Non-owned/hired automobile liability of \$1,000,000.00 in aggregate.
- c) Worker's Compensation Covering statutory requirements of the State of Virginia and Employer's Liability of not less than \$100,000.00.
- d) Equivalent insurance coverage for real property and equipment acquired with DHCD Grant Funds or County Grant Funds.

Acceptance or approval of insurance shall in no way modify or change the indemnity or hold harmless clauses in this agreement, which shall continue in full force and effect.

- 2) Gigabeam agrees to provide the county with Certificates of Insurance evidencing the above-required insurance before commencement of activity as part of this agreement, and thereafter with certificates evidencing renewals or replacements of said insurance policies at least fifteen (15) days before the expiration or cancellation of any such policies. The contractual liability arising out of the agreement shall be acknowledged on the Certificate of Insurance by the insurance company. The county shall be provided within thirty (30) days prior notice, in writing, of Notice of Cancellation or material change to the insurance, and said notification shall be stated on the Certificate of Insurance. Gigabeam's subcontractors, if any, shall comply with the exact insurance requirements.

Gigabeam shall be responsible for verifying insurance by those entities it hires. If said entities do not carry proper insurance, then Gigabeam shall have insurance protection from claims which may arise out of or as a result of the work, whether it be performed by Gigabeam, subcontractor, independent contractors, consultants, agents, supplier, and the like, whether directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable.

Insurance Notices and Certificates of Insurance shall be provided to:

Chris McKlarney, County Administrator
 Giles County Administration
 315 North Main St.
 Pearisburg, VA 24134
 cmklarney@gilescounty.org

Section 5-Indemnification and Hold Harmless

Gigabeam agrees to indemnify and hold the county, its officials, board members, constitutional officers, and officers, agents, attorneys, and employees (each represented as "the county") harmless against and from all claims by or on behalf of any person, firm or corporation including but not limited to the grant provided by DHCD for the project, arising from the conduct or management of, or from any work or things done or omitted to be done on the project while this agreement obligations remain outstanding, including but not limited to (i) any condition of the project, (ii) any breach or default on the part of Gigabeam in the performance of any of its obligations under this agreement, (iii) any act of negligence of Gigabeam, or any of its agents, contractors, servants, employees, or licensors, (iv) any act of negligence of any assignee or lessee of Gigabeam, or of any agents, contractors, servants, employees, or licensees of

any assignee or lessee of Gigabeam, (v) any performance by the county as required under this agreement or as requested by Gigabeam, this paragraph shall also apply to any subcontractors of Gigabeam and (vi) for any repayment obligation the county may have to DHCD due to the county contracting with DHCD to be the Grantee for the \$_____ DHCD Grant Funds being provided to Gigabeam pursuant to this agreement for the project.

Gigabeam agrees to indemnify and save the county harmless from and against all costs and expenses incurred in or in connection with any such claim arising as aforesaid or in connection with any action or proceeding brought thereon. In case any such claim shall be made, or action brought based upon any such claim in respect of which indemnity may be sought against Gigabeam, upon receipt of notice in writing from the county setting forth the particulars of such claim or action, Gigabeam shall assume the defense thereof including the employment of counsel and the payment of all costs and expenses. In any such action, the county shall have the right to employ separate counsel mutually acceptable to the county and Gigabeam and to participate in the defense thereof; provided that if the county and Gigabeam participate in the defense thereof; provided that the county and Gigabeam cannot agree on mutually acceptable counsel, the county shall have the exclusive right to select such counsel. The fees and expenses of such counsel reasonably incurred shall be at the expense of Gigabeam without regard to any authorization of such employment by Gigabeam.

Section 6—Compliance with Federal, State& Local Laws

Gigabeam covenants and warrants that it shall comply with all applicable laws, ordinances, codes, rules, and regulations of the state, local, and federal governments, including but not limited to those laws and regulations specifically listed in the Assurance/Certification Section of the Agreement between DHCD and the County.

Gigabeam agrees to comply with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 USC 1857(h)), section 508 of the Clean Water Act (33 USC 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15).

Section 7—Suspension and Termination

- 1) The county may suspend or terminate this agreement, in whole or part, if Gigabeam materially fails to comply with any terms of this agreement or any of the rules, regulations, or provisions related to DHCD grant funding of this agreement referred to herein. In the event there is probable cause to believe Gigabeam is in material noncompliance with any applicable rules or regulations, the county may withhold further payment of DHCD grant funds until such time as Gigabeam is found to comply by the county or is otherwise adjudicated to comply. The county will notify Gigabeam in writing of any action to suspend or terminate before taking such action.
- 2) [Add Suspend or Termination stipulation regarding substantive project progress, without just cause]
- 3) This agreement shall be terminated and canceled without penalty if the Gigabeam Grant and/or the DHCD grant funding, upon which the parties are dependent, to pay for this service fails to be appropriated or otherwise made available in whole or in part.
- 4) If the county suspends or terminates this agreement in whole or in part due to any reason set forth above, the county will not be liable for any loss or damage to Gigabeam that results directly or indirectly from said suspension or termination.
- 5) The county shall not be responsible for or liable for language included or excluded in any of Gigabeam's subcontracts, purchase orders, and the like.
- 6) Upon a good faith suspension or termination by the county of this agreement,

Gigabeam shall remit to the county within thirty (30) days of receipt of written notice the entire amount of DHCD Grant funds that DHCD requires the county to return to DHCD under the agreement between DHCD and County.

Section 8—Remedies

In the event of any violation or breach of this agreement, including but not limited to, Gigabeam's misuse or misapplication of funds derived from this agreement, by Gigabeam's violation of any of the statutes, rules, and regulations of DHCD, either directly or indirectly, by Gigabeam and/or any of its agents or representatives, then Gigabeam, to the extent permitted by law, agrees to indemnify and hold county harmless from any requirement by the county to repay to DHCD the DHCD grant funds the county paid Gigabeam for this project or penalties and expenses, including attorneys' fees and costs of litigation, resulting from such action or omission by Gigabeam. In the event DHCD makes any claim to the county requiring the county to repay any portion of the DHCD Grant which would give rise to invoking the remedy provisions, as set forth in this section, then the county shall immediately notify Gigabeam in writing, providing the full details of the alleged violation. Gigabeam shall provide to the county within thirty (30) days of receiving written notice of the portion of the DHCD grant the county is required to repay DHCD pursuant to the agreement between DHCD and the county. Should Gigabeam fail to provide the funds to the county, the county may proceed to enforce repayment of the DHCD Grant by retaining any of the retainages still in possession of the county and/or exercise any, and all other rights, powers, or remedies the county may have under law. The parties agree that any dispute, action, claim, cause of action, breach of contract, or other remedy or relief sought under the provisions of this agreement or any related project shall be controlled and decided by the laws of the State of Virginia. The parties further agree that the appropriate venue for any disputes shall be the Montgomery Circuit Court or the US District Court, Western Division of Virginia, if applicable.

Section 9—Default-Loss of Grant Funds

If Gigabeam fails to fully perform and carry out any of the terms, covenants, and conditions of the agreement, Gigabeam shall be in default, and notice in writing shall be given to Gigabeam of such default by the county or an agent of the county. If Gigabeam fails to cure such default within thirty (30) days after written notice thereof from the county (unless such default is not capable of cure within such thirty (30) day period, in which case Gigabeam shall promptly commence and diligently prosecute to completion the cure of such default after written notice thereof from the county), the county may at its option terminate and cancel the agreement.

In the event of such termination, all DHCD Grant funds awarded to Gigabeam under this agreement shall be immediately revoked. Any approvals related to the project shall be immediately revoked and canceled. In such an event, Gigabeam will no longer be entitled to receive any compensation for work undertaken after the date of the termination of this agreement, as the DHCD Grant funds will no longer be available for this project.

Such termination shall not affect or terminate any of the rights of the county as against Gigabeam then existing, or which may thereafter accrue because of such default, and the foregoing provision shall be in addition to all other rights and remedies available to the county under the law.

The waiver of a breach of any term, covenant, or condition hereof shall not operate as a waiver of any subsequent breach of the same or any other term, covenant, or condition hereof.

Section 10—Reporting Responsibilities

- 1) Project Files Gigabeam shall keep a file on the project containing the information as required by DHCD.
- 2) Record Retention All records must be retained for five years after completion of the project.
- 3) Meeting Attendance Gigabeam will have a representative attend all meetings regarding the project scheduled by the county or DHCD unless the county is given notice of non-attendance 24 hours before the scheduled meeting time.
- 4) Requests of the County At the reasonable request of the county or DHCD, Gigabeam shall furnish such reports, budgets, certifications, and other documents required pursuant to Federal, State, or County rules, regulations, and policies that apply to the project and shall give specific answers to questions from the county of DHCD, from time to time, relative to Gigabeam's contracts and operations in connection with the project.

Section 11—Inspection, Monitoring & Access to Records

The county reserves the right to inspect, monitor, and observe work and services performed by Gigabeam at any and all reasonable times.

The county reserves the right, at the county's expense, to audit the records of Gigabeam for five years after the completion of the project. The county reserves the right to audit the records of Gigabeam at any time during this agreement's performance and for five years after final payment is made under this agreement.

If required, Gigabeam shall provide the county with a certified audit of Gigabeam's records representing the Fiscal Year during which the project becomes complete pursuant to the requirements of DHCD and OMB Circular A-133.

Access shall be granted upon reasonable notice to the County, DHCD, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers, and records of Gigabeam or its contractors which are directly pertinent to that specific contract to make audit, examination, excerpts, and transcriptions.

Section 12—General Conditions

- 1) All notices or other communications which shall or may be given under this agreement shall be in writing and shall be delivered by personal service, overnight delivery service, or by registered mail addressed to the other party at the address indicated herein or as the same may be changed from time to time. Such notice shall be deemed given to the day on which personally served, if by overnight delivery service, on the date of receipt of such notice; or, if by mail, on the fifth day after being posted or the date of actual receipt, whichever is earlier.

County:

County of Giles

ATTN: Chris McKlarney, County Administrator

315 North Main St.

Pearisburg, VA 24134

Gigabeam:

Gigabeam Network LLC
ATTN: Michael Clemmons
504 Snidow St.
Pembroke, VA 24136

- 2) Titles and headings are for convenient reference and are not part of this agreement.
- 3) In the event of a conflict between the terms of this agreement and any terms or conditions contained in any attached documents, the term in this agreement shall rule.
- 4) No waiver or breach of any provision of this agreement shall constitute a waiver of a subsequent breach of the same or any other provision hereof, and no waiver shall be effective unless made in writing.
- 5) The parties hereto agree that this agreement shall be construed and enforced according to the laws of the Commonwealth of Virginia.
- 6) Should any provisions, paragraphs, sentences, words, or phrases contained in this agreement be determined by a court of competent jurisdiction to be invalid, illegal, or otherwise unenforceable under the laws of the State of Virginia, such provisions, paragraphs, sentences, words or phrases shall be deemed modified to the extent necessary to conform with such laws, or if not modifiable to conform with such laws, then same shall be deemed severable. In either event, this agreement's remaining terms and provisions shall remain unmodified and in full force and effect.
- 7) Gigabeam shall comply with the provisions of the Copeland Anti-Kick-Back-Act (18 USC 874).
- 8) Gigabeam shall comply with the provisions of sections 103 and 107 of the Contract Work Hours and Safety Standard Act (40 USC 327-330).
- 9) Gigabeam further warrants and agrees to include or cause to be included the criteria and requirements of paragraphs (7) through (8) of this section in every nonexempt subcontract. Gigabeam also agrees to take such action as the federal, state, or local government may direct to enforce aforesaid provisions.
- 10) The obligations undertaken by Gigabeam pursuant to this agreement shall not be delegated or assigned to any other person or county unless the county shall first consent to the performance or assignment of such service of any part thereof by another person or county unless Giles County shall first consent to the performance or assignment of such service or any part thereof by another person or county, which consent shall not be unreasonably withheld.
- 11) The agreement shall be binding upon the parties hereto, their heirs, executors, legal representative, successors, and assigns.
- 12) Gigabeam and its employees and agents shall be deemed independent contractors and not agents or employees of the county. They shall not attain any rights or benefits under the county's civil service or pension ordinances, or any rights generally afforded to a classified or unclassified employee of the county.

Section 13—Miscellaneous

1) Severability

Should any provision contained within this agreement be found, for any reason, to be invalid, illegal, or unenforceable, it shall not affect any other provision hereof, and this agreement shall be constructed as if such invalid, illegal, or unenforceable provision had never been contained herein.

2) Non-waiver of Rights

The county's failure to insist upon strict performance of any provision of this contract, or failure to exercise any right based upon breach, will not constitute a waiver of any rights under this agreement.

3) Amendments

Any amendment to this agreement must be in writing and signed by a duly authorized representative of each organization. Such amendment(s) shall not invalidate this agreement nor relieve or release the county or Gigabeam from its obligations under this agreement. However, the county may amend this agreement without Gigabeam to conform with federal, state, and local governmental guidelines, policies, and available funding amount or for other reasons. If such amendment(s) results in a change in the funding, the scope of services, or the schedule of the activities to be undertaken as part of this agreement, such modifications will be incorporated only by a written amendment signed by the county and Gigabeam.

This agreement represents the entire agreement between the parties and supersedes all prior representations, negotiations, or agreements, whether written or oral.

4) Counterparts

This agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all taken together shall constitute the same instrument.

WITNESS the following signatures and seals:

The County of Giles, Virginia

By: _____

Chris McKlarney, County Administrator

Date: _____

Gigabeam Networks, LLC

By: _____

Micheal Clemmons, Gigabeam

Date: _____

Attachment 9
Funding Sources Table

Source	Amount	Percentage	Status
Requested VATI	\$21,861,537	49.39%	Pending
GigaBeam / APCO	\$22,400,000	50.61%	Pending project approval

Appalachian Power
40 Franklin Road SW
Roanoke, VA 24011

Brad Hall
Vice President External Affairs
540-982-7435
bnhall@aep.com



August 24, 2022

Virginia Department of Housing & Community Development
600 E Main Street, Suite 300
Richmond, VA 23219

DHDC Staff:

Appalachian Power is excited to be involved with a project designed to make high speed broadband available in unserved areas of Giles County. We look forward to your consideration of support for the project as you review the VATI 2023 New River Valley Regional Commission application.

We are committed to the New River Valley Regional Commission project and, as indicated in the VATI 2023 application, have pledged approximately \$22,400,000.00 in matching funds to the project if approved by the State Corporation Commission.

Please accept this correspondence as our notification of matching funding.

Sincerely,

A handwritten signature in blue ink, which appears to read "Brad Hall", is positioned above the printed name and title.

Brad Hall
Vice President External Affairs

Attachment 12: Derivation of Cost

FTTx

Product	Total	VATI	Non-VATI	Source of Estimate	Date
Final Design/Engineering/Permitting	\$999,483	\$999,483		GigaBeam	8/22/22
Project & Construction Management	\$246,500	\$246,500		GigaBeam	8/22/22
Make Ready	\$2,299,899	\$2,299,899		GigaBeam	8/22/22
Aerial Construction Labor & Materials	\$33,603,973	\$11,203,973	\$22,400,000	GigaBeam / APCO	8/22/22
Construction Contingency	\$1,350,387	\$1,350,387		GigaBeam	8/22/22
OLT Cabinets/Headend Labor & Materials	\$730,431	\$730,431		GigaBeam	8/22/22
Fiber Drop Labor & Materials	\$2,893,384	\$2,893,384		GigaBeam	8/22/22
Subscriber Installation Labor & Materials	\$1,837,480	\$1,837,480		GigaBeam	8/22/22
Grant Administration	\$300,000	\$300,000		GigaBeam	8/22/22

Total \$44,261,537 \$21,861,537 \$22,400,000

Giles VATI FTTx Project Budget

	Quantity	Cost	Total
Design/Engineering			
Last Mile Network Design	4314	\$25.00	\$107,850 (cost per passing)
Access Fiber Extension Engineering	766633	\$1.00	\$766,633 (cost per ft)
		Total	\$874,483
Project & Construction Management			
	145	\$1,700.00	\$246,500
		Total	\$246,500
Access Fiber Construction & Labor			
Apco Middle Mile Build			\$22,400,000
Fiber Optic Cable - 48 Strand	804965	\$1.25	\$1,006,206 (cost per ft)
Attachment assemblies/supplies	6080	\$35.00	\$212,800
Apex Fiber Optic Closure	1399	\$279.00	\$390,321
Apex Mounting Bracket	1399	\$35.00	\$48,965
1x8 Splitter/tray	155	\$250.00	\$38,750
1x4 Splitter/tray	1244	\$225.00	\$279,900
Titan Multiport RTD 4 port 1000' Flat	996	\$330.00	\$328,680
Titan Multiport RTD 8 port 1000' Flat	248	\$385.00	\$95,480
Multiport Terminal Mounting Bracket	1244	\$35.00	\$43,540
Labor			
Installation of MPT Tails	402482	\$8.25	\$3,320,477 Cost per ft
Installation of Access Fiber	804965	\$4.95	\$3,984,577 Cost per ft
Multiport MPT splicing	1244	\$1,141.80	\$1,420,399
Access Fiber Splicing	26	\$1,303.00	\$33,878
Make Ready	766633	\$3.00	\$2,299,899
Permitting	1	\$125,000.00	\$125,000
Contingency			\$1,350,387
		Total	\$37,379,259
Headend/OLT's			
Headend			
Routing: Juniper JNP204/MX204	1	\$0.00	\$0
L3 Managed Switch - Juniper	2	\$12,500.00	\$25,000
Software Licensing, Misc Cables & Materials	1	\$0.00	\$0
Labor	1	\$0.00	\$0
		Total	\$25,000
OLT Cabinets			
Cabinet Package - Cabinet, Wiring, UPS, Misc mounting	26	\$5,000.00	\$130,000
Pad Construction - Prep, Concrete, Electrical, Labor	26	\$1,500.00	\$39,000
SFP 10G Transport	52	\$958.00	\$49,816
E7-2 10G AXOS XGS-PON	26	\$12,265.00	\$318,890
PON Optics	155	\$495.00	\$76,725
Labor	26	\$3,500.00	\$91,000
		Total	\$705,431
		Total	\$730,431
Customer Drops			
Hardware			
Trident ADSS Drop Cable	2588	\$350.00	\$905,800
Fast-SC-Connector	2588	\$18.00	\$46,584
Mounting Supplies	2588	\$125.00	\$323,500
OptiNID Duo enclosure	2588	\$20.00	\$51,760
SC Adapter	2588	\$5.00	\$12,940
Labor			
Drop cable installation to Optinid	2588	\$600.00	\$1,552,800
		Total	\$2,893,384
Subscriber Equipment & Installation			
Materials			
GP1100x GigaPoint ONT	2588	\$125.00	\$323,500
GigaBlast V6.1 Wifi 6 Router	2588	\$145.00	\$375,260
Fiber Drop Cable - 50' (Connect Optinid to ONT)	2588	\$40.00	\$103,520
Installation of MDU Drop Cable & Setup of Electronics	2588	\$400.00	\$1,035,200

	Total	\$1,837,480
Grant Administration		\$300,000
	Total	\$44,261,537

VATI Application – Giles County Letters of Support

(Alphabetical by name)

1. Dr. Terry E. Arbogast II, Superintendent – Giles County Public Schools
2. Delegate Jason Ballard – 12th District - Virginia
3. Dr./Pastor Brian Burch – Giles County Ministerial Association
4. Congressman H. Morgan Griffith – 9th District Virginia
5. Patricia B. Huber, Ph.D. – President, New River Community College
6. Roger Jones, Mayor, Town of Rich Creek, Virginia
7. U.S. Senator Tim Kaine – Virginia Letter being sent under separate cover.
8. Mr. Todd Meredith, Town Manager – Town of Pearisburg, Virginia
9. Mr. Terry Nicholson, Town Manager – Town of Narrows, Virginia
10. Mr. James D. "Dusty" Stump, Mayor – Town of Pembroke, Virginia
11. U.S. Senator Warner – Virginia Letter being sent under separate cover.
12. Ms. Kristie Williams, Vice-President – Carilion Giles Community Hospital

School Board Members

Jason B. Buckland
Melissa R. Guynn
Phillip A. Pennington
Stephen M. Steele
Mark A. Wilburn



Dr. Terry E. Arbogast, II
Division Superintendent

GILES COUNTY PUBLIC SCHOOLS

Tamarah Holmes, Ph.D – Director
Office of Broadband
Department of Housing and Community Development
600 East Main Street, Ste. 300
Richmond, VA 23219

8/16/22

Superintendent Dr. Terry E. Arbogast, II
Giles County Public Schools
151 School Road
Pearisburg, VA 24134
540-921-1421

RE: Letter of Support for Virginia Telecommunications Initiative (VATI) Broadband project proposal for Giles County

Dear Dr. Holmes:

On behalf of the Giles County Public School System, I enthusiastically pledge our support to this project. Realization of full broadband coverage in the county is critical for our students; especially those who are historically underserved; living in our lower-income homes/areas.

Education has become increasingly more dependent upon high-speed internet over the past years. Prior to the pandemic, it became essential for research, primary/distance learning, communication, etc. With the pandemic onset, we became painfully aware of the inequities to educational technology access due to socioeconomic status.

The Giles School System, in concert with Giles County Government called every household where a student lived. We were able to affect a 60% response rate. Of those surveyed, 18.5% had no access to internet, 17.5% stated they had service but had issues with speed, data limits or other issues, 16% could not afford broadband and only 16% stated they had internet with no issues. Temporary solutions were brought into play, however, they did not, and will not, have the permanent solution that universal coverage will provide.

In closing, the Department of Housing and Community Development's (DHCD) goal of achieving universal broadband coverage is critical to, not only our students, but to the entire Giles County community in order to build and maintain economic resiliency. Please give this proposal from Giles County a favorable review.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Arbogast II".

Dr. Terry E. Arbogast II
Superintendent-Giles County Public Schools



JASON S. BALLARD

POST OFFICE BOX 341
PEARISBURG, VIRGINIA 24134

TWELFTH DISTRICT

COMMONWEALTH OF VIRGINIA

HOUSE OF DELEGATES
RICHMOND

COMMITTEE ASSIGNMENTS:
COURTS OF JUSTICE
COUNTIES, CITIES AND TOWNS
PUBLIC SAFETY

August 23, 2022

Tamarah Holmes, Ph.D.
Director
Office of Broadband
Department of Housing and Community Development
600 East Main Street, Ste. 300
Richmond, VA 23219

RE: Letter of Support for the Giles County Virginia Telecommunications Initiative
Broadband Project Proposal

Dear Dr. Holmes:

Please accept this letter of support on behalf of Giles County's proposal to receive broadband expansion assistance via the Department of Housing and Community Development Virginia Telecommunications Initiative Broadband Project. As addressed in its request, broadband expansion in Giles County has become essential to the day-to-day activities and success of individuals and businesses, in addition to regional economic and educational opportunities.

As a member of the Virginia General Assembly who resides in Giles County, I have personally and professionally experienced the necessity for increased broadband accessibility, most especially as it relates to education. During COVID, challenges faced by families whose need for virtual learning through programs such as Virtual Virginia were further exacerbated by slow connectivity. Of even greater concern during that unprecedented period in time were households that did not have adequate or in some cases, existing internet access. In response, I am confident that a partnership between Giles County and the Department of Housing and Community Development will proactively address and avoid similar hardships.

Looking to the future of Giles County and global communication, these past two years have proved that high-speed broadband internet is no longer a luxury; it is a necessity. As noted by the additional accompanying letters of proposal support from Dr. Terry Arbogast (Superintendent, Giles County Public Schools), Ms. Kristie G. Williams (Vice-President, Carilion Giles Community Hospital), Pastor Brian Burch (representing Giles County Ministerial Association), and Dr. Patricia Huber (President, New River Community College), broadband expansion is essential for education, healthcare, and worship, to recognize just a few considerable examples in our community.

It is for these and other reasons that that I appreciate your attention to Giles County's proposal to receive broadband expansion assistance through the Department of Housing and Community Development Virginia Telecommunications Initiative Broadband Project. I look forward to the possibility of working closely with DHCD, local internet service providers, and other local and state stakeholders, as we partner together to achieve our individual and combined goals of accessible broadband within the county and Commonwealth.

With kind regards,

A handwritten signature in blue ink, reading "Jason Ballard". The signature is fluid and cursive, with the first name "Jason" and last name "Ballard" clearly distinguishable.

Jason S. Ballard, Esq.
Delegate
12th District

Tamarah Holmes, Ph.D.
Director, Office of Broadband
Department of Housing and Community Development
600 East Main Street, Suite 300
Richmond, VA 23219

8/17/22

RE: Giles County Virginia Telecommunications Initiative broadband project proposal – Letter of Support

Dear Dr. Holmes:

I am writing to seek your support for this proposal. My doctoral dissertation was on the use of technology in Appalachian faith communities. The conclusion was simple, the presence and absence of broadband is statistically measurable. Then the pandemic forced our churches to radically expand the use of the internet. And it only took 5 minutes in our first church Zoom meeting to recognize large swaths of our county are internet deprived. Watching the children of our county attempt to do virtual school with extremely limited internet access was painful and embarrassing. There should be a better solution. Dr. Holmes, I believe you hold the keys towards bringing equality to our region.

So, my fellow pastors and I who make up the Giles County Ministerial Association are united in our heartfelt desire to see this proposal come to life. It is a justice issue in that the poorest members of our community find housing further from town where the current sporadic cable internet is available. Thirty years ago, dial up internet became a reality in the United States. For a large percentage of Giles County, it is still the ONLY source of connecting to the world electronically.

My neighbor's favorite phrase is, "It is no longer my grandfather's world." Broadband was not an option years ago and our grandparents survived. But today it is a need. The ironic part is that even our grandparents want quality internet access. My 88-year-old mother-in-law, who uses a walker and is no longer able to drive, loves Facebook for it allows her to keep track of her grandchildren. She uses the internet to watch worship, connect with her missionaries, and have access to the latest weather and news. The good news is her house is in Atlanta where broadband is a given.

So, the members of our Association say enough is enough. Our rural county that has a total of four traffic lights is treated as second-class because the big broadband companies cannot make enough money to justify fixing this social injustice. In the 1930's the folks of Appalachia received electricity because of aid from organizations like yours. We support this grant proposal for we are convicted that people from all walks of life in our midst would benefit from quality broadband access.

Utterly convinced our God does incredibly more than we ask or imagine,

Brian
Rev. Dr. Brian Burch
Pearisburg First United Methodist Church
Giles County Ministerial Association
PO Box 400
Pearisburg, VA 24134
540-599-3526 (mobile)
540-921-1021 (office)

H. MORGAN GRIFFITH
9th DISTRICT, VIRGINIA

COMMITTEE ON
ENERGY AND COMMERCE
SUBCOMMITTEES:

OVERSIGHT AND INVESTIGATIONS
REPUBLICAN LEADER

ENERGY

HEALTH

www.morgangriffith.house.gov



Congress of the United States
House of Representatives
Washington, DC 20515-4609

2202 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
(202) 225-3861 PHONE
(202) 225-0076 FAX

323 WEST MAIN STREET
ARLINGTON, VA 24310
(276) 525-1405 PHONE
(276) 525-1444 FAX

17 WEST MAIN STREET
CHRISTIANSBURG, VA 24073
(540) 381-5671 PHONE
(540) 381-5675 FAX

August 16, 2022

Dr. Tamarah Holmes
Director, DHCD Office of Broadband
Virginia Department of Housing and Community Development
600 East Main Street, Suite 300
Richmond, VA 23219-2430

Dear Dr. Holmes,

I am writing to express my interest in the grant application for the Virginia Telecommunications Initiative (VATI) through the Virginia Department of Housing and Community Development submitted by Giles County, with county government offices located in Pearisburg, Virginia.

In preparing this grant application, Giles County cited many factors contributing to the need for this funding in my congressional district. I ask that you give this application your most thoughtful and serious consideration. If there is any additional information that my office can provide, please contact Josh Hess at my Christiansburg office at (540) 381-5671.

I would very much appreciate it if you would acknowledge receipt of this letter and keep me apprised of your action regarding this application when review is complete. You should respond to Giles County in care of my Christiansburg office at (540) 381-5671 by phone or by mail to 17 W. Main Street, Christiansburg, Virginia 24073.

Thank you for your time and attention to this matter. I look forward to hearing from you. I remain

Sincerely yours,

H. MORGAN GRIFFITH
Member of Congress

NEW RIVER Community College

5251 College Drive, Dublin, Virginia 24084-3660

August 17, 2022

Tamarah Holmes, Ph.D.
Director
Office of Broadband
Department of Housing and Community Development
600 East Main Street, Ste. 300
Richmond, VA 23219

RE: Letter of Support for Virginia Telecommunications Initiative (VATI) Broadband project proposal
for Giles County

Dear Dr. Holmes:

We at New River Community College (NRCC) are excited to pledge our support to the proposed project for deploying broadband services for students in Giles County. Our experience has shown that students without ready access to broadband, even if enrolled in traditional rather than online courses, struggle to keep pace with those who are more fortunate in having online access. We are strongly in favor of the efforts planned for expansion of this key resource.

NRCC has extensive penetration into Giles County, with a long history of serving graduates of Giles and Narrows high schools, students who enroll in dual enrollment classes while still in high school, and others including hundreds of ACCE (Access to Community College Education) students who benefit from a public/private partnership to support their attendance. Without reliable high-speed internet in their homes, their ability to take advantage of these opportunities is either negated or seriously restricted.

As noted by others, reaching communities without broadband speed internet service builds on the findings identified in the Giles County Broadband Assessment. This assessment has helped the county to identify prioritized areas of need for broadband services. As a result, the additional broadband capacity will be applied in an efficient and effective fashion, where it's most needed.

In summary, we strongly support this initiative and will appreciate your consideration of the proposal submitted by Giles County.

Sincerely,



Patricia B. Huber, Ph.D.
President, New River Community College



Town of Rich Creek
P.O. Box 65
Rich Creek, Virginia 24147-0065
(540) 726-3260 Fax (540) 726-3047

Rich Creek, Virginia

Tamarah Holmes, Ph.D.
Director
Office of Broadband
Department of Housing and Community Development
600 East Main Street, Ste. 300
Richmond, VA 23219

8/18/22

Mr. Roger Jones -Mayor
Town of Rich Creek
250 Old Virginia Avenue
Rich Creek, VA 24147

RE: Letter of Support for Virginia Telecommunications Initiative (VATI) Broadband project proposal for Giles County

Dear Dr. Holmes:

On behalf of the Town of Rich Creek, our businesses and our citizens, I am excited to pledge our support to this Giles County project to deploy broadband services to those who are underserved or have no high-speed internet options. In addition, I strongly support the Virginia Department of Housing and Community Development's (DHCD) goal of achieving universal broadband coverage throughout the Commonwealth of Virginia.

Broadband has become a service as essential as electricity and running water in the world we live in. Those without access to it will face considerable challenges in building and maintaining economic resiliency. This is especially true for our citizens with lower socioeconomic status. It is important to note that within the four census tracts in Giles County, the tract where Rich Creek is located has the lowest median incomes in the county. Without universally available internet access, our students, businesses and community at-large will fall behind in pursuing economic opportunity. The ability to attract new business, and, therefore, jobs will be severely throttled. Opportunities for our emerging workforce will be limited and the "brain drain" of our younger workforce moving outside of our region will continue.

The proposed broadband deployment project, expanding internet access throughout Giles County, addresses these issues by reaching into communities with inadequate or no broadband speed internet service. It builds on the findings identified through the Giles County Broadband Assessment. This assessment has enabled the county to prioritize specific areas in need of broadband services. Armed with this knowledge and determination to realize universal broadband, our citizens will be able to participate in the far-reaching advantages afforded through broadband access.

I respectfully request that DHCD give this Giles County proposal your most serious consideration. A hoped-for positive review will make a world of difference for our current citizens and generations to come.

Sincerely,
Roger Jones, Mayor

A handwritten signature in black ink, appearing to read "Roger Jones".



TOWN OF PEARISBURG

112 TAZEWELL ST.
PEARISBURG, VIRGINIA 24134

Robert L. Dickerson
Mayor

Council:
Jimmie R. Williams
Kristi Eaton
Cathy Clark
Gary L. Fields, Sr.
Frank Tanner
Amanda Davis

Todd Meredith
Town Manager
tmredith@pearisburg.org

Jackie C. Martin
Chief of Police

Regina H. Harless
Town Clerk

Hope Harrell
Town Treasurer

Allison Long
Librarian

Rodney F. Wilson
Building Official /
Public Works Director

Telephone:
(540) 921-0340

Website:
www.pearisburg.org

August 19, 2022

Tamarah Holmes, Ph.D.
Director
Office of Broadband
Department of Housing and Community Development
600 East Main Street, Ste. 300
Richmond, VA 23219

Mr. Todd Meredith, Town Manager
Town of Pearisburg
112 Tazewell Street
Pearisburg, VA 24134
tmredith@pearisburg.org

RE: Letter of Support for Virginia Telecommunications Initiative (VATI)
Broadband project proposal for Giles County

Dear Dr. Holmes:

On behalf of the Town of Pearisburg, our businesses, and our citizens, I am excited to pledge our support to this project to deploy broadband services to those who are underserved or have no high-speed internet options. In addition, I strongly support the Virginia Department of Housing and Community Development's (DHCD) goal of achieving universal broadband coverage throughout the Commonwealth of Virginia.

Broadband has become a service as essential as electricity and running water in the world we live in. Those without access to it will face considerable challenges in maintaining and building economic resiliency. This is especially true for those with lower socioeconomic status. Without universally available internet access, our students, businesses, and community at-large will fall behind in pursuing economic opportunity. The ability to attract new industry, and, therefore, jobs will be severely throttled. Opportunities for our emerging workforce will be limited and the "brain drain" of our younger workforce moving outside of our region will continue.

The proposed broadband deployment project to expand internet access in Giles County addresses these issues by reaching into communities without broadband speed internet service. It builds on the findings identified through the Giles County Broadband Assessment. This assessment has enabled the county to prioritize specific areas in need of broadband services. Armed with this knowledge and determination to realize universal broadband, our citizens will be able to participate in the far-reaching advantages afforded through broadband access.

I respectfully request that DHCD give this Giles County proposal your most thorough consideration. A positive review will make a world of difference for our current citizens and generations to come.

Sincerely,

A handwritten signature in cursive script that reads "Todd Meredith".

Todd Meredith
Pearisburg Town Manager



Town Manager
Town of Narrows
PO Box 440 – 210 Main Street
Narrows, VA 24124

8/22/22

Tamarah Holmes, Ph.D.
Director, Office of Broadband
Department of Housing and Community Development
600 East Main Street, Ste. 300
Richmond, VA 23219

RE: Letter of Support for Virginia Telecommunications Initiative (VATI) Broadband project proposal for Giles County

Dear Dr. Holmes:

On behalf of the Town of Narrows, our businesses and our citizens, I extend our support of the project to deploy broadband services to those who are underserved or have no high-speed internet options in Giles County. In addition, I strongly support the Virginia Department of Housing and Community Development's (DHCD) goal of achieving universal broadband coverage throughout the Commonwealth of Virginia.

Broadband has become a service as essential as electricity and running water in the world we live in. Those without access to it will face considerable challenges in maintaining and building economic resiliency. This is especially true for those with lower socioeconomic status. Without universally available internet access, our students, businesses and community at-large will fall behind in pursuing economic opportunity. The ability to attract new business, and, therefore, jobs will be severely throttled. Opportunities for our emerging workforce will be limited and the "brain drain" of our younger workforce moving outside of our region will continue.

The proposed broadband deployment project to expand internet access in Giles County addresses these issues by reaching into communities without broadband speed internet service. It builds on the findings identified through the Giles County Broadband Assessment. This assessment has enabled the county to prioritize specific areas in need of broadband services. Armed with this knowledge and determination to realize universal broadband, our citizens will be able to participate in the far-reaching advantages afforded through broadband access.

I respectfully request that DHCD give this Giles County proposal your most serious consideration. A positive review will make a world of difference for our current citizens and generations to come.

Sincerely,

Terry Nicholson

Narrows Town Manager

tnicholson@townofnarrows.org

540-358-8009

Post Office Box 5
Pembroke, VA 24136



Phone: 540-626-7191
Fax: 540-626-5523

Tamarah Holmes, Ph.D.
Director
Office of Broadband
Department of Housing and Community Development
600 East Main Street, Ste. 300
Richmond, VA 23219

8/17/22

Mr. James D. "Dusty" Stump-Mayor
Town of Pembroke
500 Snidow Street
Pembroke, VA 24136

RE: Letter of Support for Virginia Telecommunications Initiative (VATI) Broadband project proposal
for Giles County

Dear Dr. Holmes:

On behalf of the Town of Pembroke, our businesses and our citizens, I am excited to pledge our support to this project to deploy broadband services to those who are underserved or have no high-speed internet options. In addition, I strongly support the Virginia Department of Housing and Community Development's (DHCD) goal of achieving universal broadband coverage throughout the Commonwealth of Virginia.

Broadband has become a service as essential as electricity and running water in the world we live in. Those without access to it will face considerable challenges in maintaining and building economic resiliency. This is especially true for our citizens with lower socioeconomic status. Without universally available internet access, our students, businesses and community at-large will fall behind in pursuing economic opportunity. The ability to attract new business, and, therefore, jobs will be severely throttled. Opportunities for our emerging workforce will be limited and the "brain drain" of our younger workforce moving outside of our region will continue.

The proposed broadband deployment project to expand internet access throughout Giles County addresses these issues by reaching into communities without broadband speed internet service. It builds on the findings identified through the Giles County Broadband Assessment. This assessment has enabled the county to prioritize specific areas in need of broadband services. Armed with this knowledge and determination to realize universal broadband, our citizens will be able to participate in the far-reaching advantages afforded through broadband access.

Post Office Box 5
Pembroke, VA 24136



Phone: 540-626-7191
Fax: 540-626-5523

I respectfully request that DHCD give this Giles County proposal your most serious consideration. A hoped-for positive review will make a world of difference for our current citizens and generations to come.

Sincerely,

A handwritten signature in black ink that reads "James O. Stump". The signature is written in a cursive, flowing style.

James Stump
Mayor

c



Tamarah Holmes, Ph.D.
Director, Office of Broadband
Department of Housing and Community Development
600 East Main Street, Suite 300
Richmond, VA 23219

8/15/22

Ms. Kristie Williams, Vice-President
Carilion Giles and Tazewell Community Hospitals
159 Hartley Way
Pearisburg, VA 24134

RE: Giles County Virginia Telecommunications Initiative broadband project proposal – Letter of Support

Dear Dr. Holmes:

Today, in the world of health, access to reliable broadband is essential to the provision of quality, efficient, patient care.

Broadband has far-reaching applications for a hospital in the areas of consumer health, clinical care, financial and administrative transactions, public health, health professional education, and biomedical research.

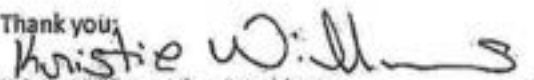
In clinical settings, the Internet enables care providers to gain rapid access to information that can aid in the diagnosis of health conditions and/or the development of suitable treatment plans. It can make patient records, test results, and practice guidelines accessible from the examination room. It can also allow care providers to consult with each other electronically to discuss treatment plans or operative procedures.

Each 3-years, Carilion Clinics conducts a comprehensive Community Health Needs Assessment. This assessment looks at, not only, direct health care provision, but also the Social Determinants of Health (SDH). Lack of transportation is consistently identified as one of these SDH issues most prevalent. The same individuals who have transportation issues are usually the same individuals who have little or no access to broadband. Not only does this lack of transportation directly impact their ability to utilize in-person health care, lack of broadband access eliminates their ability to utilize virtual provider visits.

In closing, the ability of our poorest citizens to have reliable broadband access will have significant impact upon all aspects of their health and, therefore, the community-at-large.

We respectfully request this proposal for Giles County Broadband be given your most serious consideration.

Thank you;


Kristie Williams, Vice-President
Carilion Giles Community Hospital



VATI, rr <vati@dhcd.virginia.gov>

VDHC VATI Giles County

U.S. Senator Kaine <senator@kaine.senate.gov>
To: director@dhcd.virginia.gov

Mon, Aug 29, 2022 at 5:05 PM

TIM KAINE
VIRGINIA

COMMITTEE ON
ARMED SERVICES

COMMITTEE ON
FOREIGN RELATIONS

COMMITTEE ON
THE BUDGET

COMMITTEE ON
HEALTH, EDUCATION, LABOR,
AND PENSIONS

United States Senate
WASHINGTON, DC 20510-4607

WASHINGTON OFFICE:
WASHINGTON, DC 20510-4607
(202) 224-4024

August 29, 2022

The Honorable Bryan Horn
Director
Virginia Department of Housing and Community Development
600 E Main St Ste 300
Richmond, VA 23219-2430

Dear Director Horn:

I write to express support for Giles County, an applicant for grant funding under the Virginia Department of Housing and Community Development's (DHCD) Virginia Telecommunication Initiative, for funding to deploy broadband coverage services throughout the county.

Giles County is one of a small number of localities remaining in Virginia without universal broadband coverage. In a recent survey of all students in the public school system, Giles County officials learned that 18.5% of students had no access to internet; 17.5% had service but had issues with speed, data limits or other; and 16% stated they could not afford broadband. This significant portion of the Giles school population will be unable to take advantage of the opportunities afforded by broadband access. Broadband has become a necessity in today's world and those without it will face considerable challenges in building and maintaining economic resiliency. The broadband deployment proposal submitted by Giles County addresses these issues by reaching into communities without broadband speed internet service. It follows on the extensive work done in the Giles County Broadband Assessment, which allowed the County to identify where the prioritized areas of need for broadband service are located.

Please give full and fair evaluation to this project, which will benefit Giles County and its residents seeking better connectivity for their children's schooling, their work, and their personal affairs like telehealth and general communication. Should you have any questions regarding this project, contact my Office's Grants Coordinator, Eida_Stanco@kaine.senate.gov. Thank you.

Sincerely,

8/30/22, 8:17 AM

Commonwealth of Virginia Mail - VDHC VATI Giles County

Tim Kaine

Form 477 Filing Summary

FRN:

0018473223

Data as of:

Dec 31, 2021

Operations:

Non-ILEC

Submission Status:

Original - Submitted

Last Updated:

May 2, 2022 10:37 AM

Filer Identification

Section	Field	Response
Filer Information	Company Name	GigaBeam Networks, LLC
	Holding Company Name	WVVA.net Inc.
	Filing Type	Non-ILEC
	SAC ID	N/A
	499 ID	N/A
Data Contact Information	Data Contact Name	Michael Clemons
	Data Contact Phone Number	(540) 726-2317
	Data Contact E-mail	mclemons@gigabeam.net
Emergency Operations Contact Information	Emergency Operations Name	Michael Clemons
	Emergency Operations Phone Number	(540) 726-2317
	Emergency Operations E-mail	mclemons@gigabeam.net
Certifying Official Contact Information	Certifying Official Name	Michael Clemons
	Certifying Official Phone Number	(540) 726-2317
	Certifying Official E-mail	mclemons@gigabeam.net

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	Form-477-Coverage-Dec-2021.csv	May 2, 2022 10:25 AM	3,679
Fixed Broadband Subscription	Form-477-Customers-Dec-2021.csv	May 2, 2022 10:33 AM	92

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	GigaBeam Networks	Terrestrial Fixed Wireless	2,254

State	DBA Name	Technology	Blocks
West Virginia	GigaBeam Networks	Terrestrial Fixed Wireless	1,425
Total			3,679

Fixed Broadband Subscription

Fixed Broadband Subscriptions by State, Technology and End User Type

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business/Govt.	Total
Virginia	Terrestrial Fixed Wireless	50	756	104	860
West Virginia	Terrestrial Fixed Wireless	42	662	57	719
Total		92	1,418	161	1,579

Fixed Broadband Subscriptions by Bandwidths and End User Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
10.000	1.000	710	46	756
25.000	2.000	479	66	545
50.000	2.000	0	1	1
50.000	3.000	226	41	267
100.000	10.000	1	2	3
100.000	20.000	2	2	4
250.000	25.000	0	2	2
1,000.000	100.000	0	1	1
Total		1,418	161	1,579

Fixed Broadband Subscriptions by Technology, Bandwidths and End User Type

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
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	50.000	3.000	226	41	267
	100.000	10.000	1	2	3
	100.000	20.000	2	2	4
	250.000	25.000	0	2	2
	1,000.000	100.000	0	1	1

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
Total			1,418	161	1,579

Reminder: Use 2010 Census geographies for data as of June 30, 2021 and before. Use 2020 Census geographies for data as of December 31, 2021 and after.

For help or assistance, please contact (877) 480-3201 or (717) 338-2834 (TTY) or you may submit an [online e-support ticket](#).

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[TTY: 1-888-835-5322](#)
[Videophone: 1-844-432-2275](#)
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Form 477 Filing Summary

FRN:

0018473223

Data as of:

Jun 30, 2021

Operations:

Non-ILEC

Submission Status:

Original - Submitted

Last Updated:

Nov 30, 2021 11:38 AM

Filer Identification

Section	Field	Response
Filer Information	Company Name	GigaBeam Networks, LLC
	Holding Company Name	WVVA.net Inc.
	Filing Type	Non-ILEC
	SAC ID	N/A
	499 ID	N/A
Data Contact Information	Data Contact Name	Michael Clemons
	Data Contact Phone Number	(540) 726-2317
	Data Contact E-mail	mclemons@gigabeam.net
Emergency Operations Contact Information	Emergency Operations Name	Michael Clemons
	Emergency Operations Phone Number	(540) 726-2317
	Emergency Operations E-mail	mclemons@gigabeam.net
Certifying Official Contact Information	Certifying Official Name	Michael Clemons
	Certifying Official Phone Number	(540) 726-2317
	Certifying Official E-mail	mclemons@gigabeam.net

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	Census_Blocks_All_June_2021_Final.csv	Nov 30, 2021 11:34 AM	4,923
Fixed Broadband Subscription	June_2021_Subs.csv	Nov 30, 2021 11:36 AM	112

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	GigaBeam Networks LLC	Terrestrial Fixed Wireless	2,958

State	DBA Name	Technology	Blocks
West Virginia	GigaBeam Networks LLC	Terrestrial Fixed Wireless	1,965
Total			4,923

Fixed Broadband Subscription

Fixed Broadband Subscriptions by State, Technology and End User Type

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business/Govt.	Total
Virginia	Terrestrial Fixed Wireless	73	759	97	856
West Virginia	Terrestrial Fixed Wireless	39	628	59	687
Total		112	1,387	156	1,543

Fixed Broadband Subscriptions by Bandwidths and End User Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
10.000	1.000	752	57	809
25.000	3.000	509	79	588
50.000	5.000	124	17	141
100.000	20.000	2	2	4
1,000.000	100.000	0	1	1
Total		1,387	156	1,543

Fixed Broadband Subscriptions by Technology, Bandwidths and End User Type

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
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