King William County
King William County 2022 Accelerated Fiber Deployment Initiative

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<td>Virginia Telecommunications Initiative 2022</td>
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<tr>
<td>Profile Manager Name:</td>
<td>Juanita McInteer</td>
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<tr>
<td>Profile Manager Phone:</td>
<td>(804) 769-4968</td>
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<tr>
<td>Profile Manager Email:</td>
<td><a href="mailto:jmcinteer@kingwilliamcounty.us">jmcinteer@kingwilliamcounty.us</a></td>
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<td>Project Name:</td>
<td>King William County 2022 Accelerated Fiber Deployment Initiative</td>
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<tr>
<td>Project Contact Name:</td>
<td>Steve Hudgins</td>
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<td>Project Contact Phone:</td>
<td>(804) 769-4926</td>
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<td>Project Contact Email:</td>
<td><a href="mailto:shudgins@kingwilliamcounty.us">shudgins@kingwilliamcounty.us</a></td>
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<tr>
<td></td>
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## Budget Information:

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## Budget Narrative:

This project seeks VATI funding in the amount of $5,400,000 to support deployment of universal broadband in King William County.

## 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 King William County is for the King William County 2022 Accelerated Fiber Deployment Initiative (“Initiative”) and is submitted by King William County (“County”) and All Points Broadband (“APB” or “All Points”), as applicant and co-applicant, respectively.

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

   In September of 2020, the County and All Points entered into a Broadband Partnership Agreement (see Attachment 8) through which the County engaged All Points as a broadband deployment partner to pursue broadband deployment for all areas of the County that are unserved by broadband, with the objective of developing and implementing a strategy for achieving universal broadband availability in the County.

   In November of 2020, the County, All Points and Dominion Energy Virginia ("Dominion") entered into a Memorandum of Understanding (see attachment 8) pursuant to which All Points assumed primary responsibility for developing a VATI-eligible network that would offer FTTH service to all locations within the County that are unserved by broadband.

   From September of 2020 until the date of this application, APB and County staff have held routine coordination meetings to refine the proposed project.
In June of 2021, APB and Rappahannock Electric Cooperative (“REC”) entered into an MOU pursuant to which REC agreed to partner with APB to extend FTTH service into unserved areas of the County, leveraging the extensive Fiber Utility Network that REC is constructing to support and modernize its electric grid (see Attachment 8).

To determine the proposed project area, All Points’ field teams visited and visually inspected all areas within the County where incumbent cable 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 the County and compared to County information gathered from previous studies and analysis.

Jointly, the County and 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 500 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 the unserved locations in the County will be included in the proposed project.

The project will extend FTTH infrastructure so that broadband service will be made available to 2,236 discrete locations in the County. On the basis of the extensive field inspections, comparisons to County data, and the online survey results, the County and All Points agree that the proposed project area will provide broadband access to all of the locations in the County that remain unserved by broadband as of the date of this application. The primary reason why the proposed project area was selected is because the proposed project area includes the remaining unserved locations in the County.

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. Approximately 50% of the project area is within Dominion’s electric service area, and Dominion is participating in this project pursuant to Virginia Code §56-585.1:9, as amended, (the "Utility Leverage Statute").

The remaining 50% of the project area is within REC’s electric service area. 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.
By partnering with Dominion under the Utility Leverage Statute and REC through its Fiber Utility Network, All Points and the County 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 approximately 1,626 Low or Moderate Income (“LMI”) households. LMI households account for approximately 72% of all households in the proposed project area, 31% of which are considered low income and 41% are considered moderate income. The project will therefore have a significant benefit by making high quality broadband available to 1,626 LMI households, which is the total number of remaining unserved LMI households in the County.

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:

The wireline broadband provider in the County is Atlantic Broadband, which has a franchise agreement with the County.

The proposed project area contains those communities and neighborhoods where Atlantic Broadband is not required to complete network buildout under the thresholds in the County’s franchise agreement and where Atlantic Broadband is not a provisional winner of RDOF support. 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.

On July 15, 2021, All Points submitted a petition 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.

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:

Other than RDOF funding discussed below, no federal grant funds have been awarded to any portion of the County or in any portion of the proposed project area. The Maps attached in Attachment 2 demonstrate that no area of the County, nor any portion of the proposed project area, has received any federal broadband-related funding other than RDOF.
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 a map showing the RDOF areas in the project area, including those areas where APB was the RDOF winner, and areas where another provider was the provisional RDOF winner. As set forth in Attachment 3, 713 locations in the project were awarded to APB in RDOF. The project also includes 1,827 locations provisionally awarded to another RDOF bidder.

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. Neither All Points nor the County were able to field-verify that any fixed wireless provider offers speeds of 25/3 in any of the areas to be served by the project. None of the locations in the proposed project area that completed the broadband survey used to confirm the proposed project area indicated the ability to subscribe to fixed wireless service of 25/3 or greater.

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

The map of currently served areas in the County 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 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 County and All Points as required by VATI and Utility Leverage program rules.
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 passings by type, each of the 2,236 locations in the project area were cross-referenced with parcel-specific land use data in the County’s GIS database. This process resulted in 2,047 passings categorized as residential, 81 passings categorized as non-home based businesses, 18 residential passings where a home based business was located, 6 community anchor institutions, and 102 passings categorized as non-residential.

Among the business passings in the proposed project area are Altura Farm and Augusta Lumber.

Among the community anchors in the proposed project area are 2 Pamunkey Indian Tribal Government Buildings, the Pamunkey Indian Museum and Cultural Center, the Pamunkey Indian Community Center, the Mattaponi Tribe building and the Mangohick Volunteer Fire Department.

b. The number of residential, business, non-residential and community anchors that are within APB’s RDOF areas that are in the project area are set forth in Attachment 3.

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 1,765 of the passings in the proposed project area (of which 562 are within APB’s RDOF areas) lack access to wireline service of at least 10/1 Mbps. This estimate was developed by comparing the most recent data available from FCC Form 477.
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.

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 sharing of bandwidth may occur 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 County. The network includes approximately 250 miles of distribution fiber, of which approximately 37 miles consist of routes within REC’s Fiber Utility Network. Approximately 149 miles will be built by All Points and approximately 64 miles will be built by Dominion pursuant to the Utility Leverage Statute. The final mileage to be constructed by Dominion is contingent of 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 three upstream connection points to All Points’ network core in the data center cluster in Ashburn, Virginia and one independent connection 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 stands, 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 1 fiber feeder hub and approximately 8 fiber distribution hubs. Service drops will be made to one of approximately 488 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
King William County began exploring options for broadband coverage in February 2017 through a sub-committee of the County’s Economic Development Authority. A request for information was released and several providers expressed interest, but the investment capital needed was unaffordable at that time, especially since there was no middle-mile infrastructure available to leverage. The King William Internet Connectivity (KWIC) committee stayed engaged at the regional, state and even federal levels with various programs to determine if any synergies could be developed. In early 2019, it was able to leverage off of a King William County Public Schools (KWCPS) project that upgraded from relatively old, nearly obsolescent fiber connectivity to modern fiber through Lumos. The high school as well as three other schools located at a campus just east were outfitted with gigabit internet access. The County was able to extend from that fiber backbone to the County Administration complex as well as the County Courthouse shortly thereafter. Unfortunately, Lumos was not interested in partnering with the County to further develop infrastructure to residential users.

In the Fall of 2019, the County was contacted by Atlantic Broadband (ABB) which was providing services in several adjacent counties. ABB was in the process of buying an existing COMCAST cable TV franchise which had deteriorated to the point where less than 100 subscribers were still receiving service. Their concept was to use this franchise agreement to replace old coaxial cable with modern fiber. Construction began in early 2020, primarily in the denser areas of the County. ABB currently supports about 2,500 residential and business locations with FTTH services.

In May of 2020, The County issued an RFP to select a broadband deployment partner to develop and implement a strategy to achieve universal broadband in the County. After a competitive selection process, in September of 2020, the County and All Points entered into a Broadband Partnership Agreement (see Attachment 8) through which the County engaged All Points as a broadband deployment partner to pursue broadband deployment for all areas of the County that are unserved by broadband, with the objective of developing and implementing a strategy for achieving universal broadband availability in the County. All Points subsequently recruited Dominion and REC to partner with APB and the County to finally achieve universal coverage in the County.

As discussed above, the County and All Points have undertaken extensive field inspections, franchisee network review, and community outreach to ensure that all remaining unserved locations in the County are included in the proposed project area. All Points’ field teams visited and visually inspected all areas within the County where the incumbent cable 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 the County and compared to County information gathered from previous studies and analysis.
All Points and the County 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. The County and members of the Board of Supervisors publicized this survey through email communications and news coverage to ensure it was widely available. More than 500 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 the unserved locations in the County will be included in the proposed project.

Because this project includes all 2,236 locations in the County that remain unserved, completing the project will achieve universal broadband in the County.

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 September of 2020, the County and APB entered into an agreement (Attachment 8) through which the County engaged APB as a broadband deployment partner.

In November of 2020, the County, APB and Dominion Energy Virginia ("Dominion") entered into a MOU (attachment 8) pursuant to which APB assumed primary responsibility for developing a VATI-eligible network that would offer FTTH service to all unserved locations in the County.

From September of 2020 until the date of this application, APB and County staff have held routine coordination meetings to refine the proposed project.

In February of 2021, APB was provisionally awarded RDOF funds for part of the proposed project area.

In March of 2021, APB, Dominion and the Pamunkey Indian Tribe entered into an MOU (see Attachment 8) to expand APB’s network in the County to extend FTTH service to the Pamunkey Indian Reservation.

In May of 2021, APB commenced low-level design for the portion of the project that is within its RDOF areas in the
In June of 2021, REC entered into an MOU pursuant to which REC agreed to partner with APB to extend FTTH service into additional unserved areas of the County outside of APB’s RDOF areas, leveraging the extensive Fiber Utility Network (see Attachment 8).

In June and July of 2021, APB completed high-level network design for the expanded project outside of APB’s RDOF area in collaboration with Dominion and REC. The network design for the expanded project now incorporates those design consultations with Dominion and REC, including the specific routes to be constructed by Dominion and REC. The high-level network design is now complete.

REC commenced construction of its Fiber Utility Network in late 2020 and is on schedule for completion by Q4 2022.

In July of 2021, APB included the proposed project in a petition to DHCD for a certification that the proposed project area is unserved for purposes of the Utility Leverage Statute. Upon receipt of DHCD’s final determination regarding the Utility Leverage petition, APB and Dominion will finalize the petition to be submitted to the SCC.

In August of 2021, APB and REC agreed on the terms that will apply to APB’s use of REC’s network and commenced make-ready analysis for all fiber distribution routes 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.

Through our shared experience achieving SCC approval of Dominion’s participation in the VATIC-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 All Points 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 of Dominion’s petitions under the Utility Leverage Statute. All Points commenced final design for this project in July and will complete final design during the pendency of the SCC petition.

Dominion and REC have assigned dedicated project managers who will lead their involvement in this project.
APB and Dominion have an agreed form of fiber lease in place for the project.

AFL Telecommunications, APB’s cable manufacturer, has allocated committed manufacturing capacity to support APB’s requirements and specific schedule for this project (see Attachment 13). 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 anticipates initiating contact with potentially affected property owners regarding the project and commencing discussions regarding easements and related rights in the first quarter 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 held by the electric utilities, 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 Q3 of 2022.

All Points will construct its last-mile infrastructure concurrently with Dominion’s and REC’s construction. APB will deploy and provision service terminals and service drop in conjunction with the utility construction schedules so that end users can be connected to the network as soon as there is distribution fiber in place.

Once construction has commenced, APB will be able to rapidly deliver service to customers who have pre-registered their locations for service. To date, more than 500 online surveys have been completed by residents and property owners who have provided their contact information, pre-registered for service and requested to be contacted when service becomes available.

To ensure the network is successfully and promptly used by presently unserved locations, APB will begin marketing the network to potential customers as soon as the SCC has ruled on the SCC Petition.

The County will serve as fiscal agent and administer VATI funds for the project.

Substantial completion of the project will be complete 18 months from grant award and receipt of final SCC approval.
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:

King William County 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 $17,730,632 and this application is requesting VATI funds in the amount of $5.4 million representing 30.5% of the total project cost. All Points will be responsible for providing $6,625,732, representing 37.4% of the total project cost. The County is contributing $2.5 million, representing 14.1% of the total project cost. Dominion is anticipated to invest $3,204,900, representing 18.1% of the total project cost, pending SCC approval of Dominion’s participation in this project.

The County’s commitment of $2.5 million is reflected in the County’s letter included in Attachment 10.

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 an MOU with All Points and the 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:**

The County has provided extensive in-kind support to the planning process that resulted in the proposed project. Since September of 2020, senior County personnel have participated in routine coordination meetings with the APB project team. The 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.

The County has invested $175,000 to engage APB through the Broadband Partnership Agreement that resulted in this application.

The County will also administer the VATI grant funds and support project construction without charging administrative costs to the project.
All Points has dedicated a full-time sales manager who will oversee all marketing and adoption activities within the County and APB has allocated a $125,000 marketing budget for the project in its first two years (which is not included in the project budget set forth in this application).

Dominion and REC 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 of in the form of $1,306,000 in cost savings.

All Points and the Pamunkey Indian Tribe have submitted an application to the NTIA for grant funding that will enable All Points to provision FTTH service to all of the 57 locations on the Reservation, including all of the community anchor institutions, and enable All Points to provide five years of symmetrical gigabit internet access service to all locations on the Reservation for five years, at no cost to the end user.

Support from the locality and electric utility partners will continue through final design and construction. The relevant County supervisors will participate in joint marketing events and public meetings to market the project and encourage adoption by their residents. 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.

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:

APB has already performed substantial marketing activities. The same survey that APB and the County made available to determine broadband availability provided the option for locations within the project area to subscribe for project updates and request to be contacted in advance of service availability. To date, more than 500 surveys were completed.
by residents who provided their contact information, pre-registered for service and requested to be contacted when service 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 $125,000 marketing budget for the project in its first two 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 members of the County Board. APB will also use its website, social media, and yard signs to market the service.

APB will also leverage REC customer marketing channels to reach potential customers, including direct communications to REC’s members via email and regular mail, and use of REC’s magazine, website and social media. All marketing will direct potential customers to APB’s Crowd Fiber tool to preregister for service. APB will use Crowd Fiber tool to accept pre-registrations from customers and to keep them customers informed regarding the deployment schedule.

APB and the County will conduct media events to keep media outlets informed about the project and generate media coverage to reinforce APB’s marketing activities. As each area of the network is nearing completion, APB will use the preferred contact method selected by each pre-registered customer to inform them of their service availability date and to schedule installations. As of the date of this application, more than 500 preregistrations have been entered into APB’s system.

The County will leverage community events to ensure that residents and businesses in the proposed project area are aware of their access to broadband. APB 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 APB’s Digital Academy is described below and in Attachment 18.

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

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.

In addition, 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.

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.

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 service is available, APB will provide service drops to all passings, regardless of drop length, for the same fixed installation fee of $199.

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.

All Points and the Pamunkey Tribe have applied to the NTIA for grant funding that will enable APB to provision FTTH service to all of the 57 locations on the Reservation, including all of the community anchor institutions, and enable APB to provide five years of gigabit internet access service to all locations on the Reservation for 5 years, at no cost to the end user. As part of this grant, the Pamunkey Tribe will provide each household on its reservation with a $200 voucher to use to purchase an Internet enabled device.

All Points and the County will partner with the County’s library system to conduct digital literacy training and awareness events.

All Points has developed a Digital Inclusion Academy through Google for Education (see Attachment 18), which...
includes courses such as "Use Digital Tools for Everyday Tasks", "Avoid Online Scams", "Build Healthy Digital Habits", "Edit Your Resume". All Points will offer free access to this Academy.

The County will support community events to ensure that residents and businesses in the proposed project area are aware of their new ability to access broadband, and of the affordable pricing tiers offered by APB.

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 the County, All Points, Dominion and REC:

<table>
<thead>
<tr>
<th>Key Individual</th>
<th>Roles and Responsibilities</th>
<th>Previous Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jimmy Carr – CEO (APB)</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>
</tr>
<tr>
<td>Brandon Ogilvie</td>
<td>CFO, APB</td>
<td>See attachment 20</td>
</tr>
<tr>
<td>Tom Innes</td>
<td>SVP of Public-Private Partnerships, APB</td>
<td>See attachment 20</td>
</tr>
</tbody>
</table>
King William County
King William County 2022 Accelerated Fiber Deployment Initiative

*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

*Steve Hudgins*
Project Lead, King William County
See attachment 20

Additional information regarding the County, All Points and project team members is set forth in Attachment 20.

King William County receives annual grants from the Virginian Department of Criminal Justice, Department of Motor Vehicles, Commission of the Arts and several other state entities totaling over $250,000. All of the grants require online quarterly, semi-annual, or annual reporting. The County also received over two million dollars in CARES funding in
March 2020 and have accurately tracked and reported those quarterly expenditures to the Auditor of Public Accounts for the State.

The County is well versed in detailed tracking and reporting of all funds back to the appropriate grantors through their online reporting portals and other tracking systems.

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 $17,730,632 and this application is requesting VATI funds in the amount of $5.4 million representing 30.5% of the total project cost. All Points will be responsible for providing $6,625,732 million, representing 37.4% of the total project cost. The County is contributing $2.5 million, representing 14.1% of the total project cost. Dominion’s investment included in the project budget is limited to that portion of its costs that will be allocated to broadband deployment.

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 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.
18. The cost benefit index is comprised of state cost per unit passed. Individual cost benefit scores are calculated and averaged together to create a point scale for a composite score. Provide the following:
   a. Total VATI funding request
   b. Number of serviceable units
      (up to 125 points)

   **Answer:**
   a. This application is requesting VATI funds in the amount of $5.4 million.

   b. 2,236

19. **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. In the project area, there are 81 business passings and 6 community anchor passings.

   Among the business passings in the proposed project area are Altura Farm and Augusta Lumber.

   The community anchors in the project are 2 Pamunkey Indian Tribal Government Buildings, the Pamunkey Indian Museum and Cultural Center, the Pamunkey Indian Community Center, the Mattaponi Tribe building and the Mangohick Volunteer Fire Department.

   The project will extend FTTH broadband access to the Pamunkey Tribe’s Reservation in the County. The Reservation is home to 48 separate households and 93 residents. Of the 48 households, 50% are below the 150% poverty level. The Tribe and APB have also collaborated on an application to the NTIA for grant funding that will enable APB to provision FTTH service to all of the 57 locations on the Reservation, and enable APB to provide 5 years of gigabit internet access.
service to all locations on the Reservation for five years, at no cost.

The project will also extend FTTH broadband access to the Mattaponi Indian Reservation which is a second tribal reservation in the proposed project area.

b.

This project is a partnership between the County, a last-mile ISP, and two electric utilities, and is following the successful model developed by APB and Dominion for the Northern Neck Initiative that was also supported by VATI funding.

This project does not take an incremental, "cherry picking" approach. Instead, it represents the County’s comprehensive strategy for achieving universal broadband access in the County.

The project leverages the Utility Leverage Statute with an investor-owned utility and the participation of an electric cooperative (REC) to simultaneously upgrade and harden Virginia’s electric grid while making last-mile FTTH available to all remaining unserved locations in the County. Pursuing these two objectives simultaneously reduces aggregate costs for all the partners and benefits the entire community. Achieving universal broadband access throughout the County will only be possible if this project is leveraged in coordination with Dominion’s ongoing fiber-deployment activities in the manner contemplated by the Utility Leverage Statute and with REC’s deployment of its network.

The project also includes a unique partnership between APB and the Pamunkey Tribe. APB, Dominion and the Tribe have entered into an MOU to expand broadband onto the Tribal Reservation. The Tribe and APB have also collaborated on an application to the NTIA for grant funding that will enable APB to provide FTTH service to all of the 57 locations on the Reservation for 5 years at no cost.

c.

The project will therefore have a significant benefit by making high quality broadband available to 1,626 LMI households, which is the total number of remaining unserved LMI households in the County. The broadband digital equity and inclusion programs made available to LMI households would not be limited to the estimated number of households at the time of application; instead, LMI households would be deemed eligible on a rolling basis throughout the duration of the project.

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.

Through the partnership with the Pamunkey Tribe described above, all tribal residents will receive five years of symmetrical gigabit service at no cost.

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

   Attachment1ProjectAreaMapKingWilliam9132021111246.pdf

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

   Attachment2DocumentationonFederalFundingAreaKingWilliam911202183640.pdf

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

   Attachment3RDOFAwardedAreasandFormincludedinVATIApplicationKingWilliam914202164222.pdf

Documentation that proposed project area is unserved based on VATI criteria

   Attachment4DocumentationUnservedAreaVATICriteriaKingWilliam914202132341.pdf
King William County
King William County 2022 Accelerated Fiber Deployment Initiative

Passings Form (Use template provided)
Attachment5PassingsFormKingWilliam914202164409.pdf

Propagation Map if Wireless Project
Attachment6PropagationMapWirelessProjectsonly9122021111443.pdf

Timeline/Project Management Plan
Attachment7TimelineProjectManagementPlanKingWilliam9142021120644.pdf

MOU/MOA between applicant/co-applicant (can be in draft form)
Attachment8MOUBetweenCountyandCoApplicantKingWilliam913202130110.pdf

Funding Sources Table (Use template provided)
Attachment9FundingSourcesTableKingWilliam9122021103003.pdf

Documentation of Match Funding
Attachment10DocumentationofMatchFundingKingWilliam911202190856.pdf

Letters of Support
Attachment11LettersofSupportKingWilliam913202175738.pdf

Derivation of Cost/Project Budget (Use template provided)
Attachment12DerivationofCostsKingWilliam9122021102813.pdf

Documentation of Supporting Cost Estimates
Attachment13DocumentationofSupportingCostEstimatesKingWilliam9122021102727.pdf

Two most recent Form 477 submitted to the FCC or equivalent
Attachment14TwoMostRecentForm477sRedacted911202195608.pdf

Point and Polygon shapefiles, in.zip file form, showing proposed passings and project area
Attachment15PointandPolygonShapefilesKingWilliam9132021111534.zip
King William County
King William County 2022 Accelerated Fiber Deployment Initiative

For wireless applicants: shapefiles, in .zip file form, indicating RSSI projections in the application area
  Attachment16RSSIProjectionShapefiles9122021111501.pdf

Optional
  Attachment18AllPointsBroadbandDigitalInclusion911202191221.pdf

Optional
  Attachment17MarketingPlanKingWilliam913202150036.pdf

Optional
  Attachment20ProjectManagementTeamKingWilliam9142021120343.pdf
Attachment 2 – Documentation of Federal Funding – King William County
2022 Virginia Telecommunication Initiative (VATI)
RDOF Passings Form

<table>
<thead>
<tr>
<th>Type of Passings</th>
<th>Total Number of Passings in the Project Area that lie within Preliminarily Awarded RDOF Areas</th>
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<tr>
<td>Residential</td>
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<td>Businesses (non-home based)</td>
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<tr>
<td>Businesses (home-based)</td>
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<tr>
<td>Community Anchors</td>
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<tr>
<td>Non-residential</td>
<td>34</td>
</tr>
<tr>
<td>Total Number of RDOF Passings</td>
<td>713</td>
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</tbody>
</table>

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

**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.
<table>
<thead>
<tr>
<th>County</th>
<th>RDOF-Awarded Census Block Group ID</th>
<th>Locations within In Census Block Group</th>
<th>Estimated Passings in RDOF awarded areas within the VATI application area (by County)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Not Awarded to Co-applicant</td>
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<tr>
<td>King William</td>
<td>511019503002</td>
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<td>Awarded to Co-applicant</td>
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</table>
# 2022 Virginia Telecommunication Initiative (VATI) Passing Form

<table>
<thead>
<tr>
<th>Type of Passings</th>
<th>Total Number of Passings in the Project Area</th>
<th>Passings in the Project Area, without Special Construction Costs Required</th>
<th>Passings with Special Construction Costs budgeted in the Application</th>
<th>Number of Passings with Speeds at 10/1 or below in Project Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>1,394</td>
<td>1,394</td>
<td></td>
<td>1,124</td>
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<tr>
<td>Businesses (non-home based)</td>
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<td>Businesses (home-based)</td>
<td>13</td>
<td>13</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Community Anchors</td>
<td>6</td>
<td>6</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Non-residential</td>
<td>68</td>
<td>68</td>
<td></td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>1,523</td>
<td>1,523</td>
<td></td>
<td>1,203</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-
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

<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>
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<td>SCC Petition Preparation</td>
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<td>SCC Petition Pending</td>
<td>DOMINION/APB</td>
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<tr>
<td>APB Low Level Design</td>
<td>APB</td>
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<tr>
<td>Obtain Necessary Easements and Secure Rights</td>
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<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>
BROADBAND PARTNERSHIP AGREEMENT

This Broadband Partnership Agreement ("Agreement") dated as of the date last set forth below, is entered into by and between the King William County Economic Development Authority ("EDA") and All Points Broadband Partners, LLC ("APB"). EDA and APB are each a "Party" and collectively the "Parties".

WHEREAS, the EDA recognizes the critical importance of ensuring universal broadband access for all of the residents and businesses of King William County Virginia (the "County") in order to support economic development, educational advancement, and quality of life in the County; and

WHEREAS, the EDA desires to engage a broadband deployment partner to develop and execute a comprehensive strategy for achieving universal broadband access for all residents and businesses in the County; and

WHEREAS, the COVID-19 pandemic has caused significant disruption to the County’s customary modes of operation, including by significantly increasing the need to ensure that County employees can conduct business via teleworking and other remote means; and

WHEREAS, the COVID-19 pandemic has caused significant disruption to the County’s public education system, including by necessitating a shift to a blended or 100% distance learning model for all students for some or all of each week; and

WHEREAS, the EDA desires to engage a broadband deployment partner that can plan and deploy immediate upgrades to the existing broadband infrastructure in the County in order to maximize the ability of County employees and students in the County’s public school system to telework and fully participate in distance learning; and,

WHEREAS, the EDA desires to engage a broadband deployment partner that can plan and deploy immediate upgrades to the existing broadband infrastructure in the County in order to maximize the ability of County employees and students in the County’s public school system to telework and fully participate in distance learning; and,

WHEREAS, on behalf of the EDA, the County issued RFP 2020-09 dated May 28, 2020 (the "Procurement"), to which APB submitted a timely response dated June 29, 2020 and provided further information during a qualifications interview on August 5, 2020 (such response and further information, collectively, the "RFP Response").

NOW THEREFORE, the EDA and APB agree as follows.

1. Engagement of APB as Broadband Partner. EDA engages APB as its primary broadband deployment partner to pursue one or more broadband deployment projects for all of the areas of the County that are currently underserved or unserved by broadband with the objective of developing a strategy for achieving universal broadband availability in the County, obtaining state and federal grant funding to offset the costs of executing such strategy, and building, operating and maintaining new broadband infrastructure in the
County. Recognizing that APB will be its primary broadband deployment partner for the term hereof, the EDA agrees that it will not provide financial resources to broadband deployment proposals that are inconsistent with the whole-of-County approach the EDA has engaged APB to pursue in its delivery of the APB Services.

2. **Broadband Planning Scope of Work.** APB shall deliver those planning and feasibility services described in APB’s RFP Response (the “APB Services”). Without limiting the foregoing, the key milestones and indicative timeframes for such activities are set forth in Exhibit A.

3. **Broadband Service Objectives.** In performing the APB Services, APB shall prioritize deployments of gigabit-capable, fiber-to-the-home networks to the greatest extent feasible. The Parties aspire to establish broadband access with minimum download rates of at least 50 Mbps for all new deployments to be developed through the APB Services.

4. **Engagement of Partners.** APB has identified Dominion Energy Virginia and Rappahannock Electric Cooperative (“REC”) as immediate priorities for the establishment of deployment partnerships in pursuit of achieving universal access for the County. The extent to which REC elects to participate in any broader partnership for achieving universal broadband in the County will be determined by REC. APB will also seek to engage all other infrastructure partners whose existing, planned, or potential assets or deployments can support the achievement of universal broadband access in the most cost-effective manner.

5. **Regular Planning Meetings.** The Parties will designate a management committee comprised of relevant EDA and County personnel and senior management from APB, which management committee shall hold meetings no less than monthly (“Status Meetings”) to review the status of APB’s deliverables comprising the APB Services, and to discuss future steps and milestones related to the APB Services. At each Status Meeting, APB will present a written report of its activities and progress against milestones.

6. **Information Sharing and In-Kind Support for Grant Applications and Regulatory Proceedings.** Upon request from APB, the EDA agrees to provide, and agrees to cause the County to provide, APB with all relevant information in its possession that will facilitate APB’s provision of the APB Services. The EDA agrees to cause the County to designate one point of contact on the County’s GIS team to serve as the primary interface for APB’s broadband design and deployment activities. The EDA further agrees to cause the County to provide reasonable and customary in-kind support to APB in the development of grant applications and the advancement of regulatory proceedings related to the APB Services.

7. **Deployment and Operation of Broadband Networks.** APB will be solely responsible for building, operating and maintaining any new broadband infrastructure that is developed through the APB Services. Aside from the specific fees and in-kind assistance described in this Agreement, Neither the County nor the EDA shall have any further obligation to provide local matching funds or other financial support for deployment activities.
(collectively, “Local Match”), unless such Local Match is specifically agreed to by the EDA or the County in writing.

8. **Fees for the APB Services.** In exchange for the APB Services, the EDA agrees to pay APB the “Planning Services Fees” in the amount of one-hundred, seventy-five thousand dollars ($175,000). The first fifty thousand dollars ($50,000) of the Planning Services Fees shall be paid within 20 days of the execution of this Agreement, and the balance shall be paid in ten (10) equal installments, monthly in advance, commencing with the third month of the Initial Term.

9. **Discounted Fees for Cooperative Contracting.** In the event another County (or agency or instrumentality thereof) that is immediately adjacent to the County elects to engage APB under the Procurement in accordance with the provisions of Virginia Code §2.2-4304, the Planning Services Fees shall be reduced to one-hundred, fifty thousand dollars ($150,000).

10. **Optional Interim Deployment Services.** Upon the EDA’s request, APB will develop an interim deployment strategy to rapidly deploy fixed-wireless and other last-mile access technologies in order to ensure that, to the greatest extent achievable before December 30, 2020, the maximum number of County employees and County students have the ability to telework and participate in distance learning, respectively, (the “Interim Deployment Plan”), and present such Interim Deployment Plan to the EDA and the County. The Interim Deployment Plan will specify the costs the EDA and/or the County would incur for APB to purchase, install and operate all supplemental broadband infrastructure set forth in the Interim Deployment Plan for a period of no less than three years (or such longer period as APB and the EDA may agree) (the “Interim Deployment Costs”). Upon receipt of the Interim Deployment Plan, the EDA shall have thirty days to confer with APB to make adjustments or modifications to the Interim Deployment Plan, and to elect to engage APB to execute the Interim Deployment Plan as it may have been modified by the mutual consent of the Parties. In the event the EDA elects to engage APB to execute the Interim Deployment Plan, the EDA shall pay to APB the Interim Deployment Costs according to the schedule set forth in the Interim Deployment Plan.

11. **Term.** The Initial Term of this Agreement will be twelve months, commencing on the last date set forth below. At the conclusion of the Initial Term, this Agreement shall continue on a month-to-month basis until either Party provides the other with no less than 60 days advance notice of its intention to terminate this Agreement.

[SIGNATURE PAGE FOLLOWS]
WITNESSETH the following signatures:

KING WILLIAM COUNTY ECONOMIC DEVELOPMENT AUTHORITY
By: [Signature]
Date: 9-2-2020

ALL POINTS BROADBAND PARTNERS, LLC
By: [Signature]
James G. Carr, Chief Executive Officer
Date: 9-3-2020
EXHIBIT A

Key Deliverables

<table>
<thead>
<tr>
<th>Activity</th>
<th>Start Month</th>
<th>Complete Month</th>
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<tbody>
<tr>
<td>Contract Award</td>
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<tr>
<td>Detailed Needs Assessment</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Market &amp; Demographics Analysis</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Identification of opportunities to leverage existing infrastructure</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Project Scoping for Partnership with Dominion Under the Pilot Statute</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Project Scoping for Partnership with Rappahannock Electric Cooperative in Conjunction with Dominion</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Identification of Funding Resources for deployment</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Technology and Network Architecture Analysis</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Financial Feasibility Analysis</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Public Support Program Application Scoping</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Network Feasibility Study Complete</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Development of Materials in Support of SCC Petition for Pilot Statute Deployment with Dominion and Prosecution of SCC Petition in Conjunction with Dominion</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Coordination With Rappahannock Electric Cooperative Regarding Extension of Network Described in SCC Petition</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Prepare and Submit Other Grant Applications Consistent with Financial Plan on Rolling Basis</td>
<td>4</td>
<td>12</td>
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MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (this “Memorandum”) is made effective as of November 4, 2020 (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 King William County, Virginia (the “County”). Dominion and All Points are the “Organizing Parties”. The County and any additional counties that may subsequently execute this Memorandum are each a “Participating County,” and collectively, the “Participating Counties”. Dominion, All Points and each Participating County 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 pilot programs with broadband providers and local counties and municipalities to facilitate such expansion.

B. The County’s Economic Development Authority and All Points have entered into that certain Broadband Partnership Agreement dated as of September 2, 2020 (the “BPA”), pursuant to which All Points has been engaged to support the County’s efforts to increase broadband access.

C. Dominion and All Points have explored the feasibility of Dominion deploying middle mile infrastructure in 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.

D. 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 each Participating 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 each Participating County and use the additional Dominion fiber capacity to serve broadband end users in unserved locations in each Participating County, (iv) All Points and the County will collaborate to recruit and engage other partners, including other electric utility companies as appropriate, to advance the Project, and (v) each Participating County 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 each such Participating County shall be referred to as a “Project” and collectively, the “Projects.”

E. It is the intention of the Parties that each Project will result in the deployment of a fiber-to-the-premises last-mile broadband network to offer service to all locations within each Participating County 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 it proceeds.

NOW, THEREFORE, the Parties hereby agree as follows:

1. PROEDURE TO ADD PARTICIPATING COUNTIES
With the consent of all Organizing Parties that have executed this Memorandum, any new county that is invited to join this Memorandum by the Organizing Parties shall have until December 31, 2020 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 specified Project. Upon acceptance of the counterpart signature page by the Organizing Parties, such county shall become a Participating County.

2. INFORMATION SHARING AND COORDINATION
   
a) Each Participating County 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 each Project.
   
b) All Points will serve as the central conduit for all information sharing activities and will be responsible for overall coordination of each Project.
   
c) The Parties will coordinate any communication releases to the public, and all announcements are subject to the prior written consent of Dominion.

3. PHASE ONE TIMEFRAME AND ACTIVITIES
   
a) The Parties anticipate that Phase I of the Project will continue until approximately February 1, 2021.
   
b) During Phase I:
      
a. The Organizing Parties will conduct community and stakeholder engagement activities in each Participating County.
      
b. The Organizing Parties will collaborate to develop preliminary plans and design criteria that: (i) are consistent with the Broadband Statute, and (ii) facilitate the extension of broadband availability to as many presently unserved locations as possible.
      
c. All Points will perform a last-mile feasibility study (“Initial Feasibility Study”) for each of the Projects within each Participating County.
      
d. All Points will prepare a preliminary financial analysis for each of the Projects within each Participating Company.
   
c) At the Conclusion of Phase I:
      
a. All Points, in coordination with the other Organizing Parties, will present the results of the Initial Feasibility Study and financial analysis to each Participating County.
      
b. All Points will identify the cost of Proceeding to Phase II for each Participating County and identify grants and other sources of potential funding to reduce or eliminate each Participating County’s out-of-pocket costs to proceed.

4. 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 December 31, 2021.
   
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 Projects as set forth in the Initial Feasibility Study. Dominion and All Points anticipate that the Petition will be submitted on or about July 1, 2021. 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 Projects 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 each 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 complete preliminary last-mile designs for each Project based upon the Dominion middle-mile infrastructure and such network elements as any other additional partners desire to contribute to the Project. 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 Support Mechanisms”).

iii. All Points will prepare detailed financial plans for each Project. The 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 Counties.

iv. The Participating Counties, and each Organizing Party, as applicable, will agree to support application(s) for one or more grant programs (“Phase II Grants”) to partially offset the capital investments required to construct each Project. All Points will coordinate and oversee the development and submission of applications for Phase II Grants.

v. If the Petition related to each 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 appropriate.

5. 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.

6. GOOD FAITH COMMITMENT TO EACH PROJECT

a) Each Participating County 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 its Project, 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
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 a Participating County, to the address set forth on such Participating 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

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

ALL POINTS BROADBAND

[Signature]
Name: Jimmy Carr
Title: CEO

[SIGNATURE PAGE TO PHASE ONE MEMORANDUM OF UNDERSTANDING]
IN WITNESS WHEREOF, the Participating County named below has executed this Memorandum as of the Effective Date.

King William County, Virginia

Bobbie H. Tassinari, County Administrator

Name: Steve Hudgins
Title: King William, County Administrator

Address for Notice Information:

[SIGNATURE PAGE TO PHASE ONE MEMORANDUM OF UNDERSTANDING]
MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding ("MOU") is made effective as of June 30, 2021, by and between Rappahannock Electric Cooperative, a Virginia corporation ("REC") and All Points Broadband Partners, LLC, a Virginia limited liability company (collectively with its affiliates, "APB", and, collectively with REC, each a "Party" and collectively the "Parties").

1. **Purpose.** APB desires to offer high-quality, fiber-to-the-home ("FTTH") last-mile broadband service (the "Service") to locations within or adjacent to REC’s service territory and REC desires to facilitate the provision of Service to its members in a manner consistent with applicable law. This MOU sets forth certain mutual expectations between the Parties for developing and advancing their collaboration to support APB’s delivery of Service.

2. **Initial Areas.** The Parties have agreed to collaborate to expand access to the Service within and adjacent to REC’s service territory through two initial projects (each an "Initial Project"). The Initial Projects include initiatives to enable APB to make Service available to: (1) all currently unserved REC member locations within Culpeper County, Virginia, and (2) certain currently unserved REC member locations within King William County, Virginia. Culpeper County and King William County are each an "Initial County".

3. **Relation to Ongoing APB & Dominion Energy Virginia Initiatives in Initial Areas.** The Parties acknowledge and agree that APB and Dominion Energy Virginia ("Dominion") have related initiatives underway in each Initial County to make Service available to currently unserved locations within Dominion’s service territory in each Initial County (each such project, a "Dominion Project"), and that Dominion’s participation in each Dominion Project is subject to approval of the Virginia State Corporation Commission ("SCC"). The Parties intend to integrate each Initial Project with the related Dominion Project in a manner that will facilitate extension of Service to as many currently unserved locations as feasible within each Initial County. The anticipated timeframes set forth in Paragraph 6 below are intended to support APB’s ability to integrate each Initial Project with the related Dominion Project before the Dominion Projects are submitted for SCC approval, which submission is anticipated to be made on or about October 1, 2021.

5. **Middle-Mile Coordination.** REC intends to facilitate APB’s delivery of the Service by supporting the installation of middle-mile fiber within REC’s electric service territory. The specific manner by which REC will facilitate APB’s delivery of the Service (the "Support Mechanism") will be determined by REC in its sole discretion, and may include:
7. **Anticipated Timeframe.** The Parties anticipate the following timeframe for advancing the initial Projects.

<table>
<thead>
<tr>
<th>Date</th>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>By June 15, 2021</strong></td>
<td>APB to complete preliminary network design for each Initial Project and provide REC with specific REC routes where it will seek to lease capacity.</td>
</tr>
<tr>
<td><strong>By July 1, 2021</strong></td>
<td>REC and APB to agree on indicative terms for APB’s lease of middle mile capacity from REC in each Initial Project area.</td>
</tr>
<tr>
<td><strong>By August 1, 2021</strong></td>
<td>REC and APB to complete negotiation on the specific terms of each Definitive Agreement such that the final form of each Definitive Agreement is in a mutually agreed form.</td>
</tr>
<tr>
<td><strong>By September 1, 2021</strong></td>
<td>APB to integrate each Initial Project with the related Dominion Project prior to submission of the SCC petition for the related Dominion Project</td>
</tr>
</tbody>
</table>
8. Coordination with APB’s Design Process. During APB’s network design process, REC agrees to share commercially reasonable information regarding its assets, to make its personnel reasonably available to APB and APB’s third party service providers, on an occasional basis to answer customary questions, and otherwise to facilitate APB’s network design activities.

In witness whereof, the Parties have executed this Memorandum of Understanding as of the date first set forth above.

Rappahannock Electric Cooperative

By: John D. Hewa
Its: President & CEO

All Points Broadband Partners, LLC

By: James G. Carr
Its: Chief Executive Officer
PAMUNKEY INDIAN TRIBE
TRIBAL GOVERNMENT

Robert Gray
Chief

1054 Pocahontas Trail
King William, VA 23086
(804) 843-2353
FAX (866) 422-3387

September 12, 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

Dear Ms. Holmes:

I am pleased to express the support of the Pamunkey Indian Tribe (the “Tribe”) for the application submitted by All Points Broadband for Accelerated Fiber Deployment in King William County.

The Pamunkey Indian Reservation lies along the Pamunkey River in King William County. The Pamunkey Indian Reservation is home to 48 separate households and approximately 93 residents. Of the 48 households, 50% are below the 150% poverty level.

The Reservation is located in a rural area of Virginia that requires at least a 30-minute drive to the nearest facilities required for basic necessities such as food, gas, medical, etc. Other than satellite service, broadband service has not been available due to the low population density of the reservation and surrounding county. Cellular telephone service is extremely poor owing to the lack of broadcast towers due to the aforementioned low population density.

The Pamunkey Indian Reservation is also home to various community anchor institutions, including the Tribal Government Buildings, the Pamunkey Indian Museum and Cultural Center, the Pamunkey Indian Community Center and the Pamunkey Indian Pottery School.

The Tribe, All Points and Dominion Energy Virginia have entered into an MOU to deliver fiber-to-the-home broadband service to all of the locations on the Tribe’s Reservation. The Tribe and All Points have also collaborated on an application to the NTIA for grant funding that will enable All Points to provision FTTH service to all of the 57 locations on the Reservation, including all of the community anchor institutions, and enable All Points to provide five years of symmetrical gigabit internet access service to all locations on the Reservation for five years, at no cost to the end user.
We are pleased to partner with All Points to leverage federal funding to support the project that All Points and King William County are submitting to the VATIC program. This is a unique opportunity to finally deliver high quality broadband to the Pamunkey Indian Reservation.

Sincerely,

[Signature]

Robert Gray, Chief
Pamunkey Indian Tribe
## ATTACHMENT 9 - FUNDING SOURCES TABLE

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
<th>%</th>
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<tr>
<td>Requested VATI</td>
<td>$5,400,000</td>
<td>30.5%</td>
<td>Pending</td>
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<tr>
<td>King William County</td>
<td>$2,500,000</td>
<td>14.1%</td>
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<td>Electric Utility, DEV</td>
<td>$3,204,900</td>
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<td>All Points Broadband</td>
<td>$6,625,732</td>
<td>37.4%</td>
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<tr>
<td><strong>Total Funding Sources</strong></td>
<td><strong>$17,730,632</strong></td>
<td><strong>100.0%</strong></td>
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</tbody>
</table>
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 King William County (the “County”) for the application to be submitted by the County and All Points Broadband, as applicant and co-applicant, respectively, to the 2022 Virginia Telecommunication Initiative (the “VATI Application”).

At its meeting on August 23, 2021, the County’s Board of Supervisors voted to approve submission of the VATI Application, and authorized a local match commitment of $2,500,000 to be included with the VATI Application.

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

Sincerely,

Steve Hudgins
Interim County Administrator
King William County
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 Zippy 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
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
## 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>
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</thead>
<tbody>
<tr>
<td>Final Design and Engineering</td>
<td>$692,058</td>
<td>$346,029</td>
<td>$346,029</td>
<td>Tilson</td>
<td>8/20/21</td>
</tr>
<tr>
<td>Project &amp; Construction Mgmt.</td>
<td>$1,000,827</td>
<td>$500,413</td>
<td>$500,413</td>
<td>Tilson</td>
<td>8/20/21</td>
</tr>
<tr>
<td>Headend/Central Office</td>
<td>$276,927</td>
<td>$106,069</td>
<td>$170,858</td>
<td>Tilson</td>
<td>8/20/21</td>
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<tr>
<td>Field Network Equipment</td>
<td>$241,755</td>
<td>$92,598</td>
<td>$149,158</td>
<td>Tilson</td>
<td>8/20/21</td>
</tr>
<tr>
<td>Utility Middle Mile</td>
<td>$3,204,900</td>
<td>-</td>
<td>$3,204,900</td>
<td>APB / Tilson / DEV</td>
<td>9/10/21</td>
</tr>
<tr>
<td>Aerial Make Ready &amp; Construction</td>
<td>$8,593,853</td>
<td>$3,291,635</td>
<td>$5,302,218</td>
<td>AFL / Tilson / REC</td>
<td>8/20/21</td>
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<tr>
<td>Underground Construction</td>
<td>$190,438</td>
<td>$72,942</td>
<td>$117,496</td>
<td>Tilson</td>
<td>8/20/21</td>
</tr>
<tr>
<td>Fiber Drop Construction</td>
<td>$2,400,089</td>
<td>$597,942</td>
<td>$1,802,147</td>
<td>AFL / Tilson</td>
<td>8/20/21</td>
</tr>
<tr>
<td>Subscriber Equipment &amp; Installation Labor</td>
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<td>$118,841</td>
<td>$358,177</td>
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<td>8/20/21</td>
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<td>Other Capex</td>
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<td>$173,054</td>
<td>$278,758</td>
<td>APB / Tilson</td>
<td>8/20/21</td>
</tr>
<tr>
<td>Construction Bond (1.5%)</td>
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<td>$100,477</td>
<td>$100,477</td>
<td>APB</td>
<td>9/10/21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td>$5,400,000</td>
<td>$12,330,632</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** please see Attachment 13 for unit and unit cost assumptions used to tabulate total cost
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 (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,

[Signature]

Ryan O’Sullivan
Director, Rural Fiber to the Home (RFTTH) Program Management
## ATTACHMENT 13 - DOCUMENTATION OF SUPPORTING COST ESTIMATES

### PROJECT COST ROLLUP

<table>
<thead>
<tr>
<th>Category</th>
<th>Unit of Measure</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Design and Engineering</td>
<td>Miles</td>
<td>250.7</td>
<td>$2,761</td>
<td>$692,058</td>
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<tr>
<td>Project &amp; Construction Mgmt.</td>
<td>Miles</td>
<td>250.7</td>
<td>$3,993</td>
<td>$1,000,827</td>
</tr>
<tr>
<td>Headend/Central Office</td>
<td>Project</td>
<td>1</td>
<td>$276,927</td>
<td>$276,927</td>
</tr>
<tr>
<td>Field Network Equipment</td>
<td>Meters</td>
<td>2,236</td>
<td>$108</td>
<td>$241,755</td>
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<tr>
<td>Utility Middle Mile</td>
<td>Meters</td>
<td>641</td>
<td>$50,000</td>
<td>$3,204,900</td>
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<tr>
<td>Aerial Make Ready &amp; Construction</td>
<td>Meters</td>
<td>184.9</td>
<td>$46,481</td>
<td>$8,593,853</td>
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<tr>
<td>Underground Construction</td>
<td>Meters</td>
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<td>$114,133</td>
<td>$190,438</td>
</tr>
<tr>
<td><strong>Construction Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>14,200,758</strong></td>
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<tr>
<td>Customer Installations</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiber Drop Construction</td>
<td>No. Subscribers</td>
<td>1,677</td>
<td>$1,431</td>
<td>$2,400,089</td>
</tr>
<tr>
<td>Subscriber Equipment &amp; Installation Labor</td>
<td>No. Subscribers</td>
<td>1,677</td>
<td>$284</td>
<td>$477,018</td>
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<tr>
<td><strong>Installation Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>2,877,107</strong></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Other Capex</td>
<td>Project</td>
<td>1</td>
<td>$451,812</td>
<td>$451,812</td>
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<tr>
<td>Grant Administration</td>
<td>Project</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Construction Bond (1.5%)</td>
<td>Insured Activity</td>
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<td>$0.01500</td>
<td>$200,955</td>
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<tr>
<td><strong>Other Subtotal</strong></td>
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<td></td>
<td></td>
<td><strong>652,767</strong></td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>17,730,632</strong></td>
</tr>
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</table>

### HEADEND / CENTRAL OFFICE

<table>
<thead>
<tr>
<th>Category</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Extended Cost</th>
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<td>CO Site Acquisitions</td>
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<td>$30,000</td>
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<tr>
<td>Tax</td>
<td>0</td>
<td>$1,590</td>
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<td>OTN Building - 12X20-6 Relay Racks</td>
<td>Large Headends</td>
<td>1</td>
<td>$175,000.00</td>
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<tr>
<td>Pole 30-5 (Labor and Materials)</td>
<td>Headends Total</td>
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<td>$1,500.00</td>
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<td><strong>Headend / Central Office Subtotal</strong></td>
<td></td>
<td></td>
<td><strong>208,090</strong></td>
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<tr>
<td>Installation Labor, Freight, Tax, and Contingency</td>
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<td></td>
<td>$68,837</td>
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<tr>
<td><strong>Headend / Central Office Total</strong></td>
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<td></td>
<td><strong>276,927</strong></td>
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</table>

### FIELD NETWORK EQUIPMENT

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<thead>
<tr>
<th>Category</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Extended Cost</th>
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</thead>
<tbody>
<tr>
<td>Netbotz Environmental Monitor including all sensors</td>
<td>Headends, all</td>
<td>1</td>
<td>$850.00</td>
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<tr>
<td>OLT Management Server (CMS)</td>
<td>Local Networks</td>
<td>1</td>
<td>$8,000.00</td>
</tr>
<tr>
<td>000-00372 - E7-2 Field Install Package (CO &amp; ODC/R) Shelf with Blank Card, FTA, and Field installation Kit</td>
<td>Chassis and spares</td>
<td>15</td>
<td>$616.90</td>
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<td>100-05529 - E7-2 XG 801 XGS-PON</td>
<td>Modules, XGS-PON</td>
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<td>100-04651 QSFP. 40GE Single Mode</td>
<td>Headends, all</td>
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<tr>
<td>100-05642- OIM 10G PON Laser</td>
<td>Modules, XGS-PON</td>
<td>48</td>
<td>$695.00</td>
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<td>Generator - Generac 25 KV - 24 hour backup system</td>
<td>Headends, all</td>
<td>1</td>
<td>$17,000.00</td>
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<td><strong>Field Network Equipment, Subtotal</strong></td>
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<td><strong>151,478</strong></td>
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<td>Installation Labor, Freight, Tax, and Contingency</td>
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<td>$90,278</td>
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<td><strong>Field Network Equipment, Total</strong></td>
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<td><strong>241,755</strong></td>
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<td>DISTRIBUTION FIBER DESIGN BASIS</td>
<td>TOTAL</td>
<td>AERIAL</td>
<td>UNDERGROUND</td>
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<tr>
<td>--------------------------------</td>
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<td>--------</td>
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</tr>
<tr>
<td>Straight Poles</td>
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<tr>
<td>Curved Poles</td>
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<td>Total Poles</td>
<td>4,281</td>
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<td>Average Drop Length (feet)</td>
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<td>Path (feet)</td>
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<td>Cable Size 12 (feet)</td>
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<td>Cable Size 48 (feet)</td>
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<td>Cable Size 72 (feet)</td>
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<td>Cable Size 96 (feet)</td>
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<td>Cable Size 144 (feet)</td>
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<td>Cable Size 288 (feet)</td>
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<td>Cable Size 432 (feet)</td>
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<td>Cable Total (feet)</td>
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<td>Serving Terminal Size 8</td>
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<td>Serving Total</td>
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<td>481</td>
<td>7</td>
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<tr>
<td>Distribution Splices at Drop Hubs and Distribution Splice Points - TOTAL</td>
<td>16,647</td>
<td>16,618</td>
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<td>Distribution Splices at Distribution Hubs - TOTAL</td>
<td>3,120</td>
<td>3,120</td>
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<tr>
<td>Drop Tail Splices - TOTAL</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Feeder Splices at Distribution Hubs and Feeder Splice Points - TOTAL</td>
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<tr>
<td>Feeder Splices at Headend - TOTAL</td>
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<tr>
<td>Splices Total</td>
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<td>Spice Cases</td>
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<td>Small Headends</td>
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<td>Medium Headends</td>
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<td>Large Headends</td>
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<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Headends Total</td>
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<tr>
<td>Large Preterm Shelves - Total</td>
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<td>Company Name</td>
<td>All Points Broadband</td>
</tr>
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<tr>
<td></td>
<td>Data Contact Phone Number</td>
<td>(703) 554-6600</td>
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<td>Data Contact E-mail</td>
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<tr>
<td>Emergency Operations Contact Information</td>
<td>Emergency Operations Name</td>
<td>Don McElroy</td>
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## Data Submitted

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

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

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

<p>| Downstream Bandwidth (in Mbps) | Upstream Bandwidth (in Mbps) | Consumer | Business / Govt | Total |        |        |</p>
<table>
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<tr>
<th>Technology</th>
<th>Downstream Bandwidth (in Mbps)</th>
<th>Upstream Bandwidth (in Mbps)</th>
<th>Consumer</th>
<th>Business / Govt</th>
<th>Total</th>
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## Fixed Voice Subscription

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

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<tr>
<th>State</th>
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<th>Consumer VoIP Subscriptions</th>
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## Fixed Voice Subscription (iVoIP)

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

<table>
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<tr>
<th>State</th>
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<tbody>
<tr>
<td>Kentucky</td>
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All other VoIP Subscriptions by State, End-user Type, Bundle and Last-mile Medium

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<th>Business / Government</th>
<th>Sold w/ Internet</th>
<th>Sold w/o Internet</th>
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<th>Coax</th>
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<th>Copper</th>
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Form 477 Filing Summary


### Filer Identification

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<th>Section</th>
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<tr>
<td>Filer Information</td>
<td>Company Name</td>
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<td>499 ID</td>
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<td>Data Contact Phone Number</td>
<td>(703) 554-6600</td>
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<tr>
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<td>Data Contact E-mail</td>
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<td>Emergency Operations E-mail</td>
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### Certifying Official Contact Information

<table>
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### Census Block Counts by State, DBA Name and Technology

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<td>All Points Broadband</td>
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## Fixed Broadband Subscription

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

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<th>Business / Govt</th>
<th>Total</th>
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<table>
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<th>Upstream Bandwidth (in Mbps)</th>
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**Fixed Broadband Subscriptions by Technology, Bandwidths and End-user Type**
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<tbody>
<tr>
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### Fixed Voice Subscription (iVoIP)

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

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<th>Total VoIP Subscriptions</th>
<th>Consumer VoIP Subscriptions</th>
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### Over-the-top VoIP Subscriptions by State and End-user Type

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

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<th>by Bundle</th>
<th>by Last-mile Medium</th>
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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.

**Survey Overview & Methodology**

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

- **Priority #2:**
  - 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>Week 1 (5/31)</th>
<th>Week 2 (6/7)</th>
<th>Week 3 (6/14)</th>
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</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**

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

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<th>Internet Technology</th>
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<tbody>
<tr>
<td>Satellite Internet (e.g., HughesNet, ViaSat)</td>
</tr>
<tr>
<td>Fiber (e.g., Verizon FiOses, MetroNet)</td>
</tr>
<tr>
<td>Fixed Wireless / Wireless Broadband (e.g., Belwave, Wisper, Nextlink)</td>
</tr>
<tr>
<td>DSL (e.g., CenturyLink, Frontier, AT&amp;T, Windstream)</td>
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<table>
<thead>
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<th>Internet Speed</th>
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<td>Not included</td>
</tr>
<tr>
<td>Unlimited</td>
</tr>
<tr>
<td>Not included</td>
</tr>
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<td>Unlimited</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Monthly Offer Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>$60</td>
</tr>
<tr>
<td>$225</td>
</tr>
<tr>
<td>$80</td>
</tr>
<tr>
<td>$30</td>
</tr>
</tbody>
</table>

Given what you know about the market, would you really buy the Internet Package you chose above?

- [ ] Yes
- [ ] No

- 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**.
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**  
N=1042, % of simulated respondents

- Fiber: 75%
- DSL: 22%
- Satellite: 3%

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

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

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

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

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

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
In satellite only markets, we observe 95% take rate

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

- Fiber: 95%
- Satellite: 6%

With 80-90% BB penetration, take rate implies total market penetration of 76%-86%

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!
King William County Crowd Fiber Survey Responses
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**

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.

<table>
<thead>
<tr>
<th>Plan</th>
<th>50/50</th>
<th>100/100</th>
<th>500/500</th>
<th>GIGABIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>$59.99 per month</td>
<td>$79.99 per month</td>
<td>$99.99 per month</td>
<td>$109.99 per month</td>
</tr>
<tr>
<td>Equipment Install &amp; Provisioning fee of $199 with 1 year commitment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Download up to 50 Mbps</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Upload up to 50 Mbps</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

GET STARTED

GET STARTED

GET STARTED

GET STARTED
ALL POINTS BROADBAND

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!

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- 24x7 Customer Support
- Stream your favorite programs
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**Enjoy:**
Fast Downloads, Smooth Streaming, & Low Latency

**Call us now at 888-888-8888**
Get Better Broadband Now!
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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USE PROMO CODE: GOFASTER
30% installation 15% discount off monthly fee for 12 months on 15 Mbps service with a 12 month lease.

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FOR THE FIRST 6 MONTHS WITH A 12 MONTH TERM

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• Stream your favorite programs
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- Stream your favorite programs
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- 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

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- Reliable High Speed Internet
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- 24/7 Customer Support
- Stream your favorite programs
- Online Account Management

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

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- Low Latency
- Reliable High Speed Internet
- 24/7 Customer Support
- Online Account Management
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- Streamline Your Favorite Programs
- Edge Streaming
- Low Latency

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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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Smooth streaming, Low latency

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▸ 24x7 CUSTOMER SUPPORT
▸ STREAM YOUR FAVORITE PROGRAMS
▸ ONLINE ACCOUNT MANAGEMENT

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

Use Promo Code YESMETOO

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Enjoy fast downloads, smooth streaming, and low latency

Call us now at 888-888-8888!
Google for Education

Applied Digital Skills

My classes

All Points Broadband Digital Inclusion Academy

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

Progress summary
Number of students and percent completed

- 1

Videos watched
Projects submitted
Quiz results
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.

Progress summary
Number of students and percent completed

My dashboard
Teacher • Progress summary
Number of students and percent completed

Videos watched Projects submitted Quiz results
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.
**Track Your Monthly Expenses**

Use a spreadsheet to track your monthly expenses.  
1 activity

**Progress summary**

Number of students and percent completed

![Progress Graph]

**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

![Progress Graph]
Welcome All Points Broadband Customer!

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

<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 below</td>
</tr>
<tr>
<td>Sean Flora</td>
<td>Director of Fiber Construction, APB</td>
<td>See below</td>
</tr>
<tr>
<td>Brandon Ogilvie</td>
<td>CFO, APB</td>
<td>See below</td>
</tr>
<tr>
<td>Tom Innes</td>
<td>SVP of Public-Private Partnerships, APB</td>
<td>See below</td>
</tr>
<tr>
<td>Chuck Hogg</td>
<td>SVP of FTTH Deployments, APB</td>
<td>See below</td>
</tr>
<tr>
<td>Darren Glatt</td>
<td>Partner and Co-Head of Infrastructure Investing, Searchlight Capital Partners</td>
<td>See below</td>
</tr>
<tr>
<td>Ajit Pai</td>
<td>Partner, Searchlight Capital Partners</td>
<td>See below</td>
</tr>
<tr>
<td>Ed Diggs</td>
<td>Manager, Rural Broadband, Dominion</td>
<td>See below</td>
</tr>
<tr>
<td>Mark Ponton</td>
<td>Director of Broadband and Fiber Services, Rappahannock Electric Cooperative</td>
<td>See below</td>
</tr>
<tr>
<td>Steve Hudgins</td>
<td>Project Lead, King William County</td>
<td>See below</td>
</tr>
</tbody>
</table>

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.

Steve Hudgins, Interim County Administrator and County Project Lead
Steve Hudgins is the Interim County Administrator for King William County and will oversee the County’s participation in this project.