Application to DHCD Submitted through CAMS

Northern Shenandoah Valley Regional Commission
NSVRC 2022 Accelerated Fiber Deployment Initiative

Application ID: 86508092021134115
Application Status: Pending
Program Name: Virginia Telecommunications Initiative 2022
Organization Name: Northern Shenandoah Valley Regional Commission
Organization Address: 400E Kendrick Lane
Front Royal, VA 22630-2910
Profile Manager Name: Brandon Davis
Profile Manager Phone: (540) 636-8800
Profile Manager Email: bdavis@nsvregion.org

Project Name: NSVRC 2022 Accelerated Fiber Deployment Initiative
Project Contact Name: Brandon Davis
Project Contact Phone: (540) 636-8800
Project Contact Email: bdavis@nsvregion.org
Project Location: 400-E Kendrick Lane
Front Royal, VA 22630-2910
Project Service Area: Augusta County, Clarke County, Fauquier County, Frederick County, Page County, Rappahannock County, Rockingham County, Warren County

Total Requested Amount: $97,208,500.00
Required Annual Audit Status: Accepted
Budget Information:

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Budget Narrative:

This project is seeking VATI funding of $97,208,500 to support a comprehensive broadband deployment throughout an eight county region.

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:**

   This application for the NSVRC 2022 Accelerated Fiber Deployment Initiative (“Initiative”) is submitted by the Northern Shenandoah Valley Regional Commission (“NSVRC” or “Commission”) and All Points Broadband (“APB” or “All Points”), as applicant and co-applicant, respectively. The project area includes unserved areas in the Counties of Augusta, Clarke, Fauquier, Frederick, Page, Rappahannock, Rockingham and Warren (each a “County” and collectively the “Participating Counties” or the “Region”).

   The attached map and shape files demonstrate the specific boundaries of the proposed project area.

   Achieving universal broadband access has been a priority for each Participating County.

   In June of 2021, seven of the Participating Counties entered into a Memorandum of Understanding with All Points, Dominion Energy Virginia (“Dominion”), and Shenandoah Valley Electric Cooperative (“SVEC”) to develop and implement a strategy to achieve universal, fiber-to-the-home (“FTTH”) broadband for all remaining unserved areas in each Participating County. Rappahannock Electric Cooperative (“REC”) subsequently joined this MOU (see Attachment 8). In August of 2021, Fauquier County entered into a similar Memorandum of Understanding with All Points and Dominion (see Attachment 8), and Fauquier County has now joined this eight-county initiative to achieve universal broadband that NSVRC will administer on behalf of the Participating Counties.
From June of 2021 until the date of this application, APB, the NSVRC and senior personnel from each Participating County have held routine coordination meetings to refine the proposed project.

To determine the proposed project area, All Points’ field teams visited and visually inspected all areas within each Participating County where incumbent wireline providers are not offering service. Specifically, All Points personnel visited all of the areas proposed to be served by the project to verify that each such area is not currently served by wireline technology (cable or fiber) that is capable of providing 25/3 service. All Points’ preliminary analysis was reviewed by NSVRC and each county and compared to County information gathered from previous studies and analysis.

All Points then published a map of the proposed service area and an online survey which residents and property owners could complete to verify whether a specific location was served or unserved by broadband. More than 4,000 online surveys were completed by residents and property owners and the survey data was used to refine the proposed service area and to ensure that all the unserved locations in the Region will be included in the proposed project. To finalize the proposed project area, locations that were identified as being slated to be served by a wireline provider offering speeds of at least 25/3 through RDOF or another federal broadband funding program were removed.

The project will extend FTTH infrastructure so that broadband service will be made available to 42,693 currently unserved locations in the Region. On the basis of the extensive field inspections, comparisons to County data, and the online survey results, the Participating Counties and All Points agree that the proposed project area will provide broadband access to all of the locations in the Region that remain unserved by cable or FTTH broadband as of the date of this application, and that are not slated to be served with qualifying broadband from another wireline provider through RDOF or another federal broadband funding program. The primary reason why the proposed project area was selected is because the proposed project area includes all the remaining unserved locations in the Region.

A secondary reason why the proposed project area was selected is because it is an ideal area in which partnerships with electric utilities can make FTTH broadband available. The Region is principally served by the three electric utilities who are supporting this project. Dominion is participating in this project pursuant to Virginia Code §56-585.1:9, as amended, (the "Utility Leverage Statute").

Within significant portions of the Region, REC is building its Fiber Utility Network to replace 30-year-old microwave communications between each of its offices and key devices on its electric grid. REC’s Fiber Utility Network is being installed on REC’s existing infrastructure such as poles and related equipment. The design for REC’s Fiber Utility Network includes additional strands of fiber within its core routes to support All Points’ extension of last mile FTTH to currently unserved areas within the proposed project area.
Within the portions of the Region not served by Dominion or REC, SVEC is deploying its own fiber-optic network to connect substations, communication sites, offices and other SVEC facilities (“Fiber Utility Network”). The design for SVEC’s Fiber Utility Network includes additional strands of fiber within its core routes to support All Points’ extension of last mile FTTH to currently unserved areas within the proposed project area.

By partnering with Dominion under the Utility Leverage Statute, and REC and SVEC through their Fiber Utility Networks, All Points and the Participating Counties will realize significant cost savings and can complete the project with significantly less grant funding than would otherwise be required to extend FTTH throughout the proposed project area.

The project area includes in excess of 21,000 Low or Moderate Income (“LMI”) households. To determine the LMI household count, the Commission and APB analyzed the currently available U.S. Census data for the proposed project area by Census tracts. Based on this analysis, it was determined that LMI households account for approximately 49% of all households in the proposed project area, 27% of which are considered low income and 22% are considered moderate income. The project will therefore have a significant benefit by making high quality broadband available to more than 21,000 LMI households, which is the total number of remaining unserved LMI households in the Region.

A map of the project area is attached as Attachment 1.

2. List existing providers in the proposed project area and the speeds offered. Please do not include satellite. Describe your outreach efforts to identify existing providers and how this information was compiled with source(s).

Answer:

There are multiple broadband providers serving various portions of each Participating County, including Comcast, Shentel, MGW, Lumos, Centurylink, New Hope Telephone, BARC Connects and Firefly, among others.

All Points has visited each area proposed to be served by the project to visually verify that wireline broadband does not exist at the locations in these areas. This regional project has been widely publicized and discussed at multiple public meetings in each Participating County.

In July of 2021, All Points submitted petitions to DHCD to have the entire proposed project area designated as unserved by broadband under the Utility Leverage Statute. Under the DHCD guidelines for the Utility Leverage program, any provider has the ability to provide evidence that they already offer service within the proposed project area. A final determination on the petition submitted in July is pending as of the date of this application.

BARC Connects and Firefly Broadband each contacted All Points to confirm the unserved status of various areas and All Points has modified the proposed project area to reflect these coordination efforts.
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. Do not include areas awarded to satellite broadband providers. Label Map: Attachment 2 – Documentation on Federal Funding Area.

Answer:
The Maps attached in Attachment 2 demonstrate the areas within each Participating County where various providers have received federal funding through the CAF, ACAM and other federal programs. RDOF areas are shown in Attachment 3.

4. Describe if any blocks awarded in Rural Digital Opportunity Fund (RDOF), excluding those awarded to satellite internet service providers, are included in the VATI application area. If RDOF areas awarded to terrestrial internet service providers 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 3 – RDOF Awarded Areas Form in VATI Area

Answer:
Attachment 3 includes maps of the project area and RDOF funded areas in each Participating County and a table of passings in RDOF awarded areas within the application.

5. 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 25/3 mbps and with less than 25% service overlap within the project area for wireless projects and 10% 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 4 – Documentation Unserved Area VATI Criteria.

Answer:
As noted above, All Points conducted extensive field surveys in each portion of the project area to determine unserved areas. All Points visited and visually inspected the areas proposed to be served by the project to verify they are not currently served by wireline technology (cable or fiber) that is capable of providing 25/3 service.

These areas where All Points completed its field surveys were mapped to determine the project area and compared to data available and supplied by the Participating Counties.

The map of currently served areas in the Region is included as Attachment 4.

Despite our extensive efforts to verify the unserved status of these areas, it is possible that a small number of locations were incorrectly identified as unserved. In the unlikely event that the Utility Leverage or VATI challenge process demonstrates that more than 10% of locations within the proposed service area are already served by broadband, the project scope will be modified by the NSVRC and All Points as required by VATI and Utility Leverage program rules.

6.
Total Passings: Provide the number of total serviceable units in the project area. Applicants are encouraged to prioritize areas lacking 10 Megabits per second download and 1 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 5 – 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. (Up to 10 points for businesses and community anchor institutions)

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 10/1 mbps or less. Describe the methodology used for these projections. (up to 15 points)

Answer:

a. 

To determine the number of residential, business, non-residential and community anchor institutions in the proposed project area, each of the 42,693 locations in the proposed project area were cross-referenced with parcel-specific land use data in County GIS data. This process resulted in 40,354 passings categorized as residential, 712 passings categorized as non-home based businesses, 2659 residential passings where a home based business was located, 35 community anchor institutions, and 1592 passings categorized as non-residential.


Among the community anchor passings are several schools, including Timber Ridge School, Belle Meade Montessori School, Wakefield School and Midland Christian Academy.
b. APB did not receive RDOF funding in any portion of the proposed project area.

c. None of the passings included in the proposed project area will require special construction costs. For the first twelve months after service is available at any location within the proposed project, All Points’ standard installation fee of $199.00 will include any length of service drop required to make service available to that location. Therefore, as All Points has confirmed with DHCD during the technical assistance process prior to submission of this application, all of the passings within the proposed service area will be considered serviceable units.

d. As noted above, for the first twelve months after service is available at any location within the proposed project, All Points’ standard installation fee of $199.00 will include any length of service drop required to make service available to that location. All Points’ detailed design for the project calculated the projected service drop length for all locations in the proposed project area, and the average drop length used to determine the project budget is based on the weighted average drop length indicated by the project design.

e. It is estimated that 28,379 of the passings in the proposed project area lack access to service of at least 10/1 Mbps. To determine the number of passings currently served by service of 10/1 or greater service, All Points compared each of the passings in the project to the most recent Form 477 data available from the Federal Communications Commission and conducted availability searches online.

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: Not applicable as this is a FTTH project.
8. 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 25/3 mbps. (up to 10 points)

Answer:

The last-mile FTTH network will offer four speed tiers that are fully symmetrical: 50/50 mbps, 100/100 mbps, 500/500 mbps, and 1/1 gbps, with no data caps. The intended monthly pricing for these plans is $59.99, $79.99, $99.99, and $109.99, respectively, with a flat $5 service fee to cover applicable taxes and FCC fees.

In order to ensure that high quality broadband is available to all currently unserved locations that are within the proposed project area, All Points has committed to maintain the 50/50 mbps service tier at the fixed price of $59.99 for the life of the project. This rate will be indexed to inflation and will not increase in real terms.

Customers will also have the ability to subscribe to VOIP phone service with multiple calling features and local and continental US long distance calls included for an additional $14.99 per month.

Because the project is a FTTH network, the only locations where sharing of bandwidth may occur are at a fiber concentration cabinet or at the network core. All Points has planned more than adequate capacity to consistently deliver advertised speeds to all customers.

9. 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:

The project is a new FTTH deployment that will make FTTH service available to currently unserved locations in the Region. The network includes approximately 3,785 miles of distribution fiber, of which approximately 223 miles will consist of routes within REC’s Fiber Utility Network, and 317 miles will consist of routes within SVEC’s Fiber Utility Network. Approximately 2,582 miles will be built by All Points and approximately 663 miles will be built by Dominion pursuant to the Utility Leverage Statute. The final mileage to be constructed by Dominion is contingent on approval of Dominion’s related petition to be submitted to the State Corporation Commission (“SCC”) under the Utility Leverage Statute. As indicated in its letter included in Attachment 13, Tilson Technology Management, Inc. has assisted All Points with the planning and design of this network, and preparation of indicative bills of materials, and related cost estimates.

At completion, the network will include 24 upstream connection points to All Points’ network core in the data center cluster in Ashburn, Virginia and six independent connections to All Points’ redundant network core in the Cermak data center in Chicago, Illinois.
All existing and new fiber distribution infrastructure will use all-dielectric self-supporting (“ADSS”) fiber cable, with AFL Telecommunications (“AFL”) as the principal cable manufacturer. Because ADSS cable is fully self-supporting and requires no messenger wire, it can be installed in a single pass, resulting in lower construction costs and more rapid deployment timeframes. ADSS is optimized for deployments on electric utility poles and infrastructure and can be placed in closer proximity to conductors, which reduces pole make ready expense. The project will use cables of various strand counts, generally ranging from 24 to 288 strands, depending on the specific network segment. As indicated in the letter included in Attachment 13, AFL, APB’s primary supplier of fiber optic cables, connectors, terminals, and related hardware, has allocated committed manufacturing capacity to support APB’s materials requirements and specific schedule for this project.

The network will include approximately 30 fiber feeder hubs and approximately 157 fiber distribution hubs. Service drops will be made to one of approximately 7,060 fiber distribution terminals. Fiber distribution terminals will be AFL Titan Ready-to-Deploy Multiport Terminals in multiple sizes depending on location and network requirements.

Service drops will be made using AFL Trident hardened drop cables.

All customer premises equipment, including optical network terminals and Wi-Fi internet access gateways will be from the Calix ecosystem of products.

All network optronics will use the XGS-PON (ITU G.9807.1) architecture, which is capable of delivering 10 gigabit, symmetric service, to all end users.

The network has been designed to be scalable and expandable to meet future needs as new locations are built within the project area and as end user demands require higher bandwidth connections.

For example, throughout all distribution routes, a minimum of 12 fiber strands will be reserved to accommodate future needs. This will ensure sufficient distribution capacity so that no additional fiber routes would need to be constructed to offer service to any new locations built in the proposed project area after project completion.

At all feeder and distribution hubs, sufficient capacity has been reserved to enable the network to be upgraded to offer 10 gigabit, symmetric service, to all end users on the network in the future as consumer demands require higher
bandwidth connections. All distribution terminals have been sized to accommodate additional connections in the future to accommodate new and in-fill development without requiring additional splicing.

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:

Achieving universal broadband access has been a long-term objective of each Participating County and this project will achieve that objective in each County.

As discussed above, the Participating Counties and APB have undertaken extensive field inspections, franchisee network review, and provider and community outreach to ensure that all remaining unserved locations in the Region that are not slated to be served by a wireline provider through RDOF or another federal funding program are included in the proposed project area. All Points’ field teams visited and visually inspected all areas within the Region where an incumbent cable or fiber provider is not offering service and verified that each such area is not currently served by wireline technology (cable or fiber) that is capable of providing 25/3 Mbps service. All Points’ preliminary analysis was reviewed by each County and compared to County information gathered from previous studies and analysis.

Because this project includes all 42,693 locations in the Region that will remain unserved after any wireline provider offering broadband service of at least 25/3 mbps completes its deployment obligations under RDOF or another federal broadband program, completing this project will achieve universal broadband in the Region.

The significance of this project, and its importance to the Region and its future is demonstrated by the significant financial commitment that each Participating County is making to the project. The Participating Counties have committed a combined $62.45 million in local match funds to ensure the success of this project and to begin the critical task of ensuring their communities are not left on the wrong side of the digital divide. To ensure the success of this application, each Participating County has committed significant local funding. Three Counties are providing local match in excess of their respective ARPA funds. Clarke, Page and Rappahannock are contributing 192%, 169% and 413% of their respective ARPA funds.

The Participating Counties recognize the importance of this project, the opportunity for cost savings presented by being part of such a large infrastructure program, and the once-in-a-generation opportunity before them. This project will be an example for the type of super-regional collaboration that is required to achieve ambitious objectives, and there is no objective more important than ensuring that all of the Region’s residents have access to high quality broadband and the opportunities it creates for connected communities.

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 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 20 points)

Answer:

In June of 2021, seven Participating Counties entered into the MOU with APB, Dominion and SVEC to implement a strategy to achieve universal FTTH, which REC subsequently joined (Attachment 8). In August, Fauquier entered into an MOU with APB and Dominion (Attachment 8), and has also joined this eight-county project.

Since June of 2021, APB, the NSVRC and senior personnel from each County have held routine coordination meetings to refine the proposed project.

From June through September of 2021, APB completed a high-level network design in collaboration with Dominion, SVEC and REC. The design now incorporates those consultations with the 3 utilities, including the specific routes to be constructed by Dominion and the portions of REC’s and SVEC’s networks to be leveraged by APB. The high-level network design is now complete.

REC commenced construction of its Fiber Utility Network in late 2020 and is on schedule to complete its construction by Q4 2022. SVEC is currently completing make-ready design for its fiber network, working with Timmons Group and Pike Engineering. Contractor field work commenced in Page and Augusta in September 2021 and will then proceed into Rockingham and Frederick.

In July, APB included the project area in petitions to DHCD for certifications that the project area is unserved under the Utility Leverage Statute. Upon receipt of DHCD’s final determination on these petitions, APB and Dominion will finalize the petition to be submitted to the SCC related to Dominion’s participation.

In August, APB and REC agreed on the specific terms that will apply to APB’s use of REC’s Fiber Utility Network and commenced make-ready analysis for all fiber routes proposed to be located on REC infrastructure. APB and REC have agreed on a timeframe for completing make-ready engineering and construction that will enable the project to be completed on the proposed timeframe.

APB and SVEC have agreed on the structure of their partnership for APB to leverage SVEC’s Fiber Utility Network.
and SVEC has commenced preliminary make-ready analysis for its routes.

Through our shared experience achieving SCC approval of Dominion’s participation in the VATI-supported Northern Neck Initiative, APB and Dominion have developed a standard final design coordination process that runs concurrently with the SCC petition process. This approach reduces costs for APB and Dominion, ensures that all information required to be submitted to the SCC is available on the required timeframes, and enables network construction to begin immediately upon SCC approval. APB will commence final design for this project in October of 2021 and will complete final design during the pendency of the SCC petition.

Dominion, REC and SVEC have each assigned dedicated project managers to lead their participation in this project.

As indicated in Attachment 13, AFL Telecommunications, APB’s cable manufacturer, has allocated committed manufacturing capacity to support APB’s requirements and specific schedule for this project. By involving AFL in the design and fiber technology evaluation from the beginning, APB has ensured that the project will benefit from APB’s strategic partnership with AFL, including firm pricing and dedicated manufacturing capacity.

Dominion is anticipated to initiate contact with potentially affected property owners regarding the project and easements in Q2 of 2022. Because the project has been designed to place all new fiber distribution routes within public rights of way or within areas subject to existing easements, APB does not anticipate requiring a significant number of new easements.

Dominion will also be preparing needed environmental permits for its proposed routes during the pendency of the SCC petition. Provided the SCC petition is submitted and approved on the planned timeframe, APB and Dominion will both commence network construction in Q4 of 2022.

APB will construct its last-mile infrastructure concurrently with Dominion's construction and completion of related REC and SVEC Fiber Utility Network routes. APB will deploy, and provision service terminals and service drops in conjunction with each electric utility’s construction schedule, so that end users can be connected to the network as soon as there is distribution fiber in place to connect their location to APB’s network core.

Once construction has commenced, APB will be able to rapidly deliver service to customers who have pre-registered their locations for service through APB’s Crowd Fiber tool.
To ensure the network is promptly used by unserved locations, APB will begin marketing the network to potential customers as soon as the SCC has ruled on the SCC Petition.

The NSVRC will serve as fiscal agent and administer VATI funds for the project. In accordance with the terms of the MOUs that are already in place, upon receipt of a VATI award All Points and NSVRC will enter into a definitive agreement reflecting this application.

Because this project involves the coordination between APB and three electric utility providers, requires substantial electric utility infrastructure to be in place before last-mile deployments can begin, and requires that Dominion obtain SCC approval for its participation, substantial completion of the project will require 36 months from grant award and SCC approval of Dominion’s participation.

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:

NSVRC has not previously received any VATI grants.

All Points received a VATI grant in the 2021 application cycle for another project that will achieve universal FTTH access within a project area in four counties on Virginia’s Northern Neck (the “Northern Neck Initiative”). Similar to the project proposed in this application, the Northern Neck Initiative was a partnership between All Points, Dominion, an electric cooperative (the Northern Neck Electric Cooperative) and participating counties, and Dominion’s participation in the Northern Neck Initiative also required approval from the State Corporation Commission.

The SCC petition for approval of Dominion’s participation in the Northern Neck Initiative was submitted in September of 2020, and the SCC’s final order approving that project was issued in March of 2021.

Construction of fiber distribution routes for the Northern Neck Initiative commenced in July of 2021 and construction is now underway. Customer installations are on schedule to commence in December 2021, and the overall project is on schedule for completion in the third quarter of 2023.
13. Matching funds: Complete the funding sources table indicating the cash match and inkind 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. Label Attachments: Attachment 9 - Funding Sources Table; Attachment 10 – Documentation of Match Funding

**Answer:**

As set forth in Attachment 9, the total cost of the proposed project is $306,249,490, and this application is requesting VATI funds in the amount of $97,208,500 representing 31.7% of the total project cost. Augusta County has committed $8.4 million, representing 2.7% of project cost. Clarke County has committed $5.4 million, representing 1.8% of project cost. Fauquier County has committed $10.5 million, representing 3.4% of project cost. Frederick County has committed $8.65 million, representing 2.8% of project cost. Page County has committed $7.8 million, representing 2.5% of project cost. Rappahannock County has committed $5.9 million, representing 1.9% of project cost. Rockingham County has committed $8.9 million, representing 2.9% of project cost. Warren County has committed $6.9 million, representing 2.3% of project cost.

Collectively, the Participating Counties have committed $62.45 million, representing 17.6% of project cost.

Dominion is anticipated to invest $33.15 million, representing 10.8% of the total project cost, pending SCC approval of Dominion’s participation in this project.

All Points will be responsible for providing $113,220,990, representing 37% of the total project cost.

All Points’s lead equity sponsor, Searchlight Capital Partners, has committed all required financing to complete the project, as demonstrated in the letter included in Attachment 10.

Dominion is providing support for the project through the Utility Leverage Program. Dominion has entered into MOUs with All Points and each Participating County to submit its Utility Leverage Petition for this project (see Attachment 8) and has confirmed its participation pending final approval from the SCC (see Attachment 10). The project budget only includes that portion of Dominion’s anticipated investment that will be allocated to broadband deployment.

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:**

Each Participating County and the NSVRC have provided extensive in-kind support to the planning process that
resulted in the proposed project. Since June of 2020, many senior County personnel from each Participating County and senior leadership from the NSVRC have participated in routine coordination meetings with the APB project team and representatives from Dominion, REC and SVEC.

Each Participating County has also agreed to provide all required support for the SCC Petition process on an in-kind basis and at no cost to the project.

Each Participating County has agreed to assist All Points with all required permitting and easements at no cost to the project, providing additional leverage in the form of approximately $1,200,000 in cost savings for the project.

All Points is dedicating three full-time sales managers to the project who will oversee all marketing and adoption activities within the Region and APB has allocated a $2,500,000 marketing budget for the project in its first three years (which is not included in the project budget set forth in this application).

Dominion, REC and SVEC have also participated in the planning process at no cost to the project.

By providing APB with access to its Utility Fiber Network, REC is providing leverage in the form of $7,806,750 in cost savings to the project.

By providing APB with access to its Utility Fiber Network, SVEC is providing leverage in the form of $23,737,500 in cost savings to the project.

Support from each Participating County and all electric utility partners will continue through final design and construction. Each Participating County, All Points, Dominion, REC and SVEC will participate in joint public meetings and marketing events to publicize the project and encourage adoption by residents in each Participating County. Dominion and APB will each incur significant costs related to the SCC Petition Process, including legal fees and other related costs that are not included in the project construction costs. APB’s share of these costs will exceed $450,000.

The project will leverage APB’s existing network core and related data-center infrastructure, as well as All Points's customer service, support, and billing functions.
15. Marketing: Describe the broadband adoption plan.

   a. 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)

   b. 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.

   APB has already performed substantial marketing activities. During the process of publicizing this regional project, APB began taking preregistrations from potential customers in the project area through its Crowd Fiber tool, which enables interested locations to provide their contact information, pre-register for service and request to be contacted when it is available.

   APB prepared an extensive marketing campaign to ensure that customers are connected to the network as soon as it is available. See Attachment 17.

   APB has dedicated a sales manager to oversee marketing and adoption activities and allocated a $2.5M marketing budget for the project in its first 2 years.

   The pre-construction marketing phase will begin with a series of mailings to all serviceable units, and a series of joint-marketing events and public meetings conducted in conjunction with community organizations and Counties. APB will also use its website, social media, and yard signs to market the service.

   APB will leverage REC’s and SVEC’s customer communication and marketing channels to inform potential customers of the project who are REC or SVEC members. All marketing communications will direct potential customers to APB’s online Crowd Fiber tool to pre-register for service and provide preferred contact methods. APB will communicate regular project updates with pre-registered locations.

   Each County has agreed to support APB, Dominion, REC and SVEC as they conduct media events and project tours to keep local media outlets informed about the project and its status, and to generate media coverage that will reinforce APB marketing activities. As each area of the network is nearing completion, All Points will use the preferred contact method selected by each customer that has pre-registered to inform them of their service availability date and to schedule installations for these pre-registered customers. As of the date of this application, more than 4,000 preregistrations have been entered into All Points’ Crowd Fiber system.
All Points will provide and make resources available on the best practices from the National Digital Equity Center, the National Digital Inclusion Alliance, and NTIA's BroadbandUSA toolkits. Information regarding All Points’ Digital Academy is described below and in Attachment 18.

90 days before service is available, APB will send an additional series of direct mail to potential customers that have not pre-registered for service, and leverage REC’s and SVEC’s customer marketing channels to inform REC and SVEC members.

APB’s marketing materials will also highlight APB’s commitment, for the first 12 months after it is available, to provide service to any serviceable unit (regardless of service drop length) for the same one-time installation charge of $199.00. This offering is projected to increase take rates.

APB will continue to use its website and social media channels, billboards, and public meetings in conjunction with the County to market the project. As last-mile construction is completed in each area of the project, APB will place door hangers at each serviceable location and yard signs in each serviceable neighborhood.

Dominion, REC and SVEC have each established dedicated websites to inform the public and residents and property owners within the project area about project status and methods to pre-register for service.

To project take rates for this project, a third party was commissioned to perform a residential survey and conjoint analysis, which was completed in June of 2021. Redacted excerpts from this third party analysis are attached as part of Attachment 17. As demonstrated in the attached excerpts, the analysis concluded that APB could achieve market share of broadband subscribers of 75%, 71%, and 95%, respectively, in various portions of the proposed project area, depending on whether the options currently available to consumers are (a) satellite and DSL, (b) DSL and fixed wireless, or (c) only satellite. APB has applied these projections across the proposed project to estimate a take rate of 75% for the project.

b.

The project area includes in excess of 21,000 LMI households, who represent 49% of all households in the proposed project area and all unserved LMI households in the Region.

All service offerings made available through this project will be eligible for the federal EBB program and future
affordability programs available to LMI households.

For the first 12 months after its service is available, APB will provide service drops to all locations within the project area, regardless of drop length, for the same fixed installation fee of $199.00.

In order to ensure that high quality broadband is available to all currently unserved locations that are within the proposed project area, APB has committed to maintain the 50/50 mbps service tier at the fixed price of $59.99 for the life of the project. This rate will be indexed to inflation and will not increase in real terms.

All Points has developed a Digital Inclusion Academy through Google for Education (see Attachment 18), based on best practices and recommendation from the National Digital Equity Center, the National Digital Inclusion Alliance, and NTIA's BroadbandUSA toolkits, which includes courses such as "Use Digital Tools for Everyday Tasks", "Avoid Online Scams", "Build Healthy Digital Habits", "Edit Your Resume", and others of a similar nature. All Points will offer free access to this Academy and all related courses to all locations within the proposed project area.

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. 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 11 – Letters of Support.

Answer:

The following table depicts key members of the project team from All Points, Dominion, REC, SVEC and the NSVRC:

<table>
<thead>
<tr>
<th>Key Individual</th>
<th>Roles and Responsibilities</th>
<th>Previous Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jimmy Carr</td>
<td>CEO, APB</td>
<td>See attachment 20</td>
</tr>
<tr>
<td>Sean Flora</td>
<td>Director of Fiber Construction, APB</td>
<td>See attachment 20</td>
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</table>
Brandon Ogilvie
CFO, APB
See attachment 20

Tom Innes
SVP of Public-Private Partnerships, APB
See attachment 20

Chuck Hogg
SVP of FTTH Deployments, APB
See attachment 20

Darren Glatt
Partner and Co-Head of Infrastructure Investing, Searchlight Capital Partners
See attachment 20

Ajit Pai
Partner, Searchlight Capital Partners
See attachment 20

Ed Diggs
Manager, Rural Broadband, Dominion
See attachment 20

Mark Ponton
Director of Broadband and Fiber Services, Rappahannock Electric Cooperative
See attachment 20

Wayne Hannah
VP and Chief Information Officer, Shenandoah Valley Electric Cooperative
Additional information about the members of the project management team is included in Attachment 20.

NSVRC is well positioned to serve as the grant administrator for this project. NSVRC has a strong history of complex grant management for multifunctional projects and have developed a reputation in our region as the go-to organization to serve as the fiscal agent for collaborative projects. For example, SVEC serves as the fiscal agent and lead support organization for DHCD’s GoVirginia Region 8, which extends beyond the boundaries of our service area. GoVirginia’s fiscal administration is complex, with nearly a dozen concurrent projects, each of which with multiple local government investors as well as private sector and nonprofit partners. NSVRC is the fiscal agent for a seven-jurisdiction public-private partnership called the Worlds of Work, which connects nearly 3,000 seventh graders each year with employers in the region, hoping to establish a career pathway for tomorrow’s workforce to remain in the region. NSVRC is the program manager and fiscal agent for the HOME Consortium, allowing our region to access significant federal funding to promote affordable housing in the region. Without the collaboration fostered by our organization, no singular jurisdiction would be eligible to access these funds. Several years ago, when the jurisdictions’ destination marketing organizations within the valley, both within our PDC boundaries and well beyond, came together to establish a regional branding initiative, we were asked to serve as the fiscal agent for the project. Since then, the jurisdictions have established the Shenandoah Valley Tourism Partnership, comprised of jurisdictions from Augusta to Frederick Counties. NSVRC continues to serve as the fiscal agent and grantee on behalf of that organization, accounting for funds from each jurisdiction, and serving as the recipient of several Virginia Tourism Corporation grants over the last few years.

NSVRC is fortunate to have an experienced finance director who has been with the organization for 14 years, during which period the Commission has achieved 14 consecutive years of clean, unqualified audit opinions. In response to the requests NSVRC continues to receive to serve as the fiscal manager for collaborative regional efforts, the Commission recently added a fiscal officer with several years of experience and an accounting degree, who will provide added capacity and further separation of duties for the fiscal management function of NSVRC.

All Points Broadband is a highly successful rural broadband provider that operates last-mile fiber, fixed-wireless, and hybrid-fiber-wireless networks serving locations in Virginia, West Virginia, Maryland, and Kentucky. All Points has grown through acquisitions and organic network expansions and been named to Inc. magazine's list of America's 5000 fastest-growing companies in each of the last four years. All Points has successfully managed numerous rural broadband deployments in partnership with rural Counties, and it has managed the development of a similar multi-partner
broadband initiative on the Northern Neck.

The company's senior managers hold leadership positions in our national industry association. All Points CEO is a member of Virginia's Broadband Advisory Council and has testified before the US Senate and Virginia General Assembly on rural broadband deployment strategies.

Searchlight Capital Partners is APB’s lead equity sponsor. Searchlight is a private investment firm with over $9 billion of assets under management with extensive expertise investing in the global telecommunications and media sectors. Over the last two years, Searchlight has invested in excess of $1.25 billion in FTTH in the United States, making Searchlight the number one investor in domestic FTTH infrastructure in that period. And as of today, through its investments in All Points, Consolidated Communications and Ziply Fiber, Searchlight is the fourth largest builder of FTTH passings in America. All Points benefits from the tremendous volume purchasing arrangements for Searchlight’s portfolio companies, which ensure availability of required supply and the best available pricing.

Searchlight has deep familiarity with broadband markets and the associated competitive dynamics in the broader United States. Searchlight’s leadership, both through their time at Searchlight and at previous investment firms, have also acquired multiple decades of experience investing specifically in fiber-based broadband businesses in the U.S. and globally, which has made it a core competency and strategic focus for the firm.

Additional letters of support are included as Attachment 11.

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:**
As set forth in Attachment 12, the total cost of the proposed project is $306,249,490, and this application is requesting VATI funds in the amount of $97,208,500 representing 31.7% of the total project cost.

Dominion’s investment in broadband related infrastructure in support of this project is anticipated to be $33.15 million, representing 10.8% of total project cost, pending SCC approval of Dominion’s participation in this project.

The Derivation of Costs divides the project into the following categories: Final Design and Engineering, Project & Construction Management, Headed/Central Office, Field Network Equipment, Utility Middle Mile, Aerial Make Ready & Construction, Underground Construction, Fiber Drop Construction, Subscriber Equipment & Installation Labor, Other Capex, Grant Administration and Construction Bond.

To develop the project budget, All Points prepared a high-level design for the project and developed an indicative bill of materials based on that design.

As part of APB’s design and cost estimation process, All Points engaged Tilson Technology Management, Inc. (“Tilson”) to supplement APB’s internal engineering and design resources and to assist in the development of the high-level design and related bill of materials and cost estimates. Tilson is one of America’s leading providers of consulting, design and construction management services to the telecommunications industry. As described in Tilson’s letter included in Attachment 13, the cost estimates that form the basis of the project budget are based on Tilson’s bill of materials and related cost estimates and reflect current pricing available to All Points.

All Points then obtained current pricing for each item on the bill of materials from its primary vendors, including AFL, APB’s primary supplier of fiber optic cables, connectors, terminals, and related hardware. As described in AFL’s letter included in Attachment 13, AFL provided the pricing used for all relevant cost categories included in the project budget and AFL has allocated committed manufacturing capacity to support APB’s materials requirements and specific schedule for this project.

Grant administration expenses are $480,000, reflecting NSVRC’s estimate of the fully loaded cost of $120,000 per year to add a full time employee to oversee and administer the grant over a four-year period.
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. This application is requesting VATI funds in the amount of $97,208,500.

b. 42,693

**Commonwealth Priorities (Up to 40 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 25/3 mbps.

**Answer:**

a. The project area includes 712 business passings and 35 community anchors.

Business passing in the project include Piney Hill B&B, Faithbrooke Barn & Vineyards, Hidden Spring Senior Living, Tredways Manufacturing, Magnolia Vineyards, Sharp Rock Vineyards, Pembrooke Springs Retreat, Rosendale Inn, Shenandoah Growers Inc., Bluestone Vineyards, Camp Horizons, Barren Ridge Vineyards, Shenandoah Valley Campground and Four Winds at North Mountain. Providing broadband at these businesses will increase their productivity and make them more attractive destinations for tourism, benefiting the Region’s economy.

Among the community anchor passings are several schools, including Timber Ridge School, Belle Meade Montessori School, Wakefield School and Midland Christian Academy.

b. This project is a partnership between NSVRC, 8 Counties, an ISP, and 3 electric utilities, and is following the successful model developed by APB and Dominion on the Northern Neck. The project leverages the unique framework Virginia has adopted to attract private investment and electric utility partnerships to deliver FTTH to the unserved. This Region has adopted this project as its collective strategy for achieving universal broadband, and this project will achieve universal coverage for 8 Counties containing more than 18% of the estimated unserved locations remaining in Virginia.

The project leverages the Utility Leverage Statute with an investor-owned utility and the participation of two electric cooperatives, REC and SVEC, to simultaneously upgrade and harden Virginia’s electric grid while making last-mile FTTH available to all remaining unserved locations in the Region. Pursuing these two objectives simultaneously reduces aggregate costs for all the partners and benefits the entire Region. The Region will achieve universal coverage if this project is leveraged in coordination with Dominion's ongoing fiber-deployment activities and with REC’ and SVEC’s deployments of their Fiber Utility Networks.

The significance of this project, and its importance to the Region is demonstrated by the significant financial commitment that each County is making to the project. The Region has committed a combined $62.45 million in local funds to ensure the success of this project and this time. 3 Counties are providing local match in excess of their total ARPA funding. Clarke, Page and Rappahannock are contributing 192%, 169% and 413% of their respective ARPA funds.

The Region sees the opportunity for cost savings that being part of this large initiative presents, and that it is once-in-a-generation opportunity. This project will be an example for the type of super-regional collaboration that is required to achieve ambitious objectives, and there is no objective more important than ensuring that all of the Region’s residents have access to high quality broadband and the opportunities it creates for connected communities.

c. The project will provide broadband to more than 21,000 LMI households, representing approximately 49% of all households in the project and all remaining unserved LMI households in the Region.

All service made available through this project will be eligible for the federal EBB program and future affordability programs available to LMI households.
For the first 12 months after its service is available, APB will provide service drops to all locations within the project area, regardless of drop length, for the same fixed installation fee of $199.00.

To ensure that high quality broadband is available to all currently unserved locations within the project area, APB has committed to maintain the 50/50 mbps service tier at the fixed price of $59.99 for the life of the project. This rate will be indexed to inflation and will not increase in real terms.

APB has developed a Digital Inclusion Academy through Google for Education (see Attachment 18), based on best practices and recommendation from the National Digital Equity Center, the National Digital Inclusion Alliance, and NTIA's BroadbandUSA toolkits, which includes courses such as "Use Digital Tools for Everyday Tasks", "Avoid Online Scams", "Build Healthy Digital Habits", "Edit Your Resume", and others of a similar nature. All Points will offer free access to this Academy and all related courses to all locations within the proposed project area and all County residents.

20. **Additional Information**

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 14 – Two most recent Form 477 submitted to the FCC or equivalent

b. Attachment 15 - Point and Polygon shapefiles, in.zip file form, showing proposed passings and project area

c. Attachment 16 - For wireless applicants: shapefiles, in .zip file form, indicating RSSI projections in the application area

d. Attachment 17 – XXXXXXX

e. Attachment 18 – XXXXXXX

f. Attachment 19 – XXXXXXX

g. Attachment 20 – XXXXXXX

**Answer:**

N/A

**Attachments:**
Map(s) of project area, including proposed infrastructure
   Attachment1ProjectAreaMapNSVRC914202125127.pdf

Documentation of Federal Funding (CAF/ACAM/USDA/RDOF, etc…) in and/or near proposed project area.
   Attachment2DocumentationonFederalFundingAreaNSVRC9122021111723.pdf

RDOF Awarded Areas included in VATI Application (Use template provided)
   Attachment3RDOFAwardedAreasincludedinVATIApplicationNSVRC9142021122149.pdf

Documentation that proposed project area is unserved based on VATI criteria
   Attachment4DocumentationUnservedAreaVATICriteriaNSVRC912202143015.pdf

Passings Form (Use template provided)
   Attachment5PassingsFormNSVRC914202121639.pdf

Propagation Map if Wireless Project
   Attachment6PropagationMapWirelessProjectsonly9122021111643.pdf

Timeline/Project Management Plan
   Attachment7TimelineProjectManagementPlanNSVRC914202184740.pdf

MOU/MOA between applicant/co-applicant (can be in draft form)
   Attachment8MOUBetweenCountyandCoApplicantNSVRC912202195438.pdf

Funding Sources Table (Use template provided)
   Attachment9FundingSourcesTableNSVRC912202194922.pdf

Documentation of Match Funding
   Attachment10DocumentationofMatchFundingNSVRC913202132120.pdf

Letters of Support
   Attachment11LettersofSupportNSVRC914202143504.pdf
Application to DHCD Submitted through CAMS

Northern Shenandoah Valley Regional Commission
NSVRC 2022 Accelerated Fiber Deployment Initiative

Derivation of Cost/Project Budget (Use template provided)
Attachment12DerivationofCostsNSVRC912202195028.pdf

Documentation of Supporting Cost Estimates
Attachment13DocumentationofSupportingCostEstimatesNSVRC912202195259.pdf

Two most recent Form 477 submitted to the FCC or equivalent
Attachment14TwoMostRecentForm477sRedacted91220211111625.pdf

Point and Polygon shapefiles, in.zip file form, showing proposed passings and project area
Attachment15PointandPolygonShapefilesNSVRC914202185039.zip

For wireless applicants: shapefiles, in .zip file form, indicating RSSI projections in the application area
Attachment16RSSIProjectionShapefiles9122021111615.pdf

Optional
Attachment17MarketingPlanNSVRC913202150305.pdf

Optional
Attachment18AllPointsBroadbandDigitalInclusion9122021113003.pdf

Optional
Attachment20ProjectManagementTeamNSVRC914202111940.pdf
NSVRC
Regional Initiative

Legend
- Project Area
- County border

All route and area information is confidential and proprietary.

© All Points Broadband
Attachment 2 – Documentation of Federal Funding – Frederick County & Clarke County

Connect America Fund Broadband Map

Company Name: FRONTIER COMMUNICATIONS CORPORATION
Fund: CAF II
Speed: 10 Mbps/1 Mbps
Locations Deployed: 1
Deployment Year: 2016

Company Name: SHENANDOAH TELECOMMUNICATIONS COMPANY
Fund: CAF-BLS
Speed: 25 Mbps/5 Mbps
Locations Deployed: 1
Deployment Year: 2019

Company Name: CENTURYLINK, INC.
Fund: CAF II
Speed: 10 Mbps/1 Mbps
Locations Deployed: 1
Deployment Year: 2018
Attachment 2 – Documentation of Federal Funding – Fauquier County
Attachment 2 – Documentation of Federal Funding – Warren County

Connect America Fund Broadband Map

Company Name: **SHENANDOAH TELECOMMUNICATIONS COMPANY**
Fund: **CAF-BLS**
Speed: **25 Mbps/5 Mbps**
Locations Deployed: **1**
Deployment Year: **2020**

Company Name: **CENTURYLINK, INC.**
Fund: **CAF II**
Speed: **10 Mbps/1 Mbps**
Locations Deployed: **1**
Deployment Year: **2018**
Attachment 2 – Documentation of Federal Funding – Rappahannock County

Connect America Fund Broadband Map

Company Name: CENTURYLINK, INC.
Fund: CAF II
Speed: 10 Mbps/1 Mbps
Locations Deployed: 1
Deployment Year: 2018

Company Name: CENTURYLINK, INC.
Fund: CAF II
Speed: 10 Mbps/1 Mbps
Locations Deployed: 1
Deployment Year: 2019
Attachment 2 – Documentation of Federal Funding – Page County

Connect America Fund Broadband Map

Company Name: SHENANDOAH TELECOMMUNICATIONS COMPANY
Fund: CAF-BLS
Speed: 25 Mbps/5 Mbps
Locations Deployed: 1
Deployment Year: 2020

Company Name: CENTURYLINK, INC.
Fund: CAF II
Speed: 10 Mbps/1 Mbps
Locations Deployed: 1
Deployment Year: 2016
Attachment 2 – Documentation of Federal Funding – Rockingham County

Connect America Fund Broadband Map

Company Name: Shenandoah Telecommunications Company
Fund: CAF-BLS
Speed: 25 Mbps/5 Mbps
Locations Deployed: 1
Deployment Year: 2020

Company Name: CenturyLink, Inc.
Fund: CAF II
Speed: 10 Mbps/1 Mbps
Locations Deployed: 1
Deployment Year: 2019

Company Name: CenturyLink, Inc.
Fund: CAF II
Speed: 10 Mbps/1 Mbps
Locations Deployed: 1
Deployment Year: 2020

Legend

Leaflet | © MapBox, Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, © OpenStreetMap
NOTES:
1. These RDOF area maps supplement Attachment 2.
2. Co-applicant is not the RDOF awardee in these areas.
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# 2022 Virginia Telecommunication Initiative (VATI) Passing Form

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<th>Passings with Special Construction Costs budgeted in the Application ³</th>
<th>Number of Passings with Speeds at 10/1 or below in Project Area ⁴</th>
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<td>23</td>
</tr>
<tr>
<td>Non-residential</td>
<td>1,592</td>
<td>1,592</td>
<td></td>
<td>829</td>
</tr>
<tr>
<td>Total</td>
<td>42,693</td>
<td>42,693</td>
<td></td>
<td>28,379</td>
</tr>
</tbody>
</table>

**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.

¹ The total number of structures in the project area that can receive service. See definition of passing below for more detail.
² The 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.
³ The 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.
⁴ The number of structures in the project area that do not have access to internet at speeds of at least 10 mbps download and 1mbps 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.
Attachment 6 – Propagation Map (Wireless Projects only)

-This page intentionally left blank as this is not a Wireless Project-
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>RESPONSIBLE PARTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact and Advise Property Owners Along Mainline Fiber Routes</td>
<td>ALL</td>
</tr>
<tr>
<td>Complete and Submit Environmental &amp; Municipal Permitting</td>
<td>ALL</td>
</tr>
<tr>
<td>Final Design and Engineering for SCC Petition</td>
<td>DOMINION/APB</td>
</tr>
<tr>
<td>SCC Petition Preparation</td>
<td>DOMINION/APB</td>
</tr>
<tr>
<td>SCC Petition Pending</td>
<td>DOMINION/APB</td>
</tr>
<tr>
<td>APB Low Level Design</td>
<td>APB</td>
</tr>
<tr>
<td>Obtain Necessary Easements and Secure Rights</td>
<td>ALL</td>
</tr>
<tr>
<td>SCC Final Order on Petition</td>
<td>DOMINION</td>
</tr>
<tr>
<td>Marketing and Pre-Registration for Broadband Svc</td>
<td>APB</td>
</tr>
<tr>
<td>Mainline (Feeder) Fiber Construction</td>
<td>DOMINION</td>
</tr>
<tr>
<td>Middle Mile Fiber Construction</td>
<td>ELECTRIC UTILITIES</td>
</tr>
<tr>
<td>Headend and Central Office Outfit</td>
<td>APB</td>
</tr>
<tr>
<td>Last Mile Fiber Construction</td>
<td>APB</td>
</tr>
<tr>
<td>Targeted Marketing for Lit Addresses (Last Mile)</td>
<td>APB</td>
</tr>
<tr>
<td>Service Order Provisioning for New Service</td>
<td>APB</td>
</tr>
<tr>
<td>Customer Drops/Installation</td>
<td>APB</td>
</tr>
</tbody>
</table>

Previously Completed Prior to Project Kickoff:
1. Field Verification of Unserved Locations
2. Preparation of Utility Leverage Unserved Determination
3. High Level Designs by APB
4. Secured Fiber Manufacturing Capacity
PHASE ONE MEMORANDUM OF UNDERSTANDING

This Phase One Memorandum of Understanding (this “Memorandum”) is made effective as of June 30__, 2021 (the “Effective Date”), by and between Virginia Electric and Power Company dba Dominion Energy Virginia, a Virginia public service corporation (“Dominion”), All Points Broadband Partners, LLC, a Virginia limited liability company (“All Points”), Shenandoah Valley Electric Cooperative (“SVEC”), a not-for-profit electric distribution cooperative, and each of the participating localities who subsequently join this Memorandum in the manner set forth herein (collectively the “Participating Localities” and individually a “Participating Locality”). Dominion, All Points and SVEC are, collectively, the “Organizing Parties”, and Dominion, All Points, SVEC and each Participating Locality are each a “Party” and collectively the “Parties”.

RECITALS

A. Pursuant to the Virginia Code § 56-585.1:9, effective July 1, 2019 (the “Broadband Statute”) the Commonwealth of Virginia is seeking to expand broadband service into unserved areas of the Commonwealth. The Broadband Statute further permits electric utilities to pursue deployments with broadband providers and localities to facilitate such expansion.

B. Dominion and All Points have explored the feasibility of Dominion deploying middle-mile service to facilitate All Points in extending last-mile service to unserved populations throughout the communities within and adjacent to SVEC’s service territory and have identified several localities as viable candidates based on the requirements of the Broadband Statute.

C. SVEC desires to collaborate with Dominion and All Points in an effort to leverage the proposed middle-mile and last-mile deployments by Dominion and All Points, respectively, to improve the security, reliability and efficiency of SVEC’s electric system and to extend broadband availability to as many of SVEC’s unserved members as possible.

D. All Points desires to collaborate with SVEC to leverage SVEC’s middle-mile fiber backbone project to facilitate All Points in extending last-mile broadband service to unserved populations throughout the communities within and adjacent to SVEC’s service territory and has identified several localities as viable candidates based on the requirements of the Broadband Statute.

E. The Organizing Parties believe their partnership as set forth herein (the “Initiative”) can dramatically expand broadband access to presently unserved areas throughout Virginia, and are inviting localities that could benefit from the Initiative to join this Memorandum and become Participating Localities.

F. The Parties will pursue a relationship whereby: (i) pursuant to the Broadband Statute, Dominion would construct a fiber route that maximizes the number of unserved areas to be served by All Points within each Participating Locality, (ii) Dominion will leverage the additional fiber installed along the route to connect
devices that may not have had fiber connectivity under the original plan pursuant to the Grid Transformation and Security Act, (iii) SVEC will leverage the Initiative to improve the security, reliability and efficiency of SVEC’s electric system and to facilitate the extension of broadband availability to as many of SVEC’s unserved members as possible, (iv) All Points will collaborate with and invest in each Participating Locality and use the additional Dominion and SVEC fiber capacity and network elements to serve broadband end users in unserved locations in each Participating Locality, and (v) each Participating Locality will share relevant information with the Organizing Parties and collaborate with the Organizing Parties to advance the Initiative. The efforts of the Parties herein in each such Participating Locality shall be referred to as a “Project”, and collectively the “Projects”).

G. It is the intention of the Parties that the Initiative will result in the deployment of a fiber-to-the-premises last-mile broadband network to offer service to all locations within each Participating Locality that are unserved as of the date hereof. The Parties acknowledge and agree that the specific details and characteristics of each Project will be analyzed and refined as the Initiative proceeds.

H. The Organizing Parties have divided the Initiative into three phases.

NOW, THEREFORE, the Parties hereby agree as follows:

1. PROCEDURE TO BECOME A PARTICIPATING LOCALITY
   Any locality that is invited to join the Initiative by the Organizing Parties shall have until July 23, 2021 to return a counterpart signature page to this Memorandum to the Organizing Parties; provided the Organizing Parties may extend this deadline for good cause if such extension will not materially delay the Initiative. Upon acceptance of the counterpart signature page by the Organizing Parties, such locality shall become a Participating Locality.

2. INFORMATION SHARING AND COORDINATION
   a) Each Participating Locality and each Organizing Party agrees to share with the Organizing Parties such information as it has in its possession related to broadband deployment and availability that may be useful to the Organizing Parties in conducting their analysis or otherwise facilitate the Initiative.
   b) All Points will serve as the central conduit for all information sharing activities and will be responsible for overall coordination of the Initiative. Upon request from time to time, All Points will provide updates to Dominion and SVEC as to the status of the Initiative.
   c) The Parties will coordinate any communication releases to the public, and all announcements are subject to the prior written consent of Dominion and SVEC.
   d) Notwithstanding anything to the contrary hereunder, in no event does this Memorandum require any Party to disclose confidential or proprietary information not otherwise authorized for release to any Party or Parties.

3. PHASE ONE TIMEFRAME AND ACTIVITIES
   a) The Parties anticipate that Phase I of the Initiative will continue until approximately August 15, 2021.
b) During Phase I:
   i. The Organizing Parties will conduct community and stakeholder engagement activities in each Participating Locality.
   ii. The Organizing Parties will collaborate to develop preliminary plans and design criteria that: (i) are consistent with the Broadband Statute, (ii) support SVEC’s desire to leverage the Initiative to improve the security, reliability and efficiency of SVEC’s electric system, and (iii) facilitate the extension of broadband availability to as many presently unserved locations as possible.
   iii. All Points will perform a last-mile feasibility study (“Initial Feasibility Study”) for the Project within each Participating Locality.
   iv. All Points will prepare a preliminary financial analysis for the Project within each Participating Locality.

c) At the Conclusion of Phase I:
   i. All Points, in coordination with the other Organizing Parties, will present the results of the Initial Feasibility Study and financial analysis to each Participating Locality.
   ii. All Points will identify the cost of Proceeding to Phase II for each Participating Locality and identify grants and other sources of potential funding to reduce or eliminate each Participating Locality’s out-of-pocket costs to proceed.
   iii. Each Participating Locality will decide whether or not to continue to Phase II. Localities that elect to withdraw from the Initiative at the conclusion of Phase I will have no further obligations under this Memorandum.

4. PHASE TWO TIMEFRAME AND ACTIVITIES

a) The Parties anticipate that Phase II of the Initiative will commence upon the conclusion of Phase I and continue until approximately December 31, 2021.

b) During Phase II:
   i. Dominion will prepare a petition (the “Petition”) under the Broadband Statute to the Virginia State Corporation Commission (the “Commission”) seeking approval of the Projects that are then included in the Initiative. SVEC will take whatever action it deems necessary and prudent to obtain approval of the Projects within its service territory that are then included in the Initiative, including, but limited to, any action that may be permitted to seek cost recovery. All Points will serve as the nongovernmental internet service provider pursuant to the Broadband Statute and for all Projects included in the Initiative. All Points and each of the other Parties will provide such information and assistance to Dominion and SVEC as each may reasonably request to advance the Initiative and will commit to continuing to be involved in the Petition and any other regulatory proceedings that may be required until and after approval of the Petition and/or other regulatory proceedings is received. The Parties agree that implementation of each Project shall be contingent upon Commission approval, or such other regulatory approval as may be necessary, of such Project on terms and conditions approved by Dominion and SVEC, depending on the location of the Project, that are not materially adverse to Dominion or SVEC.
   ii. All Points will complete preliminary last-mile designs for each Project based upon the middle-mile infrastructure of Dominion and SVEC. Such last-mile designs will be tailored to maximize each Project’s eligibility for all available state and federal grant, loan, loan guarantee, and other support mechanisms (collectively, “Public
iii. All Points will prepare detailed financial plans for each Project. Each financial plan will address initial capital investment needs, ongoing operational expenses and provide more than one indicative approach for funding each Project through a combination of private capital, Public Support Mechanisms and contributions from Participating Localities.

iv. The Participating Localities, and each Organizing Party, as applicable, will agree to support an application for one or more grant programs ("Phase II Grants") to partially offset the cost of the activities to be conducted during Phase II. All Points will coordinate and oversee the development and submission of applications for Phase II Grants.

v. All Points will coordinate and oversee the development and submission of applications for all available Public Support Mechanisms to fund each Project within the Initiative.

c) At the Conclusion of Phase II:

i. All Points will present the anticipated outcome of its last-mile designs to each Participating Locality.

ii. Each Participating Locality will decide whether or not to continue to Phase III. Localities that elect to proceed to Phase III will enter into negotiations with All Points for one or more binding mutual definitive agreements ("Definitive Agreements"), setting forth their respective commitments and obligations and such particulars as the parties thereto may deem appropriate. Localities that elect to withdraw from the Initiative at the conclusion of Phase II will have no further obligations under this Memorandum.

5. EXPENSES

The Parties understand that various costs will be incurred in relation to activities contemplated herein. The Parties understand that regardless of which party incurs such costs, none of the Parties herein shall be responsible for reimbursement of expenses to any of the others, unless such reimbursement is to be funded by a Phase I Grant or Phase II Grant, or otherwise agreed to in the Definitive Agreements.

6. GOOD FAITH COMMITMENT TO INITIATIVE

a) Each Participating Locality agrees that, for so long as it is a Party to this Memorandum, it shall not participate in any activity or course of conduct that is inconsistent with or competitive to the Initiative, and that it will devote its broadband-related attention and resources to the Initiative.

b) The Parties understand and agree that, except as provided in the next sentence, this Memorandum (i) constitutes only a statement of intentions, (ii) does not reflect all matters upon which Definitive Agreements must be reached in order for the transactions contemplated hereby to be consummated, (iii) binding obligations with respect to a Project will only result from the execution of one or more Definitive Agreements and subject to the terms and conditions stated therein, and (iv) does not obligate the Parties to enter into any Definitive Agreement relating to any Project. This Memorandum is not
intended to be binding, other than Paragraphs 4(b)(i), 5 and 6.

7. TERMINATION

Any Party may terminate its participation in this Memorandum at any time, with or without cause, upon written notice to the other Parties. In addition, this Memorandum shall terminate and be of no further force and effect if the Commission rejects the petition.

8. LIMITATION OF LIABILITY

No Party shall be liable to the others in contract, tort, or otherwise, for any claims, liabilities or losses arising out of this Memorandum or alleged to result from the failure of the other Party to enter into any Definitive Agreements. The Parties hereby waive, in advance, any claims (whether such claims are based on breach of contract, tort, equity or any other theory) for the failure for any reason to enter into the Definitive Agreements. In no event shall any Party be liable to the other for any incidental, indirect, special, punitive or consequential damages (including without limitation damages for lost profits).

9. GENERAL


This Memorandum shall be governed in all respects by the laws of the Commonwealth of Virginia.


No modification, amendment or waiver of any of the provisions of this Memorandum will be binding without the written consent of the Parties hereto.

9.3. Binding Effect; Assignment.

This Memorandum will inure to the benefit of and be binding upon each of the Parties hereto and their respective successors and permitted assigns to the extent provided in Section 6, but in no respect shall give rise to any third party beneficiary rights or claims. No Party may assign any of its rights, interests, or obligations hereunder without the prior written consent of the other Parties, except that any of the Organizing Parties may assign this Memorandum to an affiliated entity upon written notice to the other Parties.

9.4. Counterparts.

This Memorandum may be executed in counterparts, all of which for all purposes shall be deemed to be an original and all of which shall, taken together, constitute one and the same instrument.

9.5. Relationship of Parties.

Nothing in this Memorandum shall be deemed to constitute, create, give effect to,
or otherwise recognize a joint venture, partnership, or formal business entity of any kind.


All notices, requests and other communications hereunder shall be in writing and delivered by hand, by nationally-recognized delivery service that guarantees overnight delivery, or by first-class registered or certified mail, return receipt requested, postage prepaid, addressed as follows:

If to Dominion:

Dominion Energy Virginia  
600 Canal Street  
Richmond, Virginia 23219  
Attention: Director, New Technologies and Energy Conservation  

with a copy to:

Dominion Energy Services, Inc.  
120 Tredegar Street  
Richmond, Virginia 23219  
Attention: Deputy General Counsel – State Regulatory  
Fax: (804) 819-2677  

If to All Points:

All Points Broadband Partners, LLC  
Attn: Legal Notices  
908 Trailview Boulevard, SE  
Suite 170  
Leesburg, Virginia 20175  

If to SVEC:

Shenandoah Valley Electric Cooperative  
Attn: J. Michael Aulgur  
180 Oakwood Drive  
Harrisonburg, Virginia 22801  

If to a Participating Locality, to the address set forth on such Participating Locality’s counterpart signature page to this Memorandum.

Any Party may change its address at any time upon notice to the other Parties.
IN WITNESS WHEREOF, the Parties have executed this Memorandum as of the Effective Date.

VIRGINIA ELECTRIC AND POWER COMPANY
DBA DOMINION ENERGY VIRGINIA

[Signature]
Name: Augustus Johnson IV
Title: Director - Electric Distribution Grid Solutions

ALL POINTS BROADBAND

[Signature]
Name: James G. Carr
Title: CEO

SHENANDOAH VALLEY ELECTRIC COOPERATIVE

[Signature]
Name: Michael Hulga
Title: VP & Chief Financial Officer
JOINDER AGREEMENT
TO
PHASE ONE MEMORANDUM OF UNDERSTANDING

Reference is made to that certain Phase One Memorandum of Understanding dated as of June 30, 2021 (the “MOU”), by and between Virginia Electric and Power Company dba Dominion Energy Virginia, a Virginia public service corporation (“Dominion”), All Points Broadband Partners, LLC, a Virginia limited liability company (“All Points”), Shenandoah Valley Electric Cooperative (“SVEC”), a not-for-profit electric distribution cooperative, and each of the participating localities who subsequently join the MOU in accordance with its terms. Capitalized terms used in this Joinder Agreement have the meanings set forth in the MOU.

Whereas, Rappahannock Electric Cooperative, a Virginia electric cooperative corporation (“REC”), provides electric service in portions of several of the Counties within or adjacent to the areas targeted for the expansion of broadband service in the MOU;

Whereas, REC desires to collaborate with Dominion, All Points and SVEC to expand broadband access within its electric service territory in the manner set forth in the MOU; and

Whereas, REC desires to execute this Joinder Agreement.

Now therefore, Dominion, All Points and SVEC agree as follows.

1. By its execution of this Joinder Agreement, REC adopts and joins the MOU as an Organizing Party.

2. The MOU is hereby amended to reflect that REC is an Organizing Party pursuant to the MOU. All references in the MOU to SVEC shall be deemed to also be references to REC.

3. A copy of this Joinder Agreement shall be added to the MOU as an amendment thereto and provided to any County invited to become a Participating County.

[SIGNATURE PAGE FOLLOWS]
In witness whereof, the Parties have executed this Joinder Agreement as of the date last set forth below.

VIRGINIA ELECTRIC AND POWER COMPANY
DBA DOMINION ENERGY VIRGINIA

Name: Augustus Johnson IV
Title: Director - Electric Distribution Grid Solutions
Date: 7/26/2021

ALL POINTS BROADBAND PARTNERS, LLC

Name: James Carr
Title: CEO
Date: 7/25/2021

SHENANDOAH VALLEY ELECTRIC COOPERATIVE

Name: Greg Rogers
Title: President & CEO
Date: 7/25/2021

RAPPAHANNOCK ELECTRIC COOPERATIVE

Name: Peter Muhoro
Title: Vice President, Strategy and Technology
Date: 7/25/2021
IN WITNESS WHEREOF, the County named below has executed this Phase One Memorandum of Understanding as of the Effective Date.

County of Augusta, Virginia

[Signature]

Name: Timothy K. Fitzgerald
Title: County Administrator
Date: 7-29-21

County’s Address for Notice:

P.O. Box 590

VERSova, VA 24482
IN WITNESS WHEREOF, the County named below has executed this Phase One Memorandum of Understanding as of the Effective Date.

**County of Clarke, Virginia**

(Signature)

Name: Chris Boles

Title: County Administrator

Date: 7-21-21

County’s Address for Notice:

County Administration

101 Chalmer Court, Suite B

Berryville VA 22611
IN WITNESS WHEREOF, the County named below has executed this Phase One Memorandum of Understanding as of the Effective Date.

County of Frederick, Virginia

[Signature]

Name: Mary T. Price
Title: Interim County Administrator
Date: 7/19/2021

County’s Address for Notice:

County of Frederick
107 N. Kent St.
Winchester, VA 22601

APPROVED AS TO FORM

COUNTY ATTORNEY
IN WITNESS WHEREOF, the County named below has executed this Phase One Memorandum of Understanding as of the Effective Date.

**County of Page, Virginia**

[Signature]

**Name:** Amity N. Moler  
**Title:** County Administrator  
**Date:** 7/20/2021

**County’s Address for Notice:**

County of Page  
103 South Court St, Suite F  
Luray, VA 22835
IN WITNESS WHEREOF, the County Broadband Authority named below has executed this Phase One Memorandum of Understanding as of the Effective Date.

**Rappahannock County Broadband Authority**

\[Signature\]

Name: Debbie P. Donehey
Title: Chair
Date: 7-30-21

County’s Address for Notice:

3 Library Road
P.O. Box 519
Washington, VA 22747
IN WITNESS WHEREOF, the County named below has executed this Phase One Memorandum of Understanding as of the Effective Date.

County of Rockingham, Virginia

(Signature)

Name: Stephen G. King

Title: County Administrator

Date: July 28, 2021

County’s Address for Notice:

Rockingham County
20 East Gay Street
Harrisonburg, VA 22802
IN WITNESS WHEREOF, the County named below has executed this Phase One Memorandum of Understanding as of the Effective Date.

County of Warren, Virginia

Signature: Edwin C. Daley

Name: Edwin C. Daley

Title: County Administrator

Date: July 21, 2021

County’s Address for Notice:

Warren County Administrator's Office
220 N Commerce Avenue
Suite 100
Front Royal, Virginia 22630
MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (this “Memorandum”) is made effective as of August 9, 2021 (the “Effective Date”), by and between Virginia Electric and Power Company dba Dominion Energy Virginia, a Virginia public service corporation (“Dominion”), All Points Broadband Partners, LLC, a Virginia limited liability company (“All Points”), and Fauquier County Broadband Authority, Virginia (the “Authority”). Dominion and All Points are the “Organizing Parties”. Dominion, All Points and the Authority are each a “Party” and collectively the “Parties”.

RECITALS

A. Pursuant to the Virginia Code § 56-585.1:9, as amended (the “Broadband Statute”), the Commonwealth of Virginia is seeking to expand broadband service into unserved areas of the Commonwealth. The Broadband Statute further permits electric utilities to pursue programs with broadband providers and local counties to facilitate such expansion.

B. Dominion and All Points have explored the feasibility of Dominion deploying middle mile infrastructure in Fauquier County (the “County”), in the manner set forth in the Broadband Statute, to facilitate All Points’ extension of last-mile service to unserved areas and agreed to proceed with the development of a proposal to present to the State Corporation Commission (“Commission”) for approval.

C. The Parties are pursuing a relationship whereby: (i) pursuant to the Broadband Statute, Dominion would construct a fiber route that maximizes the number of unserved areas to be served by All Points within the County, (ii) Dominion will leverage the additional fiber installed along the route to connect devices that may not have had fiber connectivity under the original plan pursuant to the Grid Transformation and Security Act, (iii) All Points will collaborate with and invest in the County and use the additional Dominion fiber capacity to serve broadband end users in unserved locations in the County, (iv) All Points and the Authority will collaborate to recruit and engage other partners, as appropriate, to advance the Project, and (v) the Authority will share relevant information with the Organizing Parties and collaborate with the Organizing Parties to advance the Project. The efforts of the Parties herein in the County are referred to as the “Project”.

D. It is the intention of the Parties that the Project will result in the deployment of a fiber-to-the-premises last-mile broadband network to offer service to all locations within the County that are unserved by broadband as of the date hereof. The Parties acknowledge and agree that the specific details and characteristics of the Project will be analyzed and refined as it proceeds.

NOW, THEREFORE, the Parties hereby agree as follows:

1. INFORMATION SHARING AND COORDINATION

a) The Authority and each Organizing Party agrees to share with the Organizing Parties such information as it has in its possession related to broadband deployment and availability that may be useful to the Organizing Parties in conducting their analysis or otherwise facilitate the Project.

b) All Points will serve as the central conduit for all information sharing activities and will be responsible for overall coordination of the Project.
e) The Parties will coordinate any communication releases to the public, and all announcements are subject to the prior written consent of Dominion.

2. PHASE ONE TIMEFRAME AND ACTIVITIES

a) The Parties anticipate that Phase I of the Project will continue until approximately September 14, 2021.

b) During Phase I:

i. The Organizing Parties will conduct community and stakeholder engagement activities in the County.

ii. The Organizing Parties will collaborate to develop preliminary plans and network design criteria that: (i) are consistent with the Broadband Statute and required for development of the Petition, and (ii) facilitate the extension of broadband availability to as many presently unserved locations as possible.

iii. All Points, in coordination with the other Organizing Parties, will present the proposed Project to the Authority and develop a Virginia Telecommunications Initiative Grant application related to the Project for the Authority’s and County’s approval, as required, and for submission prior to the VATI Grant application due date in September 2021.

iv. All Points will identify the costs, if any, of Proceeding to Phase II for the Authority and County, and identify grants and other sources of potential funding to reduce or eliminate the County’s out-of-pocket costs to proceed.

3. PHASE TWO TIMEFRAME AND ACTIVITIES

a) The Parties anticipate that Phase II of the Project will commence upon the conclusion of Phase I and continue until approximately July 15, 2022.

b) During Phase II:

i. Dominion and All Points will prepare a petition (the “Petition”) under the Broadband Statute to the Commission seeking approval of Dominion’s participation in the Project. Dominion and All Points anticipate that the Petition will be submitted in the first quarter of 2022. All Points will serve as the nongovernmental internet service provider pursuant to the Broadband Statute. All Points and each of the other Parties will provide such information and assistance to Dominion as it may reasonably request to advance the Project and will commit to continuing to be involved in the Petition until and after approval of the Petition is received. The Parties agree that implementation of the Project shall be contingent upon Commission approval of such Project on terms and conditions approved by Dominion that are not materially adverse to Dominion.

ii. All Points will identify all available state and federal grant, loan, loan guarantee, and other support mechanisms (collectively, “Public Support Mechanisms”) that may be available to support the Project, and All Points will coordinate and oversee the development and submission of applications for relevant Public Support Mechanisms.

iii. The Authority, and each Organizing Party, as applicable, will agree to support application(s) for any Public Support Mechanisms identified by All Points.

iv. If the Petition related to the Project is approved by the Commission on terms and conditions approved by Dominion that are not materially adverse to Dominion, the Parties intend to negotiate and execute one or more binding mutual definitive agreements (“Definitive Agreements”) setting forth their respective commitments and obligations and such other particulars as the parties thereto may deem
4. EXPENSES

The Parties understand that various costs will be incurred in relation to activities contemplated herein. Except to the extent set forth in any other agreements between any of the Parties, including any Definitive Agreements, the Parties understand that none of the Parties herein shall be responsible for reimbursement of expenses to any of the others.

5. GOOD FAITH COMMITMENT TO EACH PROJECT

a) The Authority agrees that, for so long as it is a Party to this Memorandum, it shall not participate in any activity or course of conduct that is inconsistent with or competitive to the Project, excluding any agreements or efforts that predate this agreement whereby the Authority or County have existing agreements or funding commitments in place including Data Stream Mobile Technologies, Inc. and Blaze Broadband, LLC, and that it will devote its broadband-related attention and resources to its Project.

b) The Parties understand and agree that, except as provided in the next sentence, this Memorandum (i) constitutes only a statement of intentions, (ii) does not reflect all matters upon which Definitive Agreements must be reached in order for the transactions contemplated hereby to be consummated, (iii) binding obligations with respect to a Project will only result from the execution of one or more Definitive Agreements and subject to the terms and conditions stated therein, and (iv) does not obligate the Parties to enter into any Definitive Agreement relating to any Project. This Memorandum is not intended to be binding, other than Paragraphs 3(b)(i), 4, and 5.

6. TERMINATION

Any Party may terminate its participation in this Memorandum at any time, with or without cause, upon written notice to the other Parties. In addition, this Memorandum shall terminate and be of no further force and effect if the Commission rejects the Petition.

7. LIMITATION OF LIABILITY

To the extent permissible under Virginia law, no Party shall be liable to the others in contract, tort, or otherwise, for any claims, liabilities or losses arising out of this Memorandum or alleged to result from the failure of the other Party to enter into any Definitive Agreements. The Parties hereby waive, in advance, any claims (whether such claims are based on breach of contract, tort, equity or any other theory) for the failure for any reason to enter into the Definitive Agreements. In no event shall any Party be liable to the other for any incidental, indirect, special, punitive or consequential damages (including without limitation damages for lost profits).

8. GENERAL

This Memorandum shall be governed in all respects by the laws of the
Commonwealth of Virginia.

8.2. Amendments.

No modification, amendment or waiver of any of the provisions of this Memorandum will be binding without the written consent of the Parties hereto.

8.3. Binding Effect; Assignment.

This Memorandum will inure to the benefit of and be binding upon each of the Parties hereto and their respective successors and permitted assigns to the extent provided herein, but in no respect shall give rise to any third party beneficiary rights or claims. No Party may assign any of its rights, interests, or obligations hereunder without the prior written consent of the other Parties, except that any of the Organizing Parties may assign this Memorandum to an affiliated entity upon written notice to the other Parties.

8.4. Counterparts.

This Memorandum may be executed in counterparts, all of which for all purposes shall be deemed to be an original and all of which shall, taken together, constitute one and the same instrument.

8.5. Relationship of Parties.

Nothing in this Memorandum shall be deemed to constitute, create, give effect to, or otherwise recognize a joint venture, partnership, or formal business entity of any kind.


All notices, requests and other communications hereunder shall be in writing and delivered by hand, by nationally-recognized delivery service that guarantees overnight delivery, or by first-class registered or certified mail, return receipt requested, postage prepaid, addressed as follows:

If to Dominion:

Dominion Energy Virginia
600 Canal Street
Richmond, Virginia 23219
Attention: Director, New Technologies and Energy Conservation

with a copy to:

Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, Virginia 23219
Attention: Deputy General Counsel – State Regulatory
Fax: (804) 819-2677
If to All Points:

All Points Broadband Partners, LLC
Attn: Legal Notices
1021 E. Cary Street
Suite 1150
Richmond, Virginia 23219

If to the County, to the address set forth on the County’s counterpart signature page to this Memorandum.

Any Party may change its address at any time upon notice to the other Parties.
IN WITNESS WHEREOF, the Parties have executed this Memorandum as of the Effective Date.

VIRGINIA ELECTRIC AND POWER COMPANY
DBA DOMINION ENERGY VIRGINIA

Signed by:

David F. Walker
Name: David F. Walker
Title: Director, Rural Broadband

ALL POINTS BROADBAND PARTNERS, LLC

Signed by:

James G. Carr
Name: James G. Carr
Title: Chief Executive Officer

FAUQUIER COUNTY BROADBAND AUTHORITY, VIRGINIA

Signed by:

Erin M. Kozanecki
Name: Erin M. Kozanecki
Title: Authorized Signatory

County Address for Notice:
Fauquier County Broadband Authority
Attn: Erin Kozanecki
10 Hotel Street,
Warrenton, VA 20186

[SIGNATURE PAGE TO MEMORANDUM OF UNDERSTANDING]
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September 7, 2021

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

RE: Support for 2022 VATI Application and Confirmation of Local Match

Dr. Holmes:

The County of Augusta (the “County”) supports the application to be submitted by the Northern Shenandoah Valley Regional Commission and All Points Broadband, as applicant and co-applicant, respectively, to the 2022 Virginia Telecommunication Initiative (the “VATI Application”).

The County joined this regional initiative through execution of a Memorandum of Understanding by and between Dominion Energy Virginia, All Points Broadband, Shenandoah Valley Electric Cooperative, Rappahannock Electric Cooperative, the County and other Participating Localities. The County has made strides over the years to provide broadband to households via provider partnerships and looks forward to the possibility of universal coverage via this opportunity.

At its meeting on August 25, 2021, the County’s Board of Supervisors voted to support and participate in the VATI Application, and authorized a local match commitment of $8.4 million for the VATI Application, towards which the School Board will contribute $2.5 million.

We appreciate your consideration of this important regional project.

Sincerely,

Timothy K. Fitzgerald
County Administrator
Tamarah Holmes, Ph.D.
Director, Office of Broadband
Virginia Department of Housing and Community Development
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Support for 2022 VATI Application and Confirmation of Local Match

Dr. Holmes:

This letter will confirm the strong support of Clarke County (the “County”) for the application to be submitted by the Northern Shenandoah Valley Regional Commission and All Points Broadband, as applicant and co-applicant, respectively, to the 2022 Virginia Telecommunication Initiative (the “VATI Application”).

The County joined this regional initiative through execution of a Memorandum of Understanding by and between Dominion Energy Virginia, All Points Broadband, Shenandoah Valley Electric Cooperative, Rappahannock Electric Cooperative, the County and other Participating Localities.

At its meeting on August 31, 2021, the County’s Board of Supervisors voted to support and participate in the VATI Application, and authorized a local match commitment of $5,400,000 to be included with the VATI Application.

We appreciate your consideration of this important regional project.

Sincerely,

Chris Boies

Chris Boies
County Administrator
September 13, 2021

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

RE: Support for 2022 VATIC Application and Confirmation of Local Match

Dr. Holmes:

This letter will confirm the strong support of Fauquier County (the “County”) for the application to be submitted by the Northern Shenandoah Valley Regional Commission and All Points Broadband, as applicant and co-applicant, respectively, to the 2022 Virginia Telecommunication Initiative (the “VATIC Application”).

At its meeting on September 9, 2021, the County’s Board of Supervisors, adopted a resolution to approve submission of the VATIC Application, and authorized a local match commitment of $10,500,000 to be included with the VATIC Application. In addition, the County’s Broadband Authority adopted a resolution of support for the VATIC Application at their meeting on September 9, 2021.

We appreciate your consideration of this important regional project.

Sincerely,

Erin M. Kozanecki, MPA
Deputy County Administrator
RESOLUTION

A RESOLUTION TO PARTNER WITH ALL POINTS BROADBAND FOR A FY 2022 VATI GRANT APPLICATION TO THE VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT TO PROVIDE IMPROVED BROADBAND ACCESS TO FAUQUIER COUNTY

WHEREAS, the Fauquier County Broadband Authority is created to support the expansion and provision of broadband services within Fauquier County; and

WHEREAS, Fauquier County Government has a project and project budget with the Capital Improvement Program for broadband expansion and acts as fiscal agent on behalf of the Fauquier County Broadband Authority; and

WHEREAS, All Points Broadband presented a conceptual project proposal to the Fauquier County Broadband Authority at their June 2021 meeting to provide wired services to unserved homes in Fauquier County as part of a program authorized by the Commonwealth of Virginia that allows wired access in partnership with electrical utility companies including Dominion Energy power, Rappahannock Electrical Cooperative, and Northern Virginia Electrical Cooperative; and

WHEREAS, the proposed project scope would potentially bring service to over 10,500 unserved wired passings in Fauquier County which allow for citizens and businesses to have broadband access that promotes economic development, virtual learning, telehealth, and every day internet access; and

WHEREAS, the Virginia FY 2022 budget included increased funding for the VATI grant program through State general fund dollars as well as a significant allocation of federal American Rescue Plan Act dollars; and

WHEREAS, Fauquier County has received federal American Rescue Plan Act dollars, private support, and holds existing cash funding through the Broadband capital project; now therefore, be it

RESOLVED, that the governing body of Fauquier County Board of Supervisors, this 9th day of September 2021, hereby authorizes County staff, to submit a FY 2022 VATI grant application with All Points Broadband to the Virginia Department of Housing and Community Development.

A Copy Teste

Paul S. McCulla, County Administrator
Clerk to the Board of Supervisors
RESOLUTION

A RESOLUTION TO APPROVE A LETTER OF SUPPORT FOR FAUQUIER COUNTY FY 2022 VATI GRANT APPLICATION

WHEREAS, the Fauquier County Broadband Authority is created to support the expansion and provision of broadband services within Fauquier County; and

WHEREAS, Fauquier County Government has a project and project budget with the Capital Improvement Program for broadband expansion and acts as fiscal agent on behalf of the Fauquier County Broadband Authority; and

WHEREAS, All Points Broadband presented a conceptual project proposal to the Fauquier County Broadband Authority at their June 2021 meeting to provide wired services to unserved homes in Fauquier County as part of a program authorized by the Commonwealth of Virginia that allows wired access in partnership with electrical utility companies; and

WHEREAS, the proposed project scope would potentially bring service to over 10,500 unserved wired passings in Fauquier County which allow for citizens and businesses to have broadband access that promotes economic development, virtual learning, telehealth, and everyday internet access; now therefore, be it

RESOLVED, that the governing body of Fauquier County Broadband Authority, this 9th day of September 2021, hereby authorizes the Deputy County Administrator to draft and submit a letter of support for this grant application.

A Copy Teste

Erin M. Kozarecki, Deputy County Administrator
Clerk to the Fauquier County Broadband Authority
Tamarah Holmes, Ph.D.
Director, Office of Broadband
Virginia Department of Housing and Community Development
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Support for 2022 VATI Application and Confirmation of Local Match

Dr. Holmes:

This letter will confirm the strong support of Page County (the “County”) for the application to be submitted by the Northern Shenandoah Valley Regional Commission and All Points Broadband, as applicant and co-applicant, respectively, to the 2022 Virginia Telecommunication Initiative (the “VATI Application”).

The County joined this regional initiative through execution of a Memorandum of Understanding by and between Dominion Energy Virginia, All Points Broadband, Shenandoah Valley Electric Cooperative, Rappahannock Electric Cooperative, the County and other Participating Localities.

At its meeting on September 9, 2021, the County’s Board of Supervisors voted to support and participate in the VATI Application, and authorized a local match commitment of $7.8m to be included with the VATI Application.

We appreciate your consideration of this important regional project.

Sincerely,

Amity N. Moler
County Administrator
September 8, 2021

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

RE: Support for 2022 VATI Application and Confirmation of Local Match

Dr. Holmes:

This letter will confirm the strong support of the Rappahannock County Broadband Authority (the “RCBBA”) for the application to be submitted by the Northern Shenandoah Valley Regional Commission and All Points Broadband, as applicant and co-applicant, respectively, to the 2022 Virginia Telecommunication Initiative (the “VATI Application”).

The RCBBA joined this regional initiative through execution of a Memorandum of Understanding by and between Dominion Energy Virginia, All Points Broadband, Shenandoah Valley Electric Cooperative, Rappahannock Electric Cooperative, the County, and other Participating Localities.

At a joint meeting held on September 7, 2021, the RCBBA and the Rappahannock County Board of Supervisors voted to support and participate in the VATI Application, and authorized a local match commitment of $5.9 million to be included with the VATI Application.

We appreciate your consideration of this important regional project.

Sincerely,

Debbie P. Donehey
Chair, RCBBA and Board of Supervisors
JOINT RESOLUTION BY THE
BOARD OF SUPERVISORS AND BROADBAND AUTHORITY
OF RAPPAHANNOCK COUNTY, VIRGINIA,
AUTHORIZING A REGIONAL VATI APPLICATION
REQUIRING A LOCAL CONTRIBUTION

WHEREAS the Rappahannock County Broadband Authority ("RCBBA") entered into a regional Phase One Memorandum of Understanding ("MOU") with All Points Broadband Partners, LLC ("All Points") together with other partner local governments ("Partners"); and,

WHEREAS, as contemplated in the MOU, All Points provided the RCBBA and the Board of Supervisors with an "Initial Feasibility Study" during their joint public meeting held on September 1, 2021; and,

WHEREAS the Initial Feasibility Study identified a fiber to the home project ("Project") that could be constructed in such a way as to serve approximately 2,000 locations in Rappahannock County that are not currently served by wired, gigabit-capable broadband; and,

WHEREAS to align the Virginia Telecommunications Initiative ("VATI") grant application funding need for each of the Partners, All Points has recommended that each partner provide a local share equal to approximately 30% of the estimated total cost of the project specifically designed for their locality; and,

WHEREAS the Initial Feasibility Study indicated that the Rappahannock County Project, as detailed in the All Points presentation to the joint bodies on September 1, 2021, would consist of approximately 270 miles of fiber optic infrastructure at an overall cost of approximately $19.4 million; and,

WHEREAS 30% the identified $19.4 million Rappahannock County Project represents approximately a $5.9 million local share.

NOW THEREFORE BE IT RESOLVED that the Rappahannock County Board of Supervisors and Rappahannock County Broadband Authority jointly find that it is in the best interests of the citizens of Rappahannock County that a VATI application be submitted with All Points prior to the September 14, 2021 grant deadline; and,

BE IT FURTHER RESOLVED that such a VATI grant application is hereby authorized and is directed to be submitted as a regional program together with other partners with a local Rappahannock County funding commitment equaling $5.9 million; and,

BE IT FURTHER RESOLVED that the Chair of the Rappahannock County Board of Supervisors and Rappahannock County Broadband Authority is authorized to sign a letter addressed to the appropriate contact with the Virginia Department of Housing and Community Development confirming the support of the joint bodies for a VATI application submitted by All Points and the RCBBA consistent with the form identified herein; and,

BE IT YET FURTHER RESOLVED that the Rappahannock County Board of Supervisors and Rappahannock County Broadband Authority are committed to working together to identify the most appropriate sources of funding to dedicate to the Project including the generous commitment of $3.5 million from a local private donor.
Record of the roll-call vote on a motion to approve the foregoing resolution, said vote taken by the Board of Supervisors and the Rappahannock County Broadband Authority of Rappahannock County, Virginia, at their joint public meeting held at the Rappahannock County Courthouse, Town of Washington, Rappahannock County, Virginia, on September 7, 2021:

### BROADBAND AUTHORITY

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I certify the foregoing accurately reflects the actions of the Rappahannock County Broadband Authority taken at the time and place stated above.

Debbie P. Donehey  
Chair, Broadband Authority

Margaret Bond  
Secretary, Broadband Authority

### BOARD OF SUPERVISORS

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<th>Motion</th>
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<td>✓</td>
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I certify the foregoing accurately reflects the actions of the Rappahannock County Board of Supervisors taken at the time and place stated above.

Debbie P. Donehey  
Chair, Board of Supervisors

Garrey W. Curry, Jr.  
Clerk for the Board of Supervisors

9/7/21
Tamarah Holmes, Ph.D.
Director, Office of Broadband
Virginia Department of Housing and Community Development
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE:  Support for 2022 VATI Application and Confirmation of Local Match

Dr. Holmes:

This letter will confirm the strong support of Rockingham County, Virginia (the “County”) for the application to be submitted by the Northern Shenandoah Valley Regional Commission and All Points Broadband, as applicant and co-applicant, respectively, to the 2022 Virginia Telecommunication Initiative (the “VATI Application”).

The County joined this regional initiative through execution of a Memorandum of Understanding by and between Dominion Energy Virginia, All Points Broadband, Shenandoah Valley Electric Cooperative, Rappahannock Electric Cooperative, the County and other Participating Localities.

At its meeting on August 25, 2021, the County’s Board of Supervisors voted to support and participate in the VATI Application and authorized a local match commitment of up to $8,900,000 to be included with the VATI Application.

We appreciate your consideration of this important regional project.

Sincerely,

[Signature]

Stephen G. King
County Administrator
September 7, 2021

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

RE: Support for 2022 VATIC Application and Confirmation of Local Match

Dr. Holmes: 

This letter will confirm the strong support of County of Warren (the “County”) for the application to be submitted by the Northern Shenandoah Valley Regional Commission and All Points Broadband, as applicant and co-applicant, respectively, to the 2022 Virginia Telecommunication Initiative (the “VATIC Application”).

The County joined this regional initiative through execution of a Memorandum of Understanding by and between Dominion Energy Virginia, All Points Broadband, Shenandoah Valley Electric Cooperative, Rappahannock Electric Cooperative, the County and other Participating Localities.

At its meeting on September 9, 2021, the County’s Board of Supervisors voted to support and participate in the VATIC Application, and authorized a local match commitment of $6,900,000 to be included with the VATIC Application.

We appreciate your consideration of this important regional project.

Sincerely,

[Signature]

Dr. Edwin C. Daley
County Administrator
BOARD OF SUPERVISORS
RESOLUTION

Approving Participation in VATI Grant Application Related
to the Regional Broadband MOU Submitted by
NSVRC and All Points Broadband

WHEREAS, achieving universal broadband availability for Frederick County (the “County”) is a priority of the County’s Board of Supervisors (“Board”); and

WHEREAS, the County is a party to that certain non-binding Phase One Memorandum of Understanding dated as of June 30, 2021 (the “Regional Broadband MOU”) entered into by and between Dominion Energy Virginia, All Points Broadband Partners, LLC (“All Points”), Shenandoah Valley Electric Cooperative, Rappahannock Electric Cooperative, the County and certain other Participating Localities; and

WHEREAS, the County desires to continue into Phase II of the Initiative as described in the Regional Broadband MOU; and

WHEREAS, the County desires to seek grant funding to support broadband deployment within the County through the 2022 Virginia Telecommunication Initiative (“VATI”) as part of the regional initiative in collaboration with the Northern Shenandoah Valley Regional Commission (“NSVRC”).

THEREFORE, BE IT RESOLVED that the County elects to continue into Phase II of the Initiative described in the Regional Broadband MOU; and

BE IT FURTHER RESOLVED that the County elects to participate in the VATI application related to the Regional Broadband MOU to be submitted by NSVRC and All Points on behalf of the County and other Participating Localities (the “Regional Application”); and

BE IT FURTHER RESOLVED that the County’s local match commitment to be reflected in the Regional Application shall be eight million, six hundred fifty thousand dollars ($8,650,000), which local match commitment shall be contingent on receipt of an award of VATI grant funds; and
BE IT FINALLY RESOLVED that the County Administrator is authorized to take such further acts in support of the Regional Application as may be appropriate and consistent with these resolutions.

ADOPTED this 8th day of September, 2021.

Charles S. DeHaven, Jr., Chairman Aye Shawn L. Graber Aye
J. Douglas McCarthy Aye Robert W. Wells Aye
Blaine P. Dunn Aye David D. Stegmaier Aye
Judith McCann-Slaughter Aye

Mary Beth Price
Interim Clerk, Board of Supervisors
County of Frederick, Virginia

Res. No. 018-21
September 14, 2021

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

RE: 2022 VATI Application

Dear Dr. Holmes:

This letter will confirm All Points Broadband’s (“APB”) support for this application to the 2022 Virginia Telecommunication Initiative program (“VATI”). APB confirms that it is committing all required financing to satisfy All Points’ match commitment set forth in the application.

We are excited to be part of this important project and appreciate your consideration.

Sincerely,

[Signature]

James G. Carr
Chief Executive Officer
Tamarah Holmes, Ph.D.
Director, Office of Broadband
Virginia Department of Housing and Community Development
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: All Points Broadband – 2022 Accelerated Fiber Deployment Initiative

Dr. Holmes:

On behalf of Searchlight Capital Partners, L.P. (“Searchlight”), I am pleased to submit this letter in support of the applications that All Points Broadband (“All Points”) is making to the 2022 Virginia Telecommunication Initiative (“VATI”).

Searchlight is All Points Broadband’s lead equity sponsor. Our investment in All Points is made for the specific purpose of accelerating All Points’ successful track record of deploying last-mile, fiber-to-the-home (“FTTH”) broadband through public-private partnerships and in partnership with electric utilities. Through its VATI and Utility Leverage programs, Virginia and the Department of Housing and Community Development (“DHCD”) have created a framework that is now recognized as a national model for attracting private capital to making last-mile FTTH available to currently unserved locations. Searchlight strongly supports All Points’ efforts to leverage that forward-thinking framework to deliver connectivity to unserved locations across the Commonwealth.

For the current VATI cycle, All Points has designed networks that will extend FTTH broadband to more than seventy five thousand currently unserved locations in Virginia. Collectively, we refer to these projects as the 2022 Accelerated Fiber Deployment Initiative (the “Initiative”). Each project in the Initiative has been designed to achieve universal FTTH access in the relevant county and/or region. Detailed bills of material and cost estimates based on current pricing have been prepared for each project and All Points and its vendors have secured materials required to execute the Initiative. In light of the pressures on the global supply chain for FTTH construction, the best way to secure required materials and labor at the lowest unit pricing is to aggregate multiple large projects into significant volume commitments. This is the approach that All Points and Searchlight have taken for the 2022 Accelerated Fiber Deployment Initiative.

This letter will confirm that Searchlight has committed all of the equity financing required to complete all of the projects included in All Points’ 2022 Accelerated Fiber Deployment Initiative and related VATI applications.
About Searchlight Capital Partners

Searchlight is a private investment firm with over $9 billion of assets under management with extensive expertise investing in the global telecommunications and media sectors. Over the last two years, Searchlight has invested in excess of $1.25 billion in FTTH in the United States, making Searchlight the number one investor in domestic FTTH infrastructure in that period. And as of today, through our investments in All Points, Consolidated Communications and Ziply Fiber, Searchlight is the fourth largest builder of FTTH passings in America. All Points benefits from the tremendous volume purchasing arrangements for Searchlight’s portfolio companies, which ensure availability of required supply and the best available pricing.

Searchlight has deep familiarity with broadband markets and the associated competitive dynamics in the broader United States. Searchlight’s leadership, both through their time at Searchlight and at previous investment firms, have also acquired multiple decades of experience investing specifically in fiber-based broadband businesses in the U.S. and globally, which has made it a core competency and strategic focus for the firm.

In addition to myself, Ajit Pai is another Partner at Searchlight who focuses on the firm’s broadband and digital infrastructure efforts and is a key member of the All Points team. Ajit is a Virginia resident and served as a member (2012-2017) and then Chairman (2017-2021) of the Federal Communications Commission.

Searchlight is Committed to All Points’ 2022 Accelerated Fiber Deployment Initiative

The projects comprising the All Points 2022 Accelerated Fiber Deployment Initiative will extend FTTH broadband to more than seventy five thousand currently unserved locations in the Commonwealth and finally bridge the digital divide for more than 32% of the remaining unserved locations estimated by Virginia’s broadband team. Searchlight has committed all equity financing required to complete all of the projects set forth in the VATI applications submitted by All Points. We look forward to providing the significant private capital that will make Virginia the first state in the nation to achieve universal broadband access.

Sincerely,

Darren Glatt
Partner & Co-Head of Infrastructure Investing
Searchlight Capital Partners, L.P.
September 9, 2021

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

RE: 2022 VATI Applications from All Points Broadband

Dear Ms. Holmes:

Dominion Energy Virginia ("Dominion") is pleased to be a party to several Memoranda of Understanding with All Points Broadband, Rappahannock Electric Cooperative, Shenandoah Valley Electric Cooperative, Northern Neck Electric Cooperative, and the Counties of Augusta, Clarke, Culpeper, Hanover, Fauquier, Frederick, King George, King William, Lancaster, Loudoun, Middlesex, Northumberland, Page, Rappahannock, Rockingham and Warren (each, a "Participating County").

Dominion, All Points, and our electric cooperative partners have developed a unique approach for achieving universal broadband access with individual Counties, and through broader, regional approaches. Dominion’s participation in each of these projects will be pursuant to, and in a manner consistent with the provisions of, Virginia Code § 56-585.1:9 (the "Utility Leverage Statute").

This letter confirms Dominion’s support for the applications to the 2022 Virginia Telecommunication Initiative to be submitted by All Points and our Participating County partners named above. Dominion’s specific investments that will support each proposed project will be set forth in petitions under the Utility Leverage Statute that will be submitted to the State Corporation Commission ("SCC"). Dominion’s participation in each project, and its specific level of related investment, will be subject to the approval of the SCC and the terms set forth in the SCC’s Final Order related to each project.

Dominion is pleased to be part of these important County-wide and regional initiatives in the manner contemplated by the Utility Leverage Statute.

Sincerely,

[Signature]

David F. Walker
Director, Rural Broadband
Tamarah Holmes, Ph.D.  
Director, Office of Broadband  
Virginia Department of Housing and Community Development  
600 East Main Street, Suite 300  
Richmond, Virginia 23219  

RE: All Points Broadband – 2022 Accelerated Fiber Deployment Initiative  

Dr. Holmes:  

On behalf of Shenandoah Valley Electric Cooperative (“SVEC”), I am pleased to submit this letter in support of the application that All Points Broadband (“All Points”) and the Northern Shenandoah Valley Regional Commission are making to the 2022 Virginia Telecommunication Initiative.  

As a member-owned, member-focused organization, SVEC understands the importance of ensuring that the rural communities we serve have access to high quality broadband. SVEC is pleased to be partnering with All Points, Dominion Energy Virginia and Rappahannock Electric Cooperative to support this important regional initiative. Partnerships between internet service providers and electric utilities create the opportunity to simultaneously address the critical need to modernize and harden electric infrastructure while making broadband access universally available.  

SVEC is proud to play an important role in this ambitious regional project and looks forward to continuing our work with All Points, other electric utilities and the communities within the proposed project area to finally bridge the digital divide.  

Thank you for your consideration of this important project.  

Sincerely,  

Gregory S. Rogers  
President and Chief Executive Officer  
Shenandoah Valley Electric Cooperative  

This institution is an equal opportunity provider and employer.  
SVEC supports our armed services and veterans in employment opportunities.
September 13, 2021

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

RE: All Points Broadband – 2022 Accelerated Fiber Deployment Initiative

Dr. Holmes:

On behalf of Rappahannock Electric Cooperative (REC), I am pleased to submit this letter in support of the applications that All Points Broadband (All Points) is submitting for grant funding from the 2022 Virginia Telecommunication Initiative.

REC is a member-owned, member-focused electric cooperative serving portions of 22 counties. We appreciate the focus from the Commonwealth on this critical need to make high-quality broadband internet service available in our unserved and underserved communities. REC’s primary role in this effort has been to serve as the facilitator of solutions like those being presented by All Points. We have worked closely to facilitate the partnerships with All Points and the counties we serve, as well as with our other electric utility partners. Our efforts have facilitated commitments that will deliver universal, fiber-to-the-home broadband access in each of the partnered counties. Additionally, REC is constructing a utility fiber backbone network designed to facilitate the successful completion of these broadband partnership solutions.

Partnerships between Internet service providers and electric utilities create opportunities to simultaneously address critical needs such as modernizing the energy grid and strengthening the reliability and security of our electric infrastructure, while making broadband access universally available. REC is proud to be facilitator and to contribute to these important projects. We also look forward to continuing our work with All Points.

Thank you for your consideration of awarding the funding necessary to complete these important projects.

Sincerely,

Peter Muhoro, Ph.D.
Chief Strategy, Technology and Innovation Officer
Rappahannock Electric Cooperative
September 10, 2021

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

Dear Dr. Holmes:

I am writing to express my full support of Augusta County’s application for the Virginia Telecommunications Initiative Grant.

In March 2020, the need for broadband was pushed to the forefront for Augusta County Public Schools when the pandemic required us to educate our students virtually. While great strides were made to provide devices to all students, not all families have the adequate internet service required to utilize these devices to their full potential. Students have had to access Wi-Fi in school parking lots, via hotspots provided by the school division, and in other locations such as libraries and fast food establishments. Since this time, numerous calls for help have been communicated to Augusta County officials regarding the lack of broadband service.

The expansion of broadband services in our community will greatly assist us in meeting the needs of our students when and if they need to work from home. Universal broadband would also allow for equity in learning opportunities for students.

Thank you for your consideration.

Sincerely yours,

Eric W. Bond, Ed.D.  
Division Superintendent
September 8, 2021

To Whom It May Concern:

Please accept this letter as an endorsement of support for Augusta County’s Virginia Telecommunications Initiative Grant application with Dominion Energy, Shenandoah Valley Electric Coop and All Points Broadband.

The Greater Augusta Regional Chamber of Commerce is a strong supporter of this project as it will positively affect the access to Broadband throughout our community. GARCC’s Voice of Business committee has been studying and discussing this topic for more than two years and has seen the great need for enhanced Broadband access. We are pleased with the progress that has been made in Augusta County over the past two years and look forward to the benefits receiving a VATI grant will bring.

Thank you for your consideration and we appreciate you accepting this letter of support.

Sincerely,

Courtney W. Thompson, President & CEO
Greater Augusta Regional Chamber of Commerce
19 Briar Knoll Court, Ste 2
Fishersville, VA 22939
(540) 324-1133
courtney@augustava.com
September 9, 2021

To Whom it May Concern:

The Augusta County Library would like to express support for the VATIC 2022 grant application for improved internet services throughout Augusta County.

Augusta County Library includes 7 locations across 967 square miles and includes many areas that lack high-speed internet. All of our locations provide public computers that are internet-ready and provide 24/7 wifi services that reach into our parking lots.

Anecdotally, based on conversations that we have with patrons as we are assisting them in the library, the community finds access to high-speed internet imperative to apply for jobs, benefits, conduct personal business, support educational pursuits, and absolutely necessary for home-based, small businesses.

The need for internet access throughout the county has become increasingly apparent throughout the COVID-19 Pandemic based on the high rate of wifi connections at our Craigsville, Deerfield, and Middlebrook locations, even when our buildings were closed due to the pandemic. At any given time you can pass these locations during off hours and see multiple cars in the parking lot, accessing the internet on their phones. Unfortunately, even though connectivity at the Middlebrook Library Station only averages 2.5 mgs, it is still better connectivity than users can access at home.

Our public computers are in high demand at all of our locations. Patrons drive 30-45 minutes from the county’s most rural areas to access our computers and internet. Patrons who have visited our locations from underserved areas such as Mt. Solon, Middlebrook, and Swoope have provided feedback regarding their lack of access to the internet. As a response to the need for connectivity throughout the county, Augusta County Library instituted a wifi-hotspot lending program in an attempt to provide temporary internet access. However, due to the fact that the same areas that struggle with internet access also struggle with cellular service, this service has not been as successful as we would have hoped.

In conclusion, Augusta County Library urges you to consider supporting Augusta County’s application for the VATIC 2022 grant not only for the benefit of our citizens but also for our
libraries. This grant would work to provide universal internet access to the underserved areas of Augusta County and to provide better internet connectivity at our remote libraries to serve patrons who are not fortunate enough to own devices and or pay for internet service. This step will go a long way to having a long-term economic and educational impact in our community, while also breaking down barriers to tasks such as applying for jobs, focusing on education, staying in touch with family, and completing everyday tasks such as renewing a driver’s license.

Should you have any additional questions, please feel free to contact me directly.

Sincerely

Jennifer Brown, MSLIS, PhD (she/her) / Director
jbrown@AugustaCountyLibrary.org
Augusta County Library
540-885-3961 | 540-949-6354
1759 Jefferson Hwy. Fishersville, VA 22939
http://www.AugustaCountyLibrary.org
Tamarah Holmes, Ph.D.
Director, Office of Broadband
Department of Housing and Community Development
600 East Main Street, Suite 300
Richmond, VA 23219

Dear Director Holmes:

I am writing in support of the Fauquier County FY 2022 Virginia Department of Housing and Community Development Virginia Telecommunication Initiative (VATI) grant application to expand high-speed broadband availability in the First Congressional District. Approval of this application would help meet the critical need to build out high-speed broadband service to residents of Fauquier County.

Rural residents in Virginia's First Congressional District appreciate the value of high-speed broadband access. Providing reliable broadband access is vital for commercial stability, job creation, distance learning, and telehealth service expansion. Throughout the First Congressional District of Virginia, as in other largely rural areas, economic incentives are needed to expand broadband access, and the VATI program has been a successful vehicle of meeting that need. VATI encourages private telecommunications providers to enlarge their coverage and gives localities the ability to design the expansion that is right for their communities. This eases the financial burden associated with construction costs, broadens service, and creates a successful public-private partnership (P3) for the awardees and for the Commonwealth.

The proposed VATI project with All Points Broadband, Dominion Energy, and Rappahannock Electrical Cooperative will bring service to 10,500 homes in Fauquier County. This is the equivalent of approximately half the homes in Fauquier, and providing wired access to the equivalent of every public school system student. The project scope and costs in Fauquier County is $64 million, and while the VATI allows for up to 80% funding from the State, we are seeking $14.7 million from the State or 23%, Local Match of $10.5 million, and All Points is contributing a significant amount at $38.8 million. REC in the past has presented similar opportunities, but those plans were 4-5 years out as of 2020. This project is the first opportunity presented to the County, after multiple RFP and PPEA opportunities in the last five years to effectively provide universal wired connectivity to the whole of the County. Given the size, topography, and population of the County; even fixed wireless has faced deployment and access challenges. The Board of Supervisors is committed to this project and opportunity to not only support our citizens...
with telehealth, virtual learning; but also supporting opportunities for economic growth and business opportunities in our rural, agricultural areas.

Thank you for your consideration of the Fauquier County application. Moreover, if you have any concerns or questions, please do not hesitate to contact my office.

Sincerely,

Robert J. Wittman
Member of Congress
September 8, 2021

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

RE: Support of Fauquier County 2022 VATI Application

Dr. Holmes:

This letter is in support of Fauquier County’s application to be submitted by the County and All Points Broadband, as applicant and co-applicant, respectively, to the 2022 Virginia Telecommunication Initiative.

The project plan includes 10,500 homes or passings designated as unserved or underserved under the grant terms, which will provide wired access that currently have limited opportunities for connectivity including wireless or cellular data providers. For perspective, this scope of homes is equivalent to providing broadband to all students within the County public school system. The public school students will benefit greatly from this project, as it will provide access for effective virtual learning, research, homework, and group projects opportunities to students that current connectivity does not allow today. As such, the Fauquier County School Division is in support of this project to fulfill the needs of our students and the community at large to provide greater access to education and learning opportunities.

We appreciate your consideration of this important project for the future of the County and our students.

Sincerely,

[Signature]

Dr. David Jeck
Superintendent
September 13th, 2021

Mr. Jimmy Carr
Chief Executive Officer
All Points Broadband
Christiansburg, VA 24073

Dear Mr. Carr,

On behalf of the Harrisonburg-Rockingham Chamber of Commerce and business community, thank you for bringing to our attention the efforts of a regional grant initiative through the Virginia Telecommunications Initiative (VATI) which will bring broadband access to areas of our County.

As you know, broadband infrastructure is key to economic development and is essential for continued prosperity as well as growth. Rural communities have continually advocated for this type of investment, and we at the Chamber fully support you, along with your private and public sector partners, in achieving this goal.

Regional collaboration is key to any initiative, and on an issue of such importance as broadband access, it’s a must. Not only will you be helping to grow our economy, but you will be making a significant investment in the quality of life of our citizens. Having roughly 7,600 locations throughout the area who could potentially benefit from this development is something that will be felt for years.

As you move forward with this initiative, please know that the Harrisonburg-Rockingham Chamber of Commerce, our hundreds of members and their thousands of employees, are ready and willing to assist.

Sincerely,

Christopher Quinn
President & CEO
Harrisonburg-Rockingham Chamber of Commerce
### ATTACHMENT 12 - DERIVATION OF COSTS

<table>
<thead>
<tr>
<th>Project / Product Cost Category</th>
<th>Total</th>
<th>VATI</th>
<th>Non-VATI</th>
<th>Source of Estimate</th>
<th>Date, Most Recent Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Design and Engineering</td>
<td>$12,588,340</td>
<td>$6,294,259</td>
<td>$6,294,081</td>
<td>Tilson</td>
<td>9/3/2021</td>
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<tr>
<td>Project &amp; Construction Mgmt.</td>
<td>$18,204,768</td>
<td>$9,102,513</td>
<td>$9,102,256</td>
<td>Tilson</td>
<td>9/3/2021</td>
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<tr>
<td>Headend/Central Office</td>
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<td>$1,654,179</td>
<td>$2,910,966</td>
<td>Tilson</td>
<td>9/3/2021</td>
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<tr>
<td>Field Network Equipment</td>
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<td>$1,905,229</td>
<td>$3,304,402</td>
<td>Tilson</td>
<td>9/3/2021</td>
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<tr>
<td>Utility Middle Mile</td>
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<td>$-</td>
<td>$33,150,000</td>
<td>APB/DEV</td>
<td>9/10/2021</td>
</tr>
<tr>
<td>Underground Construction</td>
<td>$21,733,014</td>
<td>$8,533,007</td>
<td>$13,200,007</td>
<td>Tilson</td>
<td>9/3/2021</td>
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<tr>
<td>Fiber Drop Construction</td>
<td>$65,082,014</td>
<td>$16,276,634</td>
<td>$48,805,380</td>
<td>AFL/Tilson</td>
<td>9/3/2021</td>
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<tr>
<td>Subscriber Equipment &amp; Installation Labor</td>
<td>$10,126,091</td>
<td>$2,532,551</td>
<td>$7,593,539</td>
<td>Tilson</td>
<td>9/3/2021</td>
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<td>Other Capex</td>
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<td>$2,318,645</td>
<td>APB/Tilson</td>
<td>9/3/2021</td>
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<tr>
<td>Grant Administration</td>
<td>$480,000</td>
<td>$480,000</td>
<td>$-</td>
<td>NSVRC</td>
<td>9/10/2021</td>
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<tr>
<td>Construction Bond (1.5%)</td>
<td>$3,782,373</td>
<td>$1,891,214</td>
<td>$1,891,160</td>
<td>APB</td>
<td>9/10/2021</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>$97,208,500</strong></td>
<td><strong>$209,040,990</strong></td>
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<td></td>
</tr>
</tbody>
</table>
September 13, 2021

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

RE: Cost Estimates for 2022 VATI Application

Dear Dr. Holmes:

To develop the project budget included with this application, All Points Broadband (“APB”) prepared a high-level design for the project and developed an indicative bill of materials based on that design.

As part of APB’s design and cost estimation process, All Points engaged Tilson Technology Management, Inc. (“Tilson”) to supplement APB’s internal engineering and design resources and to assist in the development of the high-level design and related bill of materials and cost estimates. Tilson is one of America’s leading providers of consulting, design and construction management services to the telecommunications industry. As described in Tilson’s letter included in Attachment 13, the cost estimates that form the basis of the project budget are based on Tilson’s bill of materials and related cost estimates and reflect current pricing available to All Points.

All Points then obtained current pricing for each item on the bill of materials from its primary vendors, including AFL Telecommunications (“AFL”), APB’s primary supplier of fiber optic cables, connectors, terminals, and related hardware. As described in AFL’s letter included in Attachment 13, AFL provided the pricing used for all relevant cost categories included in the project budget and AFL has allocated committed manufacturing capacity to support APB’s materials requirements and specific schedule for this project.

Sincerely,

James G. Carr
Chief Executive Officer
Tamarah Holmes, Ph.D  
Director, Office of Broadband  
Virginia Department of Housing and Community Development  
600 East Main Street, Suite 300  
Richmond, Virginia 23219

RE: Applications of All Points Broadband to the Virginia Telecommunications Initiative

Dear Dr. Holmes:

Tilson Technology Management, Inc. ("Tilson") is a leading provider of consulting, design and construction management services to leading telecommunications firms throughout the United States. Tilson is pleased to have been engaged by All Points Broadband ("APB") to support its planning and high-level design activities for each of the projects included in APB’s 2022 Accelerated Fiber Deployment Initiative (the "Initiative").

This letter will confirm that Tilson has assisted APB in the development of high-level designs, indicative bills of material, and related cost estimates for each of the projects included in the Initiative. We understand that APB has incorporated our work into the project budgets that APB is submitting as part of the Initiative.

We hope that the significant work we have performed with All Points will result in the expansion of fiber-to-the-home broadband access to tens of thousands of currently unserved Virginians.

Sincerely,

John Ford  
Director

John Ford (Sep 7, 2021 15:02 EDT)  
Jay Ford  
Director
September 8, 2021

Dr. Tamarah Holmes  
Director, Office of Broadband  
Virginia Department of Housing and Community Development  
600 East Main Street, Suite 300

RE: Letter of Support for APB’s 2022 Accelerated Fiber Deployment Initiative

Dear Dr. Holmes,

AFL Telecommunications (“AFL”) is a leading global manufacturer of fiber optic cables, connectors, terminals, and related hardware. Headquartered in Duncan, South Carolina, AFL manufactures its products at several locations in the United States and abroad, including manufacturing locations in North Carolina, South Carolina, and Bristol, Virginia.

AFL is excited to be partnering with All Points Broadband (“APB”) and its electric utility partners, as part of APB’s 2022 Accelerated Fiber Deployment Initiative that will deliver best-in-class fiber-to-the-home broadband access to thousands of currently unserved locations in Virginia.

AFL has a strong working relationship with All Points Broadband and will serve as APB’s strategic supplier for all of the projects included in the 2022 Accelerated Fiber Deployment Initiative. APB evaluated multiple technology solutions, ultimately selecting AFL as the best fit for its rural fiber optic projects. AFL’s ADSS-style self-supporting cable technology and dedicated manufacturing capacity enables faster, less complicated deployment that reduces overall time to market at a competitive total cost of ownership.

This letter will confirm that AFL is committed to supporting All Points Broadband’s 2022 Accelerated Fiber Deployment Initiative. AFL and APB have reviewed the specific projects and related bills of materials associated with the projects APB is submitting and AFL has provided APB with pricing that is incorporated in APB’s applications. AFL is also allocating committed manufacturing capacity to support APB’s requirements and project schedules.

We appreciate the opportunity to support this important initiative to bridge the digital divide in the Commonwealth of Virginia.

Sincerely,

Ryan O’Sullivan  
Director, Rural Fiber to the Home (RFTTH) Program Management
### Construction

<table>
<thead>
<tr>
<th>Activity</th>
<th>Unit of Measure</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Design and Engineering</td>
<td>Miles</td>
<td>3,784.8</td>
<td>$3,326</td>
<td>$12,588,340</td>
</tr>
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<td>Project &amp; Construction Mgmt.</td>
<td>Miles</td>
<td>3,784.8</td>
<td>$4,810</td>
<td>$18,204,768</td>
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<tr>
<td>Headend/Central Office</td>
<td>Project</td>
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<td>$4,565,145</td>
<td>$4,565,145</td>
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<tr>
<td>Field Network Equipment</td>
<td>No. Unserved Passings</td>
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<td>$122</td>
<td>$5,209,631</td>
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<tr>
<td>Utility Middle Mile</td>
<td>Miles</td>
<td>663.0</td>
<td>$50,000</td>
<td>$33,150,000</td>
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<tr>
<td>Aerial Make Ready &amp; Construction</td>
<td>Miles</td>
<td>2,902.0</td>
<td>$44,001</td>
<td>$127,667,765</td>
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<tr>
<td>Underground Construction</td>
<td>Miles</td>
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<td></td>
<td><strong>$223,138,664</strong></td>
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### Customer Installations

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<th>Unit of Measure</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber Drop Construction</td>
<td>No. Subscribers</td>
<td>32,021</td>
<td>$2,032</td>
<td>$65,082,014</td>
</tr>
<tr>
<td>Subscriber Equipment &amp; Installation</td>
<td>No. Subscribers</td>
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<td>$316</td>
<td>$10,126,091</td>
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<td><strong>Installation Subtotal</strong></td>
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<td><strong>$75,208,105</strong></td>
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### Other

<table>
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<tr>
<th>Activity</th>
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<th>Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Capex</td>
<td>Project</td>
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<td>$3,640,348</td>
<td>$3,640,348</td>
</tr>
<tr>
<td>Grant Administration</td>
<td>Project</td>
<td>1</td>
<td>$480,000</td>
<td>$480,000</td>
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<tr>
<td>Construction Bond (1.5%)</td>
<td>Insured Activity</td>
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<td>$0.01500</td>
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<td></td>
<td><strong>$7,902,722</strong></td>
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</table>

**Total** $306,249,490

### Headend / Central Office

<table>
<thead>
<tr>
<th>Category</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Extended Cost</th>
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</thead>
<tbody>
<tr>
<td>CO Site Acquisitions</td>
<td>30</td>
<td>$30,000.00</td>
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<td>Tax</td>
<td>0</td>
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<tr>
<td>OTN Building - 12X20- 6 Relay Racks</td>
<td>Large Headends</td>
<td>6</td>
<td>$175,000.00</td>
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<tr>
<td>ODC 100 Cabinet - Adtran, Nokia, Calix</td>
<td>Small Headends</td>
<td>17</td>
<td>$24,000.00</td>
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<tr>
<td>1XTA5000 5 GEN SMART FIBER (mounting bracket)</td>
<td>Small Headends</td>
<td>17</td>
<td>$1,346.22</td>
</tr>
<tr>
<td>30AMP Generator Connector</td>
<td>Small Headends</td>
<td>17</td>
<td>$1,650.00</td>
</tr>
<tr>
<td>5TH GEN SMART POLE MOUNT KIT</td>
<td>Small Headends</td>
<td>17</td>
<td>$1,410.59</td>
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<tr>
<td>Pole 30-5 (Labor and Materials)</td>
<td>Headends Total</td>
<td>30</td>
<td>$1,500.00</td>
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<td>ODC 1000 Cabinet</td>
<td>Medium Headends</td>
<td>7</td>
<td>$32,000.00</td>
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<td><strong>Headend / Central Office Subtotal</strong></td>
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<td></td>
<td><strong>$2,749,616</strong></td>
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<td>Installation Labor, Freight, Tax, and Contingency</td>
<td>$1,815,529</td>
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<td><strong>Headend / Central Office Total</strong></td>
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<td><strong>$4,565,145</strong></td>
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### Field Network Equipment

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<tr>
<th>Category</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Extended Cost</th>
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<tbody>
<tr>
<td>Netbotz Environmental Monitor including all sensors</td>
<td>Headends, all</td>
<td>30</td>
<td>$850.00</td>
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<tr>
<td>OLT Management Server (CMS)</td>
<td>Local Networks</td>
<td>8</td>
<td>$8,000.00</td>
</tr>
<tr>
<td>000-00372 - E7-2 Field Install Package (CO &amp; ODC/RT): Shelf with Blank Card, FTA, and Field installation Kit</td>
<td>Chassis and spares</td>
<td>147</td>
<td>$616.90</td>
</tr>
<tr>
<td>100-05529 - E7-2 XG 801 XGS-PON</td>
<td>Modules, XGS-PON</td>
<td>98</td>
<td>$11,670.00</td>
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<tr>
<td>100-04651 QSFP, 40GE Single Mode transceiver 40km, 1310nm, Duplex LC, C-Temp</td>
<td>Headends, all</td>
<td>60</td>
<td>$6,497.00</td>
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<tr>
<td>100-05642- OIM 10G PON Laser Generator - Generac 25 KV - 24 hour backup system</td>
<td>Modules, XGS-PON</td>
<td>784</td>
<td>$695.00</td>
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<tr>
<td>BATTERY STRING, 190AH</td>
<td>Small + Medium Headends</td>
<td>24</td>
<td>$2,992.94</td>
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<tr>
<td>ELTEK FLATPKS RECTIFIER 1000W</td>
<td>Small + Medium Headends</td>
<td>96</td>
<td>$642.35</td>
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<tr>
<td><strong>Field Network Equipment, Subtotal</strong></td>
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<td></td>
<td><strong>$2,902,040</strong></td>
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<td>Installation Labor, Freight, Tax, and Contingency</td>
<td>$2,307,591</td>
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<td><strong>Field Network Equipment, Total</strong></td>
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<tr>
<td>DISTRIBUTION FIBER DESIGN BASIS</td>
<td>TOTAL</td>
<td>AERIAL</td>
<td>UNDERGROUND</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Straight Poles</td>
<td>54,829</td>
<td>54,829</td>
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<tr>
<td>Curved Poles</td>
<td>13,707</td>
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<td>Total Poles</td>
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<td>Data Contact Phone Number</td>
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<td>[REDACTED]</td>
</tr>
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<td>Emergency Operations Contact Information</td>
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**Census Block Counts by State, DBA Name and Technology**

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<td>Terrestrial Fixed Wireless</td>
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<tr>
<td>Maryland</td>
<td>All Points Broadband</td>
<td>Terrestrial Fixed Wireless</td>
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<td>Virginia</td>
<td>All Points Broadband</td>
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<td>West Virginia</td>
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### Fixed Broadband Subscriptions by State, Technology and End-user Type

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<td>Terrestrial Fixed Wireless</td>
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<tr>
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<td>West Virginia</td>
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### Fixed Broadband Subscriptions by Bandwidths and End-user Type

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<th>Upstream Bandwidth (in Mbps)</th>
<th>Consumer</th>
<th>Business / Govt</th>
<th>Total</th>
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<td>Business / Govt</td>
<td>Total</td>
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<tr>
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### Fixed Voice Subscription (iVoIP)

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### Over-the-top VoIP Subscriptions by State and End-user Type

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**Census Block Counts by State, DBA Name and Technology**

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## Fixed Broadband Subscription

### Fixed Broadband Subscriptions by State, Technology and End-user Type

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### Fixed Voice Subscription

**VGE Lines and VoIP Subscriptions by State and End-user Type**

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<th>State</th>
<th>Total VGE Lines</th>
<th>Consumer VGE Lines</th>
<th>Total VoIP Subscriptions</th>
<th>Consumer VoIP Subscriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kentucky</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Fixed Voice Subscription (iVoIP)

**Over-the-top VoIP Subscriptions by State and End-user Type**

<table>
<thead>
<tr>
<th>State</th>
<th>Total</th>
<th>Consumer</th>
<th>Business / Govt</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kentucky</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### All other VoIP Subscriptions by State, End-user Type, Bundle and Last-mile Medium

<table>
<thead>
<tr>
<th>State</th>
<th>Total</th>
<th>Consumer</th>
<th>by End-user Type</th>
<th>by Bundle</th>
<th>by Last-mile Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kentucky</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>Total</td>
<td>Consumer</td>
<td>Business / Government</td>
<td>Sold w/ Internet</td>
<td>Sold w/o Internet</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>----------</td>
<td>------------------------</td>
<td>------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Attachment 16 – RSSI Projection Shapefiles

-This page intentionally left blank as this is not a Wireless Project-
FTTH Rapid Assessment
Follow Up Results

TAKE RATE SURVEY
Altman Solon has conducted a Rapid primary research study to assess ARPU and take rate viability in underserved areas.

Sources: Underserved BB Survey (N=1042), Altman Solon Research & Analysis

### Target Audience Process

We targeted Zip Codes to address the following priorities:

- **Priority #1 (Underserved BB HHs):** Required 50% of HH within a zip code to have no cable or fiber availability

### Qualification Criteria

**Must**

- Be above 18 years of age
- Purchase Wireless Phone or Home Internet
- Be either solely or partially involved in these purchasing decisions
- Not have access to Cable

### Timeline

<table>
<thead>
<tr>
<th>Project kickoff</th>
<th>Week 1 (5/31)</th>
<th>Week 2 (6/7)</th>
<th>Week 3 (6/14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTTH Rapid Assessment</td>
<td>Build Survey &amp; address initial client feedback, Survey Soft Launch</td>
<td>Survey Full Launch, Survey Analysis File &amp; Preliminary Report</td>
<td>Final Survey Analysis Report</td>
</tr>
</tbody>
</table>

Sources: Underserved BB Survey (N=1042), Altman Solon Research & Analysis
In our conjoint, respondents are asked to select product packages they are most likely to purchase.

### Sample Choice Based Conjoint (CBC) Question

- **Internet Technology**
  - Satellite Internet (e.g., HughesNet, ViaSat)
  - Fiber (e.g., Verizon FiOs, MetroNet)
  - Fixed Wireless / Wireless Broadband (e.g., Belwave, Wisp, Nextlink)
  - DSL (e.g., CenturyLink, Frontier, AT&T, Windstream)

- **Internet Speed**
  - 10 Mbps
  - 1 Gbps
  - 100 Mbps
  - 5 Mbps

- **Landline Phone Offer**
  - Not included
  - Unlimited
  - Not included
  - Unlimited

- **Monthly Offer Price**
  - $60
  - $225
  - $80
  - $30

If these were your only options, which would you choose?

Respondents see 10-12 screens, and on each must select their **favored option out of the given options**, and indicate whether they would purchase this option in the marketplace.

A conjoint has two pieces:
- **Attributes** (e.g., Internet Technology and Monthly Price)
- **Levels** (e.g., DSL, Fiber, or $60, $120) which define the different options an attribute can take on.

- By showing multiple randomized packages, conjoint surveys can determine the **relative value of product features based on survey-taker tradeoffs**

- Altman Solon uses Hierarchical Bayes estimations to determine **relative importance of each attribute and level**

Note: This page would be proceeded by a description page which defines each attribute and level, including the channels included in each channel package.

Sources: Underserved BB Survey (N=1042), Altman Solon Research & Analysis
In Satellite + DSL markets with baseline prices, we observe 75% take rate and an ARPU well in line with APB targets.

### Take Rate by Technology

<table>
<thead>
<tr>
<th>Technology</th>
<th>Take Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber</td>
<td>75%</td>
</tr>
<tr>
<td>DSL</td>
<td>22%</td>
</tr>
<tr>
<td>Satellite</td>
<td>3%</td>
</tr>
</tbody>
</table>

N=1042, % of simulated respondents

*With 80-90% BB penetration, take rate implies total market penetration of 60%-67%*

### ARPU by Technology

<table>
<thead>
<tr>
<th>Technology</th>
<th>ARPU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber</td>
<td></td>
</tr>
<tr>
<td>DSL</td>
<td></td>
</tr>
<tr>
<td>Satellite</td>
<td></td>
</tr>
</tbody>
</table>

N=1042, Simulated ARPU

Notes: Calculated by multiplying take rate of each existing promo offer by cost of the promo offer.

Sources: Underserved BB Survey (N=1042), Altman Solon Research & Analysis
Simulation Results – DSL & Fixed Wireless

In DSL + Fixed Wireless markets, we observe 71% take rate and an ARPU well in line with APB targets.

**Take Rate by Technology**
N=1042, % of simulated respondents

- **Fiber:** 71%
- **DSL:** 20%
- **Fixed Wireless:** 9%

*With 80-90% BB penetration, take rate implies total market penetration of 57%-64%*

**ARPU by Technology**
N=1042, Simulated ARPU

Notes: Calculated by multiplying take rate of each existing promo offer by cost of the promo offer.
Sources: Underserved BB Survey (N=1042), Altman Solon Research & Analysis
Simulation Results - Satellite

In satellite only markets, we observe 95% take rate

Take Rate by Technology
N=1042, % of simulated respondents

ARPU by Technology
N=1042, Simulated ARPU

Notes: Calculated by multiplying take rate of each existing promo offer by cost of the promo offer
Sources: Underserved BB Survey (N=1042), Altman Solon Research & Analysis
Gig Fiber Broadband in Your Home

All Points Broadband is engaged with its electric utility partners in several large scale fiber-to-the-home projects in Virginia. We are collecting information from customers in the zones below to ensure universal coverage and to finalize our construction sequence within each zone. All Point's standard FTTH architecture is capable of offering 10Gbps service to the home.

To get started please follow these directions:

Step 1: Enter an address and press Go.

Step 2: Confirm your Pin/location is correct. If not, just grab it and move it to the correct location on the map. Press next.

Step 3: Enter your contact information. Press next.

Step 4: Answer the quick questionnaire so we can provide the same great service for your friends and neighbors. Press next.

Step 5: Review your information and then tell everyone the great news and how to get registered. Submit

NO COMMITMENTS. PAY NOTHING UPFRONT. JUST SHOW YOUR INTEREST!
At All Points Broadband, we empower communities by bringing utility grade broadband to underserved markets, deploying fiber and state-of-the-art fixed-wireless technology to homes and businesses in communities throughout Virginia, West Virginia, Maryland and Kentucky.

### Fiber Internet Plans

**50/50**
- **$59.99** per month
- Equipment Install & Provisioning fee of $199 with 1 year commitment
- Download up to 50 Mbps
- Upload up to 50 Mbps
- [GET STARTED](#)

**100/100**
- **$79.99** per month
- Equipment Install & Provisioning fee of $199 with 1 year commitment
- Download up to 100 Mbps
- Upload up to 100 Mbps
- [GET STARTED](#)

**500/500**
- **$99.99** per month
- Equipment Install & Provisioning fee of $199 with 1 year commitment
- Download up to 500 Mbps
- Upload up to 500 Mbps
- [GET STARTED](#)

**GIGABIT**
- **$109.99** per month
- Equipment Install & Provisioning fee of $199 with 1 year commitment
- Download up to 1,000 Mbps
- Upload up to 1,000 Mbps
- [GET STARTED](#)
GET BETTER BROADBAND NOW!
HIGH SPEED BROADBAND IN YOUR NECK OF THE WOODS!
FASTER INTERNET IS NOW AVAILABLE!
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INTERNET WHERE YOU LIVE

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- Unlimited Data Usage
- Reliable High Speed Internet
- Low Latency for Gamers
- 24x7 Customer Support
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FREE INSTALLATION WITH A 12 MONTH TERM
ENJOY FAST DOWNLOADS, SMOOTH STREAMING, AND LOW LATENCY
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SAMPLE FLYERS
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- 24/7 CUSTOMER SUPPORT
- RELIABLE HIGH SPEED INTERNET
- STREAM YOUR FAVORITE PROGRAMS
- LOW LATENCY FOR GAMERS
- ONLINE ACCOUNT MANAGEMENT

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ICANSTREAM
FREE Installation with a 3-Month Term
($199 Savings)

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Live Connected.

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Enjoy fast downloads, smooth streaming, and low latency

Unhappy with your Internet? Call us now at 888-888-8888

Get Better Broadband Now!
Enjoy fast downloads, smooth streaming, and low latency

Features:
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- Reliable High Speed Internet
- Low Latency for Gamers
- 24x7 Customer Support
- Stream your favorite programs
- Online Account Management

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NEED4SPEED

80% installation, 50% discount for the first 3 months
3-month service with a 12-month term

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Live Connected.

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Enjoy fast downloads, smooth streaming, and low latency.

Faster Internet is Now Available! Call us now at 888-888-8888

ALL POINTS BROADBAND
Live Connected.

HIGH SPEED BROADBAND IN YOUR NECK OF THE WOODS!
Features:
- Unlimited Data Usage
- Reliable High Speed Internet
- Low Latency for Gamers
- 24x7 Customer Support
- Stream your favorite programs
- Online Account Management

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FREE Installation with a 12 Month Term and $199 Savings!

Call Today to Schedule your installation: 888-888-8888
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- Reliable High Speed Internet
- Low Latency for Gamers
- 24x7 Customer Support
- Stream your favorite programs
- Online Account Management

ENJOY:
FAST DOWNLOADS, SMOOTH STREAMING, & LOW LATENCY

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IN YOUR NECK OF THE WOODS!

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GOFASTER

$50 INSTALLATION, $5 DISCOUNT OFF ANY PLAN FOR 12 MONTHS
WITH A 12 MONTH TERM

CALL US NOW AT 888-888-8888

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GOFASTER

$50 INSTALLATION, $5 DISCOUNT OFF ANY PLAN FOR 12 MONTHS
WITH A 12 MONTH TERM

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Enjoy fast downloads, smooth streaming, and low latency

Features:
• Unlimited Data Usage
• Reliable High Speed Internet
• Low Latency for Gamers
• 24x7 Customer Support
• Stream your favorite programs
• Online Account Management

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Call us now at
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Enjoy fast downloads, smooth streaming, and low latency

Faster Internet is Now Available!
Call Today to Schedule your Installation
888-888-8888

Provided by
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Live Connected.
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$50 INSTALLATION, $10 DISCOUNT FOR THE FIRST 6 MONTHS WITH A 12 MONTH TERM

$199 SAVINGS

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At All Points Broadband, we empower communities by bringing utility grade broadband to underserved markets, deploying fiber and state-of-the-art fixed wireless technology to homes and businesses in communities throughout Virginia, West Virginia, Maryland and Kentucky.

FEATURES:
- Unlimited Data Usage
- Reliable High Speed Internet
- Low Latency for Gamers
- 24x7 Customer Support
- Stream your favorite programs
- Online Account Management

CALL TODAY TO SCHEDULE YOUR INSTALLATION
888-888-8888!

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ALL POINTS BROADBAND
Leesburg, Virginia 20175
FASTER INTERNET IS NOW AVAILABLE!

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FREE INSTALLATION WITH A 12 MONTH TERM
$199 SAVINGS

CALL TODAY TO SCHEDULE YOUR INSTALLATION
888-888-8888!

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Leesburg, Virginia 20175
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Leesburg, Virginia 20175
ALL POINTS BROADBAND
Live Connected.

FASTER INTERNET
IS NOW AVAILABLE!

Use Promo Code:
ICANSTREAM

FREE INSTALLATION
WITH A 12 MONTH TERM
(A $199 SAVINGS)

Call us now at
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Features:
- Unlimited Data Usage
- Reliable High Speed Internet
- Low Latency for Gamers
- 24x7 Customer Support
- Stream your favorite programs
- Online Account Management

ENJOY
- Smooth Streaming
- Fast Downloads
- Low Latency

Call Today to Schedule your Installation
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ALL POINTS BROADBAND
Live Connected.

HIGH SPEED BROADBAND
in your Neck of the Woods

Get Better Broadband Now!

Call us now:
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FEATURES:
- Unlimited Data Usage
- Reliable High Speed Internet
- Low Latency for Gamers
- 24/7 Customer Support
- Stream your favorite programs
- Online Account Management

Enjoy fast downloads, smooth streaming, and low latency

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Use Promo Code: ICANSTREAM
FREE Installation with a 12 Month Term (a $199 Savings)

Get Better BROADBAND Now!

Call us now at 888-888-8888!
INTERNET WHERE YOU LIVE

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FREE Installation with a 12 Month Term (a $99 Savings)

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- UNLIMITED DATA USAGE
- LOW LATENCY FOR GAMERS
- STREAM YOUR FAVORITE PROGRAMS
- RELIABLE HIGH SPEED INTERNET
- 24/7 CUSTOMER SUPPORT
- ONLINE ACCOUNT MANAGEMENT
- EASY INSTALLATION
- SPEED STREAMING
- LOW LATENCY

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HIGH SPEED BROADBAND
IN YOUR NECK OF THE WOODS!

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NEED4SPEED

$50 Installation, $10 discount for the first 6 months (a $199+ savings) with a 12 Month Term

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FEATURES

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- Reliable High Speed Internet
- Low Latency for Gamers
- 24x7 Customer Support
- Stream your favorite programs
- Online Account Management

Enjoy fast downloads, Smooth streaming, Low latency

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Live Connected.

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allpointsbroadband.com

FEATURES:

- UNLIMITED DATA USAGE
- RELIABLE HIGH SPEED INTERNET
- LOW LATENCY FOR GAMERS
- 24X7 CUSTOMER SUPPORT
- STREAM YOUR FAVORITE PROGRAMS
- ONLINE ACCOUNT MANAGEMENT

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888-888-8888

Enjoy fast downloads, smooth streaming, and low latency
UNHAPPY WITH YOUR INTERNET?

CALL US NOW!
888.888.8888

Free Installation with a 2-year contract (A $199 SAVINGS)

Features include:
- Unlimited Data Usage
- Reliable High Speed Internet
- Low Latency for Gamers
- 24/7 Customer Support
- Stream your favorite programs
- Online Account Management

Enjoy fast downloads, smooth streaming, and low latency.

CALL TODAY TO RESCHEDULE YOUR INSTALLATION!
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Get Better Broadband Now!

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Live Connected...

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NEED4SPEED

FAST DOWNLOADS  SMOOTH STREAMING  LOW LATENCY

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in your Neck of the Woods!

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FEATURES:
1. Unlimited Data Usage
2. Reliable High Speed Internet
3. Low Latency for Gamers
4. 24x7 Customer Support
5. Stream your favorite programs
6. Online Account Management

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GET FIBER BROADBAND
MONTHLY PLANS STARTING AT $59.99

GIGABIT BROADBAND
INSTALLATION STARTING AT $199

We Just Installed Fiber Broadband for One of your Neighbors and It’s Available at your Home Today!

Sign Up NOW at: https://fiber.allpointsbroadband.com

CALL TODAY TO SCHEDULE YOUR INSTALLATION (888) 217-7827
ALL POINTS BROADBAND

FEATURES

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- Reliable High Speed Internet
- Low Latency for Gamers
- 24x7 Customer Support
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Enjoy fast downloads  Smooth streaming  Low latency

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We just qualified a new customer in your area and they can get up to

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Call Today to Schedule your Installation 888-888-8888!

Features:
- Unlimited Data Usage
- 24x7 Customer Support
- Reliable High Speed Internet
- Stream your favorite programs
- Low Latency for Gamers
- Online Account Management
CURRENT LESSONS

**Google Workspace: Gmail**
Learn the basic components of Gmail to help you send and receive emails.

- 1 activity

**Use Digital Tools for Everyday Tasks**
Learn to communicate more efficiently through emails, internet search, and digital documents.

- 7 activities
Avoid Online Scams
Learn to identify and avoid online scams by analyzing a real-life situation in a group.
1 activity

Build Healthy Digital Habits
Create a healthy technology balance by reflecting on digital habits with one of three creative projects.
4 activities

Edit Your Resume
Edit your resume to make it stronger and more appealing to an employer.
Use Google to Get a New Job

Conduct a successful job search using digital tools.

7 activities

Create a Budget in Google Sheets

Learn to make good financial decisions by researching and comparing costs and spending in a spreadsheet.

5 activities

Plan and Budget

Analyze spending, research costs, and plan for purchases using a spreadsheet.
# Applied Digital Skills

## Track Your Monthly Expenses
Use a spreadsheet to track your monthly expenses.

1 activity

### Progress summary
Number of students and percent completed

- **0**: 1

### Videos watched
- View lesson
- View materials

### Projects submitted
- View lesson
- View materials

### Quiz results
- View lesson
- View materials

## Connect and Collaborate From Anywhere with Digital Tools
 Improve your digital collaboration and communication skills using online tools.

1 activity

### Progress summary
Number of students and percent completed

- **0**: 1

### Videos watched
- View lesson
- View materials

### Projects submitted
- View lesson
- View materials

### Quiz results
- View lesson
- View materials
Welcome All Points Broadband Customer!

START LEARNING

Browse our lessons to start learning new skills.

My classes

All Points Broadband Digital Inclusion Academy

Class code: 7byvf6

Current lessons

Google Workspace: Gmail
0/1 activities completed

Use Digital Tools for Everyday Tasks
0/7 activities completed

Avoid Online Scams
0/1 activities completed
### Key Individual | Roles and Responsibilities | Previous Experience
---|---|---
Jimmy Carr – CEO (APB) | CEO, APB | See below
Sean Flora | Director of Fiber Construction, APB | See below
Brandon Ogilvie | CFO, APB | See below
Tom Innes | SVP of Public-Private Partnerships, APB | See below
Chuck Hogg | SVP of FTTH Deployments, APB | See below
Darren Glatt | Partner and Co-Head of Infrastructure Investing, Searchlight Capital Partners | See below
Ajit Pai | Partner, Searchlight Capital Partners | See below
Ed Diggs | Manager, Rural Broadband, Dominion | See below
Mark Ponton | Director of Broadband and Fiber Services, Rappahannock Electric Cooperative | See below
Wayne Hannah | VP and Chief Information Officer, Shenandoah Valley Electric Cooperative | See below
Brandon Davis | Executive Director, Northern Shenandoah Valley Regional Commission | See below

**Jimmy Carr, Chief Executive Officer**

Jimmy is the Chief Executive Officer of All Points Broadband. In this role he is responsible for the Company’s strategic direction and is focused on expanding All Points’ portfolio of public-private partnerships to provide fiber-to-the-home access to currently unserved areas in partnership with investor-owned and cooperative electric utilities.

After growing a successful rural-focused internet service provider in another market, he founded All Points to bring state-of-the-art connectivity to underserved communities in Virginia, Kentucky and throughout the mid-Atlantic. Jimmy is a former member of the Board of Directors of the Wireless Internet Service Providers Association and former Chairman of its Government Affairs Committee. He represents the rural broadband industry on the Virginia Broadband Advisory Council and has testified before the U.S. Senate and Virginia General Assembly as an expert on rural broadband deployment.

Jimmy was the principal architect of All Points’ innovative strategy to partner with investor-owned and cooperative electric utilities to achieve universal FTTH access in APB’s partner jurisdictions. He led the APB team that developed and implemented this new approach with two electric utilities and five counties on Virginia’s Northern Neck and has developed the specific electric utility partnerships that will apply this approach for this project.

Before joining the telecommunications industry, Jimmy was an associate with the law firm of Sullivan & Cromwell LLP. He previously served as Virginia’s Assistant Secretary of Transportation in two administrations, directing legislative and regulatory affairs for six agencies with an annual budget in excess of four billion dollars. He is also the founder and principal architect of the public-private partnership to build the 55-mile Virginia Capital Trail.

Jimmy earned a law degree and an MBA at the University of Virginia, where he was the Managing Editor of the *Virginia Law Review*, President of the JD/MBA society and inducted into the Raven Society. He is an Order of the Coif graduate of the law school and received the business school’s Shermet Award and Faculty Award for Academic Excellence. Jimmy graduated from Davidson College *cum laude* and with departmental honors.
Sean Flora, Director of Fiber Construction

Sean Flora is All Points’ Director of Fiber Construction, overseeing the Company’s OSP engineering and construction activities. Sean and his team are responsible for delivering best-in-class, fiber-to-the-home networks to All Points’ partners and customers.

Prior to joining All Points, Sean spent 19 years at Cincinnati Bell in roles of increasing responsibility, including Senior Manager of OSP Construction and Contracts and Senior Manager of OSP Engineering. Sean was instrumental in Cincinnati Bell’s FTTH deployments in multiple states.

Sean has been recognized as an ICT Visionary by ISE Magazine. He has served on the Fiber Broadband Association’s Technology Committee, as well as the Education Subcommittee for the past 5 years. Sean holds a B.A. in Communications from Northern Kentucky University.

Brandon Ogilvie, Chief Financial Officer

Brandon leads All Points Broadband’s finance and capital investment initiatives and oversees its accounting and administrative functions. He launched his career in Silicon Valley managing high-frequency product lines for telecommunications and networking applications. After relocating to Virginia, he formed a renewable energy company with a team of talented individuals where, as CFO, he led the development and financing of bioenergy facilities with rated outputs up to 50 MW. More recently he served as President and CFO of a national fuel distributor for five years.

Brandon earned an MBA from the University of Virginia’s Darden School of Business where he was inducted into the Raven Society, received the Shermet Award, and was awarded the Thomas G. Labrecque Scholarship for Ethics. He graduated from Purdue University with highest distinction earning a B.S. and M.S. in Civil Engineering.

Tom Innes, Senior Vice President, Public-Private Partnerships

Tom works with All Points’ partners to structure public-private partnerships that bring high-quality, FTTH broadband to unserved areas. He also manages APB’s human capital functions.

Tom holds an MBA and a Master of Arts in Public Policy from the College of William & Mary. Prior to William & Mary, Tom was a civil engineer at The Louis Berger Group. He graduated from the Virginia Military Institute, where he earned a B.S. in Civil Engineering. He is a native of Richmond, Virginia and is an Eagle Scout.

Chuck Hogg, Senior Vice President for Fiber to the Home

Chuck is All Points’ SVP for Fiber to the Home deployments and technical lead for All Points’ groundbreaking partnerships with electric utilities. Prior to joining All Points, Chuck co-founded and spent 13 years growing Shelby Broadband, a highly successful, rural-focused ISP acquired by All Points in 2018.

Chuck is a recognized industry leader and pioneer in the conversion of fixed wireless networks to FTTH. He has served on the Board of the Wireless Internet Service Providers Association for 10 years and currently serves as its Vice Chairman. Chuck’s career has included owning and partnering in various internet and technology companies, including Shelby Broadband, QuickLink Wireless, VIA Studio, FatHosting, AC Ventures, and Avolutia Ads. Chuck earned his BSBA in Information Systems from Xavier University.
Darren Glatt, Director and Operating Partner

Mr. Glatt is a Partner and Co-Head of Infrastructure Investing at Searchlight Capital Partners, overseeing the firm’s efforts in the Technology, Media and Telecommunications (“TMT”) sectors. Mr. Glatt is actively engaged in All Points’ public-private partnerships. Prior to joining Searchlight in 2013, Mr. Glatt worked as a Partner in the Private Equity Group at Apollo Management, L.P., where he focused on both equity and credit investing in a range of industries that included TMT, Consumer, Leisure and Shipping, among others. Mr. Glatt also held positions at Apax Partners and The Cypress Group. He started his career at Bear Stearns in 1998 in New York. Mr. Glatt is a currently a member of the Boards of Bezeq and B Communications Ltd., and formerly a member of the Boards of Charter Communications, Rackspace, Ocean Outdoor, PatientPoint, MediaMath, 160over90, PlayPower, Veritable Maritime and Core Media. Mr. Glatt received a BS from The George Washington University and an MBA from Harvard Business School.

Ajit Pai, Director and Operating Partner

Ajit Pai is a Partner at Searchlight Capital Partners who focuses on the firm’s broadband and digital infrastructure efforts and is one of Searchlight’s representatives on All Points’ Board of Directors. Ajit served as Chairman of the FCC from January 2017 until January 2021. During Pai’s tenure at the FCC as both Commissioner and Chairman from 2012-2021, he implemented major initiatives to help close the digital divide including the Connect America Fund and the Rural Digital Opportunity Fund; advance U.S. leadership in 5G, Open Radio Access Networks, Wi-Fi 6, and other wireless technologies; promote innovation; protect consumers, public safety, and national security; and make the agency itself more open, transparent, and data-driven. Earlier in his career, he served in various positions of increasing responsibility at the FCC, the U.S. Department of Justice, and the U.S. Senate. Before becoming a Commissioner at the FCC, he worked as a Partner at the law firm of Jenner & Block and served as in-house counsel at Verizon. Mr. Pai graduated with honors from Harvard University in 1994 and from the University of Chicago Law School in 1997.

Ed Diggs, Manager, Rural Broadband Program

Mr. Diggs is a Manager in Dominion Energy Virginia’s Rural Broadband Program and will be responsible for coordinating the company’s participation in this project. Mr. Diggs led Dominion’s Rural Broadband Program during its pilot phase and was instrumental in creating the framework that Dominion and All Points now apply to all of their coordinated projects to deliver universal FTTH broadband in currently unserved areas.

Prior to launching Dominion’s Rural Broadband Program, Mr. Diggs held a series of roles of increasing responsibility within the Company, including Project Manager, Right of Way Design Supervisor and Electric Distribution Design Supervisor.

Mark Ponton, Director of Broadband and Fiber Services

Mr. Ponton is Rappahannock Electric Cooperative’s Director of Broadband and Fiber Services. In this role, he is responsible for directing REC’s fiber utility network project, negotiating contracts with broadband service providers and working with counties in REC’s service territory on broadband initiatives. Mr. Ponton has coordinated high-level design activities with All Points and will coordinate REC’s ongoing involvement in this project.

Prior to his current role, Mr. Ponton was REC’s supervisor of SCADA load management and telecommunications. He earned an associate’s degree of Applied Science in computer technology from ECPI and a bachelor’s degree in leadership and management from the University of Mary Washington.
Wayne Hannah, VP and Chief Information Officer

Mr. Hannah is VP and Chief Information Officer of Shenandoah Valley Electric Cooperative. He is charged with leading SVEC’s information technology activities and will manage SVEC’s participation in this project.

Prior to joining SVEC, Mr. Hannah spent five years serving as Augusta County’s Director of Management of Information Systems. He holds a Bachelor of Science in Computer Science from Mississippi College and received a Management Intern Program Certificate from the National Rural Electric Cooperative Association.

Brandon Davis, Executive Director, Northern Shenandoah Valley Regional Commission

Brandon is the Executive Director of the Northern Shenandoah Valley Regional Commission. He is responsible for setting the strategic direction of the organization and executing regional projects that promote collaboration among the region’s jurisdictions. Prior to joining the Commission in February of 2016, he spent 10 years in service to Virginia local governments in various leadership related to management, planning, and community development. He holds a Bachelor’s Degree from James Madison University in Public Administration, a Master’s Degree in Business Administration from Liberty University, as well as a Graduate Certificate in Local Government Management from Virginia Tech. A native of rural Bedford County, Virginia, he now resides in the Shenandoah Valley with his wife and three children.