Middlesex County

Middlesex County 2022 Accelerated Fiber Deployment Initiative

Application ID:	86509102021103744	
Application Status:	Pending	
Program Name:	Virginia Telecommunications Initiative 2022	
Organization Name:	Middlesex County	
Organization Address:	PO Box 428 Saluda, VA 23149	
Profile Manager Name:	Kevin Gentry	
Profile Manager Phone:	(804) 815-1715	
Profile Manager Email:	gentry@co.middlesex.va.us	
Project Name:	Middlesex County 2022 Accelerated Fiber Deployment Initiative	
Project Contact Name:	Kevin Gentry	
Project Contact Phone:	(804) 815-1715	
Project Contact Email:	kevinkev1970@gmail.com	
Project Location:	877 General Puller Hwy Saluda, VA 23149-3105	
Project Service Area:	Middlesex County	
Total Requested Amount: \$2,050,000.00		

Required Annual Audit Status: No Current Audits Found

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Telecommunications \$2,050,000.00 \$8,453,887.00 \$10,503,887 Construction \$1,516,501.00 \$7,740,963.00 \$9,257,464 Construction Related Soft Costs \$347,671.00 \$347,671.00 \$695,342 Other: Other CAPEX \$185,828.00 \$365,253.00 \$551,085	Budget Information:			
Construction\$1,516,501.00\$7,740,963.00\$9,257,464Construction Related Soft Costs\$347,671.00\$347,671.00\$695,342Other: Other CAPEX\$185,828.00\$365,253.00\$551,082	Cost/Activity Category	DHCD Request	Other Funding	Total
Construction Related Soft Costs\$347,671.00\$347,671.00\$695,342Other: Other CAPEX\$185,828.00\$365,253.00\$551,082	Telecommunications	\$2,050,000.00	\$8,453,887.00	\$10,503,887.00
Other: Other CAPEX \$185,828.00 \$365,253.00 \$551,08	Construction	\$1,516,501.00	\$7,740,963.00	\$9,257,464.00
	Construction Related Soft Costs	\$347,671.00	\$347,671.00	\$695,342.00
Total: \$2,050,000.00 \$8,453,887.00 \$10,503,887	Other: Other CAPEX	\$185,828.00	\$365,253.00	\$551,081.00
	Total:	\$2,050,000.00	\$8,453,887.00	\$10,503,887.00

Budget Narrative:

This application seeks VATI funding in the amount of \$2.05 million to support deployment of a broadband network to reach all remaining unserved areas in Middlesex County.

Questions and Responses:

1. Project Description and Need

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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 Middlesex County is for the Middlesex County 2022 Accelerated Fiber Deployment Initiative ("Initiative") and is submitted by Middlesex 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. Communities within the project area include Jamaica, Church View, Warner, Paces Neck and many others.

In February of 2021, the County's Broadband Authority ("Authority") issued an RFP to select an ISP partner to deploy broadband into the County's unserved areas. All Points responded to the RFP with a proposal to deploy universal fiber-to-the-home ("FTTH") broadband in partnership with its middle mile deployment partner, Dominion Energy Virginia ("Dominion") (see Attachment 8).

In April of 2021, after a competitive selection process the Authority selected All Points, and All Points and the Authority entered into a Broadband Partnership Agreement (see Attachment 8) through which the Authority engaged All Points as a broadband deployment partner to pursue FTTH broadband deployment projects for all areas of the County that are currently unserved by Broadband.

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In April of 2021, the Authority, All Points and 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, and Dominion agreed to seek approval from the State Corporation Commission ("SCC") for its participation in the initiative.

From April of 2021 until the date of this application, APB and the Authority have held routine coordination meetings to refine the project set forth in this application.

To determine 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. 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 Authority and compared to County information gathered from previous studies and analysis. Approximately 140 currently unserved passings that will be served through a VATI grant awarded to the County and Atlantic Broadband in the 2021 VATI application cycle were removed from the proposed project area.

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 50 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 970 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. The entire proposed 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").

By partnering with Dominion under the Utility Leverage Statute 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

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FTTH throughout the proposed project area.

The project area includes approximately 410 Low or Moderate Income ("LMI") households as defined by the Virginia Housing Development Authority. To determine the LMI household count, the County and APB analyzed the currently available U.S. Census data for the proposed project area by Census tracts (9505, 9510, and 9305.02). LMI households account for approximately 71% of all households in the proposed project area, 14% of which are considered low income and 57% are considered moderate income. The project will therefore have a significant benefit by making high quality broadband available to 410 LMI households, which is the total number of remaining unserved LMI households in the County. Due to the nature of Census tract boundaries not matching project area boundaries, and the fact that Census data itself is based on estimates, there may actually be more LMI households within the project area. 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.

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 has determined it is not required to complete network buildout under the thresholds in the County's franchise agreement. 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.

In July of 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.

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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:

As described in Attachment 3, the project area includes 372 locations that were provisionally awarded to an 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.

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. All Points subsequently removed from the proposed project area approximately 140 passings that are the subject of a 2021 VATI grant award received by the County and Atlantic Broadband

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

6. Total Passings: Provide the number of total serviceable units in the project area. Applicants are encouraged to prioritize areas lacking 10 Megabits per second download and 1 Megabits per second upload speeds, as they will receive priority in application scoring. For projects with more than one service area, each service area must have delineated passing information. Label Attachment: Attachment 5 – Passings Form.

a. Of the total number of VATI passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area. (Up to 10 points for businesses and community anchor institutions)

b. If applicable, of the total number of RDOF passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area.

c. If applicable, provide the number of passings that will require special construction costs, defined as a one-time fee above normal service connection fees required to provide broadband access to a premise. Describe the methodology used for these projections.

d. If applicable, provide the number of passings included in the application that will receive broadband access because special construction costs have been budgeted in the VATI application. Describe the methodology used for determining which passings with special construction costs were budgeted in the application.

e. Provide the number of passings in the project area that have 10/1 mbps or less. Describe the methodology used for these projections. (up to 15 points)

Answer:

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a.

To determine the number of residential, business, non-residential and community anchor institutions in the proposed project area, each of the 970 locations in the proposed project area were cross-referenced with parcel-specific land use data in the County's GIS database. This process resulted in 888 passings categorized as residential, 35 passings categorized as non-home based businesses, 8 residential passings where a home based business was located, 5 community anchor institutions, and 42 passings categorized as non-residential.

Among the business passings in the proposed project area are Ware's Servicenter, Two Feather Farm, and H&H Distributing.

b. APB did not receive RDOF funding in any portion of the proposed project area.

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

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

e.

It is estimated that 564 of the passings in the proposed project area lack access to service of at least 10/1 mbps.

To determine the number of passings currently served by service of 10/1 or greater service, All Points compared each of the passings in the project to the most recent Form 477 data available from the Federal Communications Commission and conducted availability searches online.

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

Answer:

Not applicable as this is a FTTH project.

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8. Speeds: Describe the internet service offerings, including download and upload speeds, to be provided after completion of the proposed project. Detail whether that speed is based on dedicated or shared bandwidth, and detail the technology that will be used. This description can be illustrated by a map or schematic diagram, as appropriate. List the private co-applicant's tiered price structure for all speed offerings in the proposed project area, including the lowest tiered speed offering at or above 25/3 mbps. (up to 10 points)

Answer:

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

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

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

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

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

Answer:

The project is a new FTTH deployment that will make FTTH service available to currently unserved locations in the County. The network includes approximately 138 miles of distribution fiber, of which approximately 57 miles will be built by All Points and approximately 80 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 two 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.

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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, in 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 approximately 2 fiber feeder hubs and approximately 4 fiber distribution hubs. Service drops will be made to one of approximately 235 fiber distribution terminals. Fiber distribution terminals will be AFL Titan Ready-to-Deploy Multiport Terminals in multiple sizes depending on location and network requirements.

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

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

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

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

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

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

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

Answer:

Achieving universal broadband access has been a long-term objective of the County.

The Middlesex Broadband Authority ("MBA") was created in 2016 to address the problem of limited access to broadband, in Middlesex. In 2017, while conducting an assessment with the Center for Innovative Technology, it was determined that the County was sorely lacking in broadband infrastructure. This information was used to develop a myriad of solutions to address that need. Middlesex worked with regional partners to pursue grant funding, resulting in 140 homes gaining access. While that project is still ongoing, the MBA is committed to achieving the governor's vision of "universal coverage" by connecting the most remote areas of the County where broadband access is effectively non-existent. The remaining areas to connect also represent a large contingency of economically disadvantaged and minority population.

The MBA has also launched a low interest loan program called "Middlesex Surfs" to help fund the capital expense of installing internet where the home is too far from our incumbent provider's physical plant. An example would be a long driveway scenario where the homeowner can afford the monthly subscription but not the thousands of dollars it would require to run the additional feet of cable. The MBA has also worked very closely with the Middlesex County Public School system to provide children access to broadband resources during the COVID pandemic. In addition, we are working with our public libraries to facilitate the purchase of a 21st century "book mobile" that would also provide temporary internet access in remote locations. In our community outreach, we continue to look for innovative ways to meet the needs of the citizens, especially those who are most vulnerable.

Middlesex and the region have struggled to keep pace with the demands of modern life. The lack of adequate, affordable broadband has had a hugely detrimental effect on our population, but it's illustrated best by one of our teachers. Keep in mind that this letter was written before the pandemic and foreshadowed the dire situation we continue to face.

First of all, I am an administrator at Middlesex County Public Schools. To be effective at my job, I must be available outside of working hours and my work often goes into the wee hours of the morning at times. Unfortunately, the amount of work I can do for my students and staff is limited to the internet I can get on my phone. While this may not seem impactful, I cannot work in many databases from my phone, so I often find myself going into school to use the internet. Oftentimes, I will end up doing work twice, once in an offline spreadsheet and then transferring to online portals. My students participate in online learning, and it is ironic that I am unable to rely on internet to the level in which the programs are intended. I preach 21st century skills, but I can only practice them within the walls of the school (which is the opposite of 21st century thinking).

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Another reason limited internet access in Middlesex County has negatively impacted me is through my own work as a student. I am a doctoral student at VCU. The program in which I am enrolled is largely an online program where I must have online video conferencing or collaborative meetings using the internet. My classmates and instructors have had to deal with delays due to buffering internet during many of our meetings. It has been a bit of a joke among my cohort that I'm on "Middlesex internet." While it's all said in fun, it sends my colleagues a message that internet is subpar in the area of collaborating and technology.

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. Approximately 140 currently unserved passings that will be served through a VATI grant awarded to the County and Atlantic Broadband in the 2021 VATI application cycle were removed from the proposed project area.

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 350 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 970 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 February of 2021, the County's Broadband Authority ("Authority") issued an RFP to select an ISP partner to deploy broadband into the County's unserved areas. All Points responded to the RFP with a proposal to deploy universal fiber-to-the-home ("FTTH") broadband in partnership with its middle mile deployment partner, Dominion Energy Virginia ("Dominion") (see Attachment 8).

In April of 2021, after a competitive selection process the Authority selected All Points, and All Points and the Authority entered into a Broadband Partnership Agreement (see Attachment 8) through which the Authority engaged All Points as

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a broadband deployment partner to pursue FTTH broadband deployment projects for all areas of the County that are currently unserved by Broadband.

In April of 2021, the Authority, All Points and 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, and Dominion agreed to seek approval from the State Corporation Commission ("SCC") for its participation in the initiative.

From April of 2021 until the date of this application, APB and the Authority have held routine coordination meetings to refine the project set forth in this application.

In May and June of 2021, All Points completed high-level network design for the project in collaboration with Dominion, and the network design now incorporates those design consultations with Dominion, including the specific routes to be constructed by Dominion. The high-level network design is now complete.

In July of 2021, All Points 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, All Points and Dominion will finalize the petition to be submitted to the SCC related to Dominion's participation in this project.

Through our shared experience achieving SCC approval of Dominion's participation in the VATI-supported Northern Neck Initiative, All Points 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 has assigned a dedicated project manager who will lead Dominion's involvement in this project.

All Points and Dominion have an agreed form of fiber lease in place for the project, which will be entered into upon final SCC approval of Dominion's participation.

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As indicated in the letter included in Attachment 13, AFL Telecommunications, APB's cable manufacturer, has allocated committed manufacturing capacity to support APB's requirements and specific schedule for this project. AFL is a leading global manufacturer of fiber optic cables, connectors, terminals, and related hardware. 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. Further details from bills of materials and cost estimates are provided in Attachment 13.

Dominion is anticipated to initiating contact with potentially affected property owners regarding the project and commencing discussions regarding easements and related rights in the second 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 construction. All Points will deploy, and provision service terminals and service drop in conjunction with Dominion's construction schedule so that end users can be connected to the network as soon as there is distribution fiber in place to connect their location to All Points' network core.

Once construction has commenced, All Points will be able to rapidly deliver service to customers who have preregistered their locations for service. The same survey that All Points and the County made available for property owners to confirm whether their location was unserved by broadband also provided the option for owners of locations within the proposed project area to subscribe for updates regarding the project and to request to be contacted in advance of service availability at their location. To date, more than 50 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 at their location.

To ensure the network is successfully and promptly used by presently unserved locations, All Points 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. In accordance with the terms of the MOU that is already in place, upon receipt of a VATI award the County and All Points will enter into a definitive 9/15/2021 11:01:21 AM

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agreement reflecting the terms of this application.

Substantial completion of the project will be complete 18 months from grant award.

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:

Middlesex worked with the counties of Mathews, Caroline, and Lancaster to submit a VATI grant to connect 140 homes in Middlesex County in the 2021 application cycle. The location of this deployment was tied to demand and, perhaps most critically, proximity to our incumbent provider's physical plant. That project was approved for funding earlier this year and is ongoing. As of this writing, we hope to have the design phase completed by September 20, 2021. If there are no project delays, those locations in Middlesex County could be released for install as early as March, 2022.

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.

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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 minimum20% match is required to be eligible for VATI, the private sector provider must provide10% 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 \$10,503,887 and this application is requesting VATI funds in the amount of \$2.05 million representing 19% of the total project cost. All Points will be responsible for providing \$2,498,887, representing 23.8% of the total project cost. The County is contributing \$1.95 million, representing 18.6% of the total project cost. Dominion is anticipated to invest \$4.005 million, representing 38.1% of the total project cost, pending SCC approval of Dominion's participation in this project.

The County's commitment of \$1.95 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.

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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 April of 2021, senior County personnel and the Authority 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 will also administer the VATI grant funds and support project construction without charging administrative costs to the project.

The County has previously invested \$36,000 in local funds to engage All Points under the Broadband Partnership Agreement (see Attachment 8), which engagement has supported the development of the plan set forth in this application.

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 \$75,000 marketing budget for the project in its first two years (which is not included in the project budget set forth in this application).

Support from the County and Dominion 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:

a. 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

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project updates and request to be contacted in advance of service availability. To date, more than 50 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 \$75K 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 jointmarketing 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.

During the pre-construction marketing phase, all marketing communications will direct potential customers to APB's online Crowd Fiber tool to register their desire to subscribe to service as soon as it is available, and to inform APB as to how each potential customer desires to be contacted in the future regarding construction progress and service availability. All Points will use the Crowd Fiber tool to accept pre-registrations from customers and to keep those customers informed regarding the deployment schedule.

The County will support All Points as it conducts media events and project tours to keep local media outlets informed about the project and its status, and to generate media coverage that will reinforce All Points' direct marketing activities. As each area of the network is nearing completion, All Points will use the preferred contact method selected by each customer that has pre-registered to inform them of their service availability date and to schedule installations for these pre-registered customers. As of the date of this application, more than 50 preregistrations have been entered into All Points' Crowd Fiber 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 9/15/2021 11:01:21 AM Pages: 16 of 26

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members that have not pre-registered 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 Emergency Broadband Benefit program and future affordability programs available to LMI households.

As part of our digital equity and inclusion strategy, All Points and the County have agreed that, for the first twelve months after its service is available, All Points 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, 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 County will partner with the County's library system to conduct digital literacy training and awareness events.

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

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 and Dominion:

Key Individual

Roles and Responsibilities

Previous Experience

Jimmy Carr

CEO, APB

See attachment 20

Sean Flora

Director of Fiber Construction, APB

See attachment 20

Brandon Ogilvie

CFO, APB

See attachment 20

Tom Innes

Middlesex County Middlesex County 2022 Accelerated Fiber Deployment Initiative SVP of Public-Private Partnerships, APB See attachment 20 Chuck Hogg SVP of FTTH Deployments, APB See attachment 20 Darren Glatt Partner and Co-Head of Infrastructure Investing, Searchlight Capital Partners See attachment 20 Ajit Pai Partner, Searchlight Capital Partners See attachment 20 Ed Diggs Manager, Rural Broadband, Dominion See attachment 20 Kevin Gentry Director of Information Technology, Middlesex County & Executive Director, Middlesex Broadband Authority See attachment 20

Information regarding the members of the project management team is included in Attachment 20.

Middlesex County, as a government agency, successfully and actively manages a myriad of grant funds. The County Administrators' office is currently managing both the CARES Act and ARPA funds at approximately \$2.0 million each. The County manages multiple airport grants for layout updates and projects, small annual grants, such as the litter grant, aid to locality grants for fire programs, and 4forlife grants for rescue squads. The County offices manage FEMA grants, including public assistance related to COVID, hurricanes and tornadoes. The Middlesex County Water Authority is managing \$29 million of USDA grants.

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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.

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17. Project Budget and Cost Appropriateness

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

Answer:

As set forth in Attachment 12, the total cost of the proposed project is \$10,503,887 and this application is requesting VATI funds in the amount of \$2.05 million representing 19.5% of the total project cost. All Points will be responsible for providing \$2,498,887, representing 23.8% of the total project cost. The County is contributing \$1.95 million, representing 18.6% of the total project cost.

Dominion's investment in broadband related infrastructure in support of this project is anticipated to be \$4,005,000, representing 38.1% of total project cost, pending SCC approval of Dominion's participation in this project.

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

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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 \$8.6 million.

b. 970

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. As noted above, within the proposed project area, there are 35 business passings, 42 non-residential passings, and 5 community anchor passings.

Among the business passings in the proposed project area are Ware's Servicenter, Two Feather Farm, and H&H Distributing.

b. This project is a partnership between the County, a last-mile ISP, and an electric utility company, and is following the successful model developed by All Points and the same electric utility (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 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 9/15/2021 11:01:21 AM

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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.

c. The project area includes approximately 410 LMI households. The project will therefore have a significant benefit by making high quality broadband available all remaining unserved LMI households in the County.

All service offerings made available through this project will be eligible for the federal Emergency Broadband Benefit program and future affordability programs available to LMI households in which APB is a participating provider.

As part of our digital equity strategy, APB and the County have agreed that, for the first twelve 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 will 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, ensuring long term affordable access to broadband within the County.

The MBA has also worked very closely with the Middlesex County Public School system to provide children access to broadband resources during the COVID pandemic. In addition, we are working with our public libraries to facilitate the purchase of a 21st century "book mobile" that would also provide temporary internet access in remote locations. In our community outreach, we continue to look for innovative ways to meet the needs of the citizens, especially those who are most vulnerable.

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.

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.

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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

Attachment1ProjectAreaMapMiddlesex9142021120012.pdf

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

Attachment2DocumentationonFederalFundingAreaMiddlesex9122021113047.pdf

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

Attachment3RDOFAwardedAreasincludedinVATIApplicationMiddlesex9142021101811.pdf

Documentation that proposed project area is unserved based on VATI criteria

Attachment4DocumentationUnservedAreaVATICriteriaMiddlesex913202170809.pdf

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Passings Form (Use template provided)

Attachment5PassingsFormMiddlesex9142021120052.pdf

Propagation Map if Wireless Project

Attachment6PropagationMapWirelessProjectsonly9122021113100.pdf

Timeline/Project Management Plan

Attachment7TimelineProjectManagementPlanMiddlesex9142021120135.pdf

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

Attachment 8 MOU Between County and CoApplicant Middlesex 9122021104314.pdf

Funding Sources Table (Use template provided)

Attachment9FundingSourcesTableMiddlesex9122021103606.pdf

Documentation of Match Funding

Attachment10DocumentationofMatchFundingMiddlesex913202151045.pdf

Derivation of Cost/Project Budget (Use template provided)

Attachment12DerivationofCostsMiddlesex9122021103534.pdf

Documentation of Supporting Cost Estimates

Attachment 13 Documentation of Supporting Cost Estimates Middlesex 9122021103441. pdf

Two most recent Form 477 submitted to the FCC or equivalent Attachment14TwoMostRecentForm477sRedacted9122021113117.pdf

Point and Polygon shapefiles, in.zip file form, showing proposed passings and project area Attachment15PointandPolygonShapefilesMiddlesex9142021120618.zip

For wireless applicants: shapefiles, in .zip file form, indicating RSSI projections in the application area Attachment16RSSIProjectionShapefiles9122021113128.pdf

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Optional

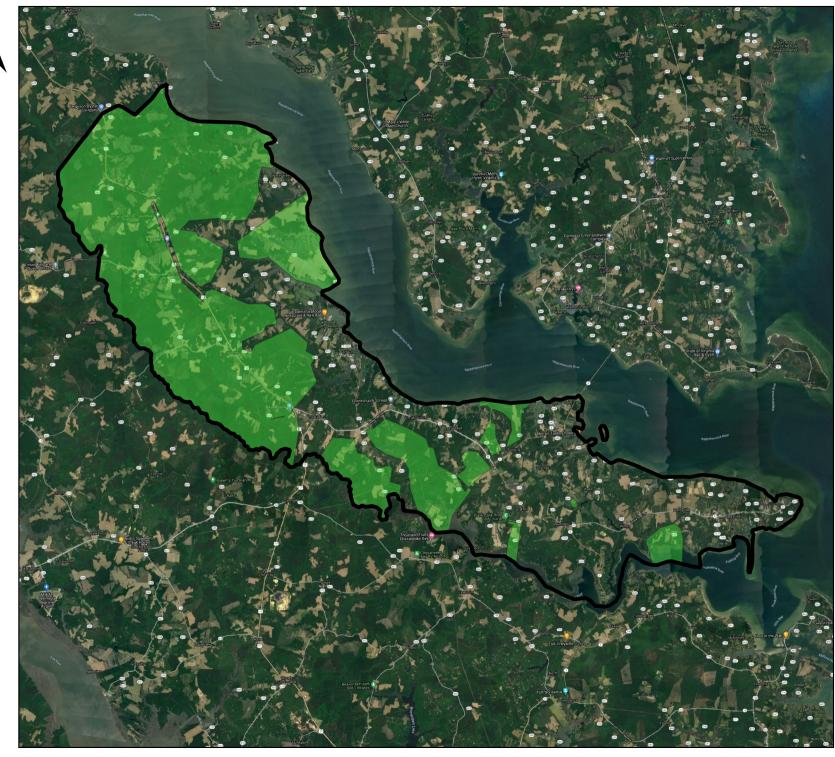
Attachment17MarketingPlanMiddlesex913202150122.pdf

Optional

Attachment18AllPointsBroadbandDigitalInclusion9122021113137.pdf

Optional

Attachment20ProjectManagementTeamMiddlesex914202112802.pdf



Middlesex County, VA

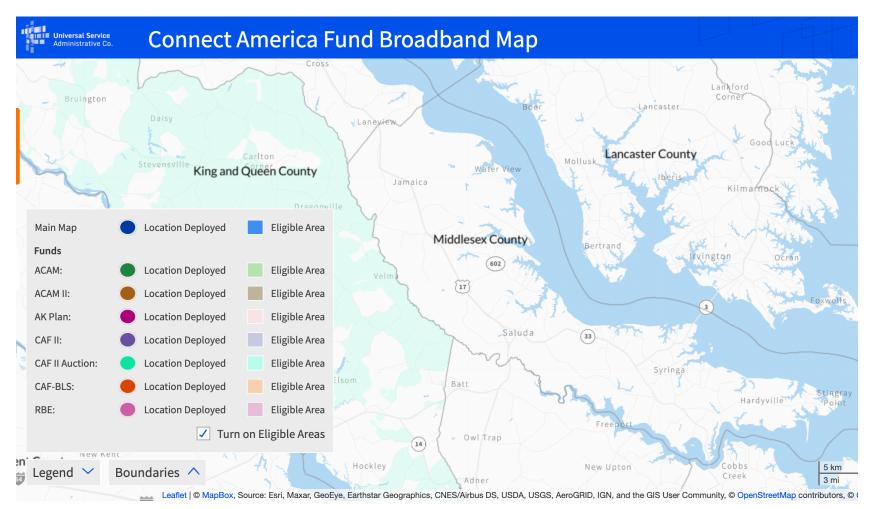
Legend

Served Area Project Area County border

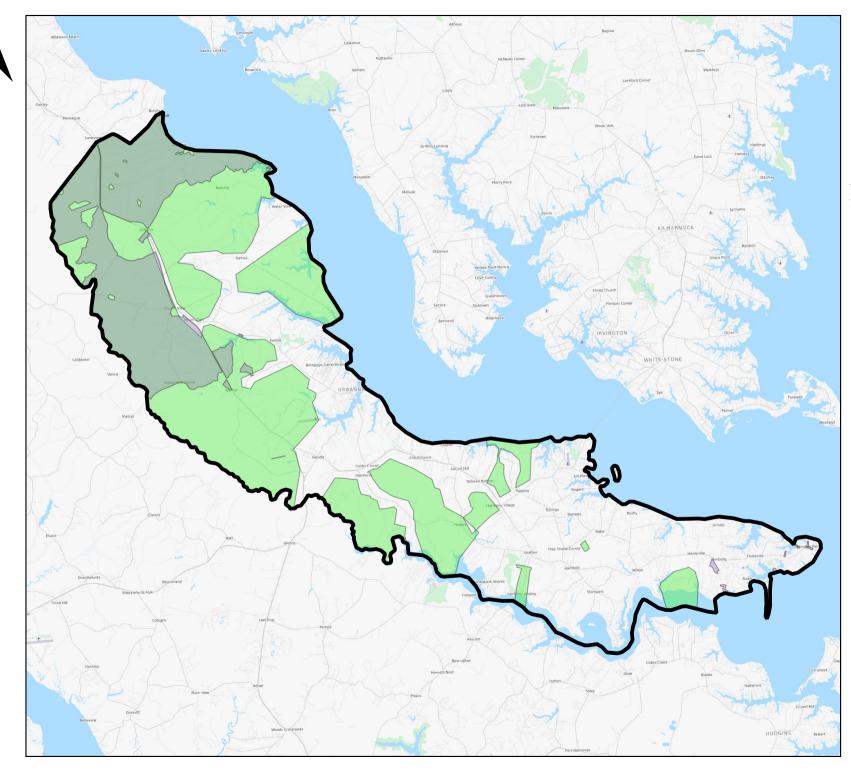


All route and area information is confidential and proprietary.

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Attachment 2 – Documentation of Federal Funding – Middlesex County



Middlesex County, VA

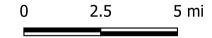
Legend

RDOFProject AreaCounty border

NOTES:

1. This RDOF area map supplements Attachment 2.

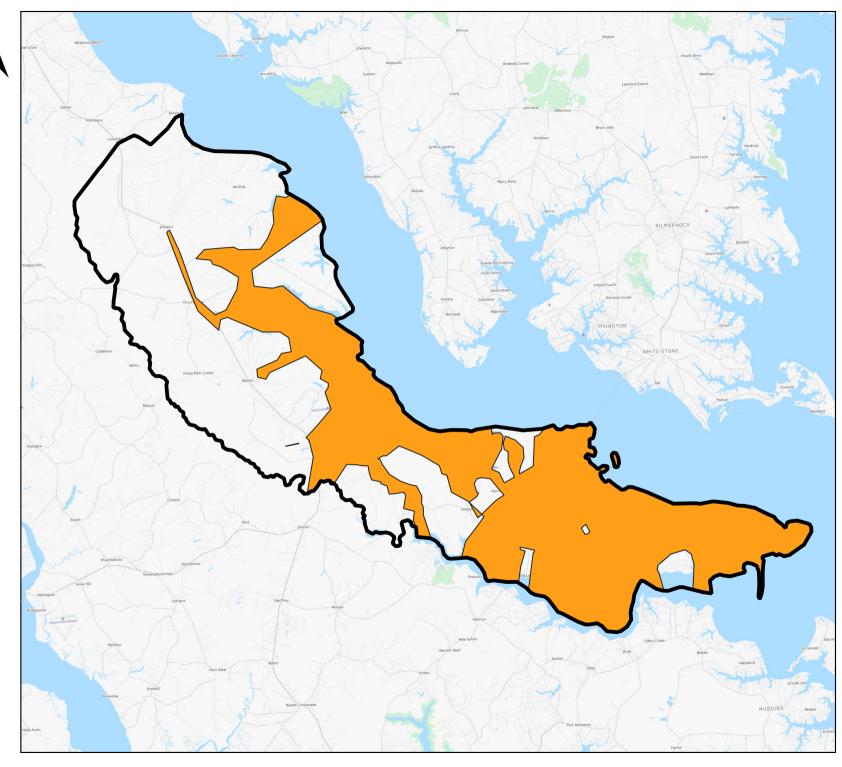
2.Co-applicant is not the RDOF awardee in these areas.



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Attachment 3 - RDOF-Awarded Areas Locations & Passings Table

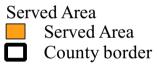
County	RDOF-Awarded Census Block Group ID	Locations within In Census Block Group	Estimated Passings in RDOF awarded areas within the VATI application area (by County)
Middlesex	511199512002	31	
Middlesex	511199509001	343	
Middlesex		374	372

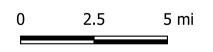


N

Middlesex County, VA

Legend





All route and area information is confidential and proprietary.

 $\ensuremath{\textcircled{}}$ All Points Broadband

2022 Virginia Telecommunication Initiative (VATI) Passing Form

Type of Passings	Total Number of Passings in the Project Area ¹	Passings in the Project Area, without Special Construction Costs Required ²	Construction Costs budgeted	Number of Passings with Speeds at 10/1 or below in Project Area ⁴
Residential	888	888		521
Businesses (non-home based)	35	35		12
Businesses (home-based)	8	8		6
Community Anchors	5	5		1
Non-residential	42	42		30
Total	970	970		564

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

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

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

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.

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

⁴The number of structures in the project area that do not have access to internet at speeds of at least 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-



Middlesex County Project Timeline (Collapsed)

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

		Plan Duration Actual Start Complete Actual (beyond plan) % Complete (beyond plan)
ACTIVITY	RESPONSIBLE PARTY	Months 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 3
Contact and Advise Property Owners Along Mainline Fiber Routes	ALL	
Complete and Submit Environmental & Municipal Permitting	ALL	
Final Design and Engineering for SCC Petition	DOMINION/APB	
SCC Petition Preparation	DOMINION/APB	
SCC Petition Pending	DOMINION/APB	
APB Low Level Design	АРВ	
Obtain Necessary Easements and Secure Rights	ALL	
SCC Final Order on Petition	DOMINION	
Marketing and Pre-Registration for Broadband Svc	АРВ	
Mainline (Feeder) Fiber Construction	DOMINION	
Middle Mile Fiber Construction	ELECTRIC UTILITIES	
Headend and Central Office Outfit	АРВ	
Last Mile Fiber Construction	АРВ	
Targeted Marketing for Lit Addresses (Last Mile)	АРВ	
Service Order Provisioning for New Service	АРВ	
Customer Drops/Installation	АРВ	

BROADBAND PARTNERSHIP AGREEMENT

This Broadband Partnership Agreement ("<u>Agreement</u>") dated as of the date last set forth below, is entered into by and between the Middlesex Broadband Authority ("<u>Authority</u>") and All Points Broadband Partners, LLC ("<u>APB</u>"). Authority and APB are each a "<u>Party</u>" and collectively the "<u>Parties</u>".

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 employees of Middlesex County government can conduct business via teleworking and other remote means; and

WHEREAS, the Authority recognizes the critical importance of ensuring universal broadband access for all of the residents and businesses of the Middlesex County, Virginia (the "<u>County</u>") in order to support economic development, educational advancement, and quality of life in the County; and

WHEREAS, the Authority 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, APB responded to RFP 2020-09 dated May 28, 2020 (the "<u>Procurement</u>") issued by King William County, Virginia ("<u>King William County</u>"), in accordance with the provisions of § 2.2-4304 of the Code of Virginia; and

WHEREAS, APB provided the Authority with its response to the Procurement and supplemental information regarding its qualifications to perform similar services in the County to those described in its response to the Procurement (such response and supplemental information, collectively, the "<u>RFP Response</u>"); and

WHEREAS, the Authority has elected to engage APB under the Procurement pursuant to § 2.2-4304 of the Code of Virginia.

NOW THEREFORE, the Authority and APB agree as follows.

- 1. <u>Contract Documents</u>. The Contract Documents consist of:
 - a. This Agreement;
 - b. The Procurement and RFP response, as amended with all addenda, as in effect with King William County as of the date hereof; and
 - c. County's Contractual Terms and Conditions (Attachment B)

Where the terms and provisions of this Agreement vary from the terms and provisions of the other Contract Documents, the terms and provisions of the Agreement shall prevail over the Contract Documents.

The Contract Documents set forth the entire Agreement between the County and APB. The County and APB agree that no representative or agent of either of them has made any representation or

promise with respect to this Agreement which is not contained in the Contract Documents, and that all terms and conditions with respect to this Agreement are expressly contained herein.

- 2. Engagement of APB as Broadband Partner. The Authority engages APB as its primary broadband deployment partner to pursue broadband deployment projects for all of the areas of the County that are currently unserved by broadband with the objective of leveraging APB's partnership with Dominion Energy Virginia ("Dominion") and Virginia Code § 56-585.1:9 (the "Broadband Statute") to make fiber-to-the-home ("FTTH") broadband access available to all of the County's currently unserved locations. For the avoidance of doubt, nothing in this Agreement creates any relationship of exclusivity between the Parties.
- 3. <u>Broadband Planning Scope of Work</u>. APB shall deliver those planning and feasibility services described in the RFP Response (the "<u>APB Services</u>"). Without limiting the foregoing, the key milestones and indicative timeframes for such activities are set forth in <u>Exhibit A</u>.
- 4. <u>Broadband Service Objectives</u>. In performing the APB Services, APB shall develop deployments of gigabit-capable, FTTH networks.
- 5. <u>Engagement of Partners</u>. APB has identified Dominion as its priority partner for achieving universal FTTH access for the County and recruited Dominion to participate in Broadband Statute Activities promptly upon execution of this Agreement. 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.
- 6. <u>Regular Planning Meetings</u>. The Parties will designate a "<u>Management Committee</u>" comprised of relevant Authority personnel and senior management from APB, which management committee shall hold meetings no less than quarterly ("<u>Status Meetings</u>") 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.
- 7. <u>Information Sharing and In-Kind Support for Grant Applications and Regulatory</u> <u>Proceedings</u>. Upon request from APB, the Authority agrees to provide APB with all relevant information in its possession that will facilitate APB's provision of the APB Services. The Authority agrees 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 Authority further agrees 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.
- 8. <u>Deployment and Operation of Broadband Networks</u>. 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, the Authority shall not have any further obligation to provide local

matching funds or other financial support for deployment activities (collectively, "<u>Local</u> <u>Match</u>"), unless such Local Match is specifically agreed to by the Authority in writing. For the avoidance of doubt, APB will not be providing design or construction services to the Authority; rather, APB will undertake all design and construction activities independently and on its own account.

- 9. Interim Deployment Services. As part of the APB Services, on request of the Authority, 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 31, 2021, the maximum number of County-affiliated employees, County businesses and their local employees, and County School Division students have the ability to telework, conduct business, and participate in distance learning, respectively, (the "Interim Deployment Plan"), and present such Interim Deployment Plan to the Management Committee no later than 60 days after execution of this Agreement. The Interim Deployment Plan will specify the costs the Authority 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 two years (or such other period as APB and the Authority may agree) (the "Interim Deployment Costs"). Upon receipt of the Interim Deployment Plan, the Management Committee 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 Authority elects to engage APB to execute the Interim Deployment Plan, the Authority shall pay to APB the Interim Deployment Costs according to the schedule set forth in the Interim Deployment Plan.
- <u>Fees for the APB Services</u>. In exchange for the APB Services, the Authority agrees to pay APB the "<u>Planning Services Fees</u>" in the amount of thirty six thousand dollars (\$36,000). The Planning Services Fees shall be paid in twelve (12) equal installments, monthly in arrears.
- 11. <u>Term</u>. 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:

MIDDLESEX BROADBAND AUTHORITY

Kevin Gentry By:

Date: 4/23/21

ALL POINTS BROADBAND PARTNERS, LLC

By: James G. Carr, Chief Executive Officer Date:

EXHIBIT A

Project Milestones

Activity	Start Month	Complete Month
Execution of MOU with Dominion	1	1
Unserved Locations Field Inventory and Verification	1	3
Identification and Prioritization of Public Support Mechanisms	1	3
Route Identification and Project Scoping with Dominion	1	3
Complete High-Level Network Design	3	4
Preparation of SCC Petition Materials	4	6
Prepare and Submit Public Support Mechanism Applications on an Ongoing Basis	4	12
Submission of SCC Petition	6	6
Coordination and Prosecution of SCC Petition	6	12
Low-Level Network Design	6	9
Final SCC Approval	12	12
Network Construction Commences	13	TBD

ATTACHMENT B MIDDLESEX BROADBAND AUTHORITY STANDARD TERMS AND CONDITIONS

The Middlesex Broadband Authority the Contractor are this day entering into a contract and, for their mutual convenience, the parties are using the Contractor's standard form agreement. This Addendum, duly executed by the parties, is attached to and hereby made a part of the contract.

The Contractor represents and warrants that it is a(n) [] individual proprietorship [] association [] partnership [X] limited liability company [] corporation [] governmental agency or authority authorized to do in Virginia the business provided for in this contract.

Notwithstanding anything in the Contractor's form to which this Addendum is attached, the payments to be made by the Middlesex Broadband Authority (the "Authority") for all goods, services, and other deliverables under this contract shall not exceed \$36,000, unless otherwise agreed in writing. Payment will be made only upon receipt of a proper invoice from the Contractor, detailing the goods/services provided and submitted to the Authority, Woodward Building, 877 General Puller Highway, Saluda, Virginia 23149. The total cumulative liability of the Authority, its officers, employees, and agents in connection with this contract or in connection with any goods, services, actions, or omissions relating to the contract, shall not under any circumstances exceed payment of the above maximum purchase price plus liability for an additional amount equal to such maximum purchase price. In its performance under this contract, the Contractor acts and will act as an independent contractor, and not as an agent or employee of the Authority.

<u>Availability of Funds</u>: It is understood and agreed between the parties herein that the Authority shall be bound hereunder only to the extent of the funds available or which may hereafter become available "subject to appropriation" by the Board of Directors of the Authority for the purpose of this agreement.

The Contractor's form contract is, with the exceptions noted herein, acceptable to the Authority. Nonetheless, because certain standard clauses that may appear in the Contractor's form agreement cannot be accepted by the Authority, and in consideration of the convenience of using that form, and this form, without the necessity of specifically negotiating a separate contract document, the parties hereto specifically agree that, notwithstanding any provisions appearing in the attached Contractor's form contract, none of the following shall have any effect or be enforceable against the Authority:

1. Requiring the Authority to maintain any type of insurance either for the Authority's benefit or for the Contractor's benefit;

2. Renewing or extending the agreement beyond the initial term or automatically continuing the contract period from term to term;

3. Requiring or stating that the terms of this attached Contractor's form agreement shall prevail over the terms of this Addendum in the event of conflict;

4. Requiring the Authority to indemnify or to hold harmless the Contractor for any act or omission;

5. Imposing interest charges contrary to that specified by the *Code of Virginia*, § 2.2-4347 through 2.2-4354, Prompt Payment;

6. Requiring the application of the law of any state other than Virginia in interpreting or enforcing the contract or requiring or permitting that any dispute under the contract be resolved in the courts of any state other than Virginia;

7. Requiring that the contract be "accepted" or endorsed by the home office or by any other officer subsequent to execution by an official of the Authority before the contract is considered in effect;

8. Delaying the acceptance of this contract or its effective date beyond the date of execution;

9. Limiting or adding to the time period within which claims can be made or actions brought;

10. Limiting the liability of the Contractor for property damage or personal injury;

11. Permitting unilateral modification of this contract by the Contractor;

12. Binding the Authority to any arbitration or the decision of any arbitration board, commission, panel or other entity;

13. Obligating the Authority to pay costs of collection or attorney's fees or waiving the right to a jury trial;

14. Granting the Contractor a security interest in property of the Authority;

15. Bestowing any right or incurring any obligation beyond the duly granted authority of the undersigned agency or representative to bestow or incur on behalf of the Authority.

16. This order may be subject to federal oversight. The Contractor, as applicable, will comply with 2 CFR 200 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards) Part 317-326 (Procurement Standards) and Section 2 CFR 200.404 (Cost Reasonableness).

EMPLOYMENT DISCRIMINATION BY CONTRACTORS PROHIBITED: During the performance of this contract, the Contractor agrees as follows:

1. a. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

b. The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an equal opportunity employer.

c. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.

2. The Contractor will include the provisions of the foregoing paragraphs a, b, c, in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

DRUG-FREE WORKPLACE TO BE MAINTAINED BY CONTRACTOR: During the performance of this contract, the Contractor agrees to (i) provide a drug-free workplace for the Contractor's employees; (ii) post in conspicuous places available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clause in every subcontractor or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this section, "*drug-free workplace*" means a site for the performance of work done in connection with a specific contract awarded to a contractor in accordance with his chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of this contract.

CONDITION OF CONTRACT: As a condition of awarding a contract for the provision of services that require the Contractor or his employees to have direct contact with the students on school property during regular school hours or during school-sponsored activities, the school board shall require the Contractor to provide certification that all persons who will provide such services have not been convicted of a felony or any offense involving the sexual molestation or physical or sexual abuse or rape of a child.

Any person making a materially false statement regarding any such offense shall be guilty of a Class 1 misdemeanor and, upon conviction, the fact of such conviction shall be grounds for the revocation of the contract to provide such services and, when relevant, the revocation of any license required to provide such services. School Boards shall not be liable for materially false statements regarding the certification required by this subsection.

This subsection shall not apply to a contractor or his employees providing services to a school division in an emergency or exceptional situation, such as when students health or safety is endangered or when repairs are needed on an urgent basis to ensure that school facilities are safe and habitable, when it is reasonably anticipated that the contractor or his employees will have no direct contact with student. *Code of Virginia* § 22.1-296.1

COMPLIANCE WITH STATE LAW REGARDING EMPLOYMENT OF ALIENS: The Contractor agrees that it does not and shall not during the performance of this contract for goods and services knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.

FEDERAL REQUIREMENT: This Agreement may be subject to federal oversight. The Contractor, as applicable, will comply with 2 CFR 200 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards) Part 317-326 (Procurement Standards) and Section 2 CFR 200.404 (Cost Reasonableness).

The Contractor shall comply with any federal and state laws and regulations in regards to confidential information they may be privy to.

This Contract consisting of this Addendum and the attached Contractor's form contract constitute the entire agreement between the parties and may not be waived or modified except by written agreement between the parties.

This contract has been reviewed by staff of the Purchasing Agent of Middlesex Department. Its substantive terms are appropriate to the needs of the County and Authority. This contract is subject to the appropriations by the Middlesex County Board of Supervisors.

IN WITNESS WHEREOF, the parties have caused this contract to be duly executed, intending thereby to be legally bound.

Middlesex Broadband Authority

By: Kevin Gentry

Title: Executive Director

Date: 4/23/21

Contractor By: CED Title: 21 Date:

1505,253 lin

Approved as to form County Attorney

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (this "<u>Memorandum</u>") is made effective as of April 17, 2021 (the "<u>Effective Date</u>"), by and between Virginia Electric and Power Company dba Dominion Energy Virginia, a Virginia public service corporation ("<u>Dominion</u>"), All Points Broadband Partners, LLC, a Virginia limited liability company ("<u>All Points</u>"), and the Middlesex Broadband Authority, a poltical subdivision of the Commonwealth of Virginia (the "<u>Authority</u>"). Dominion and All Points are the "<u>Organizing Parties</u>". Dominion, All Points and the Authority are each a "<u>Party</u>" and collectively the "<u>Parties</u>".

RECITALS

- A. Pursuant to the Virginia Code § 56-585.1 :9, as amended, (the "<u>Broadband</u> <u>Statute</u>") 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 political subdivisions to facilitate such expansion.
- B. The Authority and All Points have entered into that certain Broadband Partnership Agreement dated as of April 17, 2021 (the "<u>BPA</u>"), pursuant to which All Points has been engaged to support the Authority's efforts to increase broadband access.
- C. Dominion and All Points have explored the feasibility of Dominion deploying middle mile infrastructure in Middlesex County, Virginia (the "<u>County</u>") 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 ("<u>Commission</u>") 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 the County, (ii) Dominion will leverage the additional fiber installed along the route to connect devices that may not have had fiber connectivity under the original plan pursuant to the Grid Transformation and Security Act, (iii) All Points will collaborate with and invest in the County and use the additional Dominion fiber capacity to serve broadband end users in unserved locations in the County, (iv) All Points and the Authority will collaborate to recruit and engage other partners, as appropriate, to advance the Project, and (v) the Authority will share relevant information with the Organizing Parties and collaborate with the Organizing Parties to advance the Project. The efforts of the Parties in the County pursuant to this Memorandum are referred to as the "Project".
- E. It is the intention of the Parties that the Project will result in the deployment of a fiberto-the-premises last-mile broadband network to offer service to all locations within the County that are unserved by broadband as of the date hereof. The Parties acknowledge and agree that the specific details and characteristics of the Project will be analyzed and refined as it proceeds.

NOW, THEREFORE, the Parties hereby agree as follows:

1. INFORMATION SHARING AND COORDINATION

- a) The Authority and each Organizing Party agrees to share with the Organizing Parties such information as it has in its possession related to broadband deployment and availability that may be useful to the Organizing Parties in conducting their analysis or otherwise facilitate the Project.
- b) All Points will serve as the central conduit for all information sharing activities and will be responsible for overall coordination of the Project.
- c) The Parties will coordinate any communication releases to the public, and all announcements are subject to the prior written consent of Dominion.

2. PHASE ONE TIMEFRAME AND ACTIVITIES

- a) The Parties anticipate that Phase I of the Project will continue until approximately August 1, 2021.
- b) During Phase I:
 - a. The Organizing Parties will conduct community and stakeholder engagement activities in the County.
 - b. The Organizing Parties will collaborate to develop preliminary plans and network design criteria that: (i) are consistent with the Broadband Statute and required for development of the Petition, and (ii) facilitate the extension of broadband availability to as many presently unserved locations as possible.
- c) At the Conclusion of Phase I:
 - a. All Points, in coordination with the other Organizing Parties, will present the proposed Project to the County.
 - b. All Points will identify the costs, if any, of Proceeding to Phase II for the County and identify grants and other sources of potential funding to reduce or eliminate the Authority's out-of-pocket costs to proceed.

3. PHASE TWO TIMEFRAME AND ACTIVITIES

- a) The Parties anticipate that Phase II of the Project will commence upon the conclusion of Phase I and continue until approximately May 15, 2022.
- b) During Phase II:
 - i. Dominion and All Points will prepare a petition (the "Petition") under the Broadband Statute to the Commission seeking approval of Dominion's participation in the Project. Dominion and All Points anticipate that the Petition will be submitted in the third quarter of 2021. All Points will serve as the internet service provider pursuant to the Broadband Statute. All Points and each of the other Parties will provide such information and assistance to Dominion as it may reasonably request to advance the Project and will commit to continuing to be involved in the Petition until and after approval of the Petition is received. The Parties agree that implementation of the Project is contingent upon Commission approval of such Project on terms and conditions approved by Dominion that are not materially adverse to Dominion.
 - ii. All Points will identify all available state and federal grant, loan, loan guarantee, and other support mechanisms (collectively, "<u>Public Support Mechanisms</u>") that may be available to support the Project, and All Points will coordinate and oversee the development and submission of applications for relevant Public Support

Mechanisms.

- iii. The Authority, and each Organizing Party, as applicable, will agree to support application(s) for any Public Support Mechanisms identified by All Points.
- iv. If the Petition related to the Project is approved by the Commission on terms and conditions approved by Dominion that are not materially adverse to Dominion, the Parties intend to negotiate and execute one or more binding mutual definitive agreements ("Definitive Agreements") setting forth their respective commitments and obligations and such other particulars as the parties thereto may deem appropriate.

4. EXPENSES

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

5. GOOD FAITH COMMITMENT TO EACH PROJECT

- a) The Authority agrees that, for so long as it is a Party to this Memorandum, it shall not participate in any activity or course of conduct that is inconsistent with or competitive to the Project, and that it will devote its broadband-related attention and resources to its Project, except as stated in Addendum A.
- b) The Parties understand and agree that, except as provided in the next sentence, this Memorandum (i) constitutes only a statement of intentions, (ii) does not reflect all matters upon which Definitive Agreements must be reached in order for the transactions contemplated hereby to be consummated, (iii) binding obligations with respect to a Project will only result from the execution of one or more Definitive Agreements and subject to the terms and conditions stated therein, and (iv) does not obligate the Parties to enter into any Definitive Agreement relating to any Project. This Memorandum is not intended to be binding, other than Paragraphs 3(b)(i), 4, and 5.

6. **TERMINATION**

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

7. LIMITATION OFLIABILITY

No Party shall be liable to the others in contract, tort, or otherwise, for any claims, liabilities or losses arising out of this Memorandum or alleged to result from the failure of the other Party to enter into any Definitive Agreements. The Parties hereby waive, in advance, any claims (whether such claims are based on breach of contract, tort, equity or any other theory) for the failure for any reason to enter into the Definitive Agreements. In no event shall any Party be liable to the other for any

incidental, indirect, special, punitive or consequential damages (including without limitation damages for lost profits).

8. GENERAL

8.1. Governing Law.

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

8.2. Amendments.

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

8.3. Binding Effect; Assignment.

This Memorandum will inure to the benefit of and be binding upon each of the Parties hereto and their respective successors and permitted assigns to the extent provided in Section 8, but in no respect shall give rise to any third party beneficiary rights or claims. No Party may assign any of its rights, interests, or obligations hereunder without the prior written consent of the other Parties, except that any of the Organizing Parties may assign this Memorandum to an affiliated entity upon written notice to the other Parties.

8.4. Counterparts.

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

8.5. Relationship of Parties.

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

8.6. Notices.

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 the Authority, to the address set forth on the Authority'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

MIL nson (Apr 28, 2021 09:30 EDT)

Name: Augustus Johnson, IV Title: Director, Electric Distribution Grid Solutions

ALL POINTS BROADBAND PARTNERS, LLC

James G. Carr (Apr 27, 2021 08:37 EDT)

Name: James G. Carr Title: Chief Executive Officer

MIDDLESEX BROADBAND AUTHORITY

Name: John B. Koontz, Jr. Title: (Chairman

County Address for Notice:

Woodward Building 877 General Puller Highway Saluda, Virginia 23149

[SIGNATURE PAGE TO MEMORANDUM OF UNDERSTANDING

Addendum A

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Partnership between Mathews County, Caroline County, Lancaster County, and Middlesex County with Atlantic Broadband (Delmar), LLC, a Delaware limited liability company, as outlined in the 2021 Virginia Telecommunications Initiative (VATI) program in CAMS Application No. 757071320110133, as amended during the negotiation process with the Virginia Department of Housing and Community Development.

ATTACHMENT 9	FUNDING	SOURCES	TABLE
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Source	Amount	%	Status
Requested VATI	\$ 2,050,000	19.5%	Pending
Middlesex County	\$ 1,950,000	18.6%	Secured
Electric Utility, DEV	\$ 4,005,000	38.1%	SCC Pending
All Points Broadband	\$ 2,498,887	23.8%	Secured
Total Funding Sources	\$ 10,503,887	100.0%	



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 Middlesex County (the "County") for the application to be submitted by the County Broadband Authority and All Points Broadband, as applicant and co-applicant, respectively, to the 2022 Virginia Telecommunication Initiative (the "VATI Application").

At its meeting on September 7, 2021, the County's Board of Supervisors voted to approve submission of the VATI Application, and authorized a local match commitment of \$1.95 Million to be included with the VATI Application.

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

Sincerely,

Jesuie Src anne

Wayne H. Jessie, Sr. Chairman, Middlesex County Board of Supervisors



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 ("<u>APB</u>") support for this application to the 2022 Virginia Telecommunication Initiative program ("<u>VATI</u>"). 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,

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: <u>All Points Broadband – 2022 Acclerated Fiber Deployment Initiative</u>

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 Initative 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 <u>all</u> of the equity financing required to complete <u>all</u> 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, Seachlight has invested in excess of \$1.25 billion in FTTH in the United States, making Searchlight the number one investor in domestic FTTH infrastructure in that period. And as of today, through our investments in All Points, Consolidated Communications and Ziply Fiber, Searchlight is the fourth largest builder of FTTH passings in America. All Points benefits from the tremendous volume purchasing arrangements for Searchlight's portfolio companies, which ensure availability of required supply and the best available pricing.

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

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

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,

Darrey Hat

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 ("<u>Dominion</u>") 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 "<u>Participating County</u>").

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 "<u>Utility Leverage Statute</u>").

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 ("<u>SCC</u>"). 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,

TAWAL

David F. Walker Director, Rural Broadband

ATTACHMENT 12 - DERIVATION OF COSTS

Project / Product Cost Category	Total	VATI	Non-VATI	Source of Estimate	Date, Most Recent Revision
Final Design and Engineering	\$ 284,258	\$ 142,129	\$ 142,129	Tilson	9/2/21
Project & Construction Mgmt.	\$ 411,083	\$ 205,542	\$ 205,542	Tilson	9/2/21
Headend/Central Office	\$ 229,114	\$ 69,386	\$ 159,728	Tilson	9/2/21
Field Network Equipment	\$ 268,889	\$ 81,432	\$ 187,457	Tilson	9/2/21
Utility Middle Mile	\$ 4,005,000	\$ -	\$ 4,005,000	APB / DEV	9/10/21
Aerial Make Ready & Construction	\$ 2,307,025	\$ 698,674	\$ 1,608,351	AFL / Tilson	9/2/21
Underground Construction	\$ 1,043,584	\$ 316,046	\$ 727,539	Tilson	9/2/21
Fiber Drop Construction	\$ 1,183,558	\$ 295,889	\$ 887,668	AFL / Tilson	9/2/21
Subscriber Equipment & Installation Labor	\$ 220,294	\$ 55,073	\$ 165,220	Tilson	9/2/21
Other Capex	\$ 455,038	\$ 137,807	\$ 317,232	APB / Tilson	9/2/21
Construction Bond (1.5%)	\$ 96,043	\$ 48,021	\$ 48,021	APB	9/10/21
Total	\$ 10,503,887	\$ 2,050,000	\$ 8,453,887		

** 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 ("<u>APB</u>") 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. ("<u>Tilson</u>") 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 ("<u>AFL</u>"), 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



September 7, 2021

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

RE: 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



 Corporate Headquarters

 170 Ridgeview Center Drive, Duncan, SC 29334 USA

 TEL: (800) 235-3423
 TEL: (864) 433-0333

 FAX: (864) 433-5560
 WEB: WWW.AFLglobal.com

September 8, 2021

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

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

Dear Dr. Holmes,

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

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

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

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

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

Sincerely,

Ryan O'Sullivan Director, Rural Fiber to the Home (RFTTH) Program Management

ATTACHMENT 13 - DOCUMENTATION OF SUPPORTING COST ESTIMATES

PROJECT COST ROLLUP	Unit of Measure	Units	Unit Cost	Project Cost
Construction				
Final Design and Engineering	Miles	137.8	\$ 2,063	\$ 284,258
Project & Construction Mgmt.	Miles	137.8	\$ 2,984	\$ 411,083
Headend/Central Office	Project	1	\$ 229,114	\$ 229,114
Field Network Equipment	No. Unserved Passings	970	\$ 277	\$ 268,889
Utility Middle Mile	Miles	80.1	\$ 50,000	\$ 4,005,000
Aerial Make Ready & Construction	Miles	47.1	\$ 48,937	\$ 2,307,025
Underground Construction	Miles	10.5	\$ 99,190	\$ 1,043,584
Construction Subtotal				\$ 8,548,954
Customer Installations				
Fiber Drop Construction	No. Subscribers	728	\$ 1,626	\$ 1,183,558
Subscriber Equipment & Installation Labor	No. Subscribers	728	\$ 303	\$ 220,294
Installation Subtotal				\$ 1,403,851
Other				
Other Capex	Project	1	\$ 455,038	\$ 455,038
Grant Administration	Project	1	\$ -	\$ -
Construction Bond (1.5%)	Insured Activity	\$ 6,402,844	\$ 0.01500	\$ 96,043
Other Subtotal				\$ 551,081
Total				\$ 10,503,887

HEADEND / CENTRAL OFFICE	Category	Units	Unit Cost	Extended Cost
CO Site Acquisitions	Headends Total	2	\$ 30,000.00	\$ 60,000
Tax		0		\$ 3,180
ODC 100 Cabinet - Adtran, Nokia, Calix 1XTA5000 5 GEN SMART FIBER (mounting	Small Headends	2	\$ 24,000.00	\$ 48,000
bracket)	Small Headends	2	\$ 1,346.22	\$ 2,692
30AMP Generator Connector	Small Headends	2	\$ 1,650.00	\$ 3,300
5TH GEN SMART POLE MOUNT KIT	Small Headends	2	\$ 1,410.59	\$ 2,821
Pole 30-5 (Labor and Materials)	Headends Total	2	\$ 1,500.00	\$ 3,000
Headend / Central Office Subtotal Installation Labor, Freight, Tax, and				\$ 122,994
Contingency				\$ 106,120
Headend / Central Office Total				\$ 229,114

FIELD NETWORK EQUIPMENT	Category	Units	Unit Cost	Extended Cost
Netbotz Environmental Monitor including all				
sensors	Headends, all	2	\$ 850.00	\$ 1,700
OLT Management Server (CMS)	Local Networks	1	\$ 8,000.00	\$ 8,000
000-00372 - E7-2 Field Install Package (CO &				
ODC/RT): Shelf with Blank Card, FTA, and Field				
installation Kit	Chassis and spares	14	\$ 616.90	\$ 8,637
100-05529 - E7-2 XG 801 XGS-PON	Modules, XGSPON	3	\$ 11,670.00	\$ 35,010
100-04651 QSFP, 40GE Single Mode				
transceiver 40km, 1310nm, Duplex LC, C-Temp	Headends, all	4	\$ 6,497.00	\$ 25,988
100-05642- OIM 10G PON Laser	Modules, XGSPON	24	\$ 695.00	\$ 16,680
Generator - Generac 25 KV - 24 hour backup				
system	Headends, all	2	\$ 17,000.00	\$ 34,000
BATTERY STRING, 190AH	Small + Medium Headends	2	\$ 2,992.94	\$ 5,986
ELTEK FLATPKS RECTIFIER 1000W	Small + Medium Headends	8	\$ 642.35	\$ 5,139
Field Network Equipment, Subtotal Installation Labor, Freight, Tax, and				\$ 141,139
Contingency				\$ 127,750
Field Network Equipment, Total				\$ 268,889

ATTACHMENT 13 - DOCUMENTATION OF SUPPORTING COST ESTIMATES (CONTINUED)

DISTRIBUTION FIBER DESIGN BASIS	TOTAL	AERIAL	UNDERGROUND	UNIT COST, AERIAL	UNIT COST, UG
Straight Poles	1,094	1,094	-		0001,00
Curved Poles	274	274	-		
Total Poles	1,368	1,368	-		
Average Drop Length (feet)	701	-	-		
Path (feet)	304,465	248,914	55,551		
Cable Size 12 (feet)	245,108	203,147	41,961		
Cable Size 24 (feet)	36,646	24,447	12,199		
Cable Size 48 (feet)	20,143	16,705	3,438		
Cable Size 72 (feet)	73	73	-		
Cable Size 96 (feet)	7,673	7,673	-		
Cable Size 144 (feet)	-	-	-		
Cable Size 288 (feet)	-	-	-		
Cable Size 432 (feet)	-	-	-		
Cable Total (feet)	309,643	252,045	57,598		
Serving Terminal Size 4	94	61	33		
Serving Terminal Size 8	141	137	4		
Serving Terminal Total	235	198	37		
Distribution Splices at Drop Hubs and					
Distribution Splice Points - TOTAL	977	932	45		
Distribution Splices at Distribution Hubs -					
TOTAL	132	132	-		
Drop Tail Splices - TOTAL	-	-	-		
Feeder Splices at Distribution Hubs and Feeder					
Splice Points - TOTAL	10	10	-		
Feeder Splices at Headend - TOTAL	-	-	-		
Splices Total	10	10	-		
Splice Cases	69	69	-		
Small Headends	2	-	33		
Medium Headends	-	-	4		
Large Headends	-	-	-		
Headends Total	2	-	37		
Large Preterm Shelves - Total	3	-	-		
Small Preterm Shelves - Total	2	-	-		
Preterm Shelves Total - Total	5	-	-		
FDH Size 96	1	-	-		
FDH Size 144	-	-	-		
FDH Size 288	-	-	-		
FDH Size 432	3	-	-		
FDH Total	4	-	-		
Splitter Module Size 2 - Distribution	-	-	-		
Splitter Module Size 4 - Distribution	-	-	-		
Splitter Module Size 8 - Distribution	-	-	-		
Splitter Module Size 16 - Distribution	-	-	-		
Splitter Module Size 32 - Distribution	32	-	-		
Splitter Module Size 64 - Distribution	-	-	-		
Splitter Module All Size - Distribution	32	-	-		
Splitter Module All Size - Total	32	-	-		
Handhold Size 4 HUB	33	-	-		
Handhold Size 8 HUB	4	-	-		
Handhold Size 0 Splice	-	-	-		
Handhold Total	37				



(RETAIN FOR YOUR RECORDS) Form 477 Filing Summary

FRN: 0023524705 Data as of: Jun 30, 2020 Operations: Non-ILEC Submission Status: Original - Submitted Last Updated: Sep 1, 2020 22:03:25

Filer	Section	Question	Response
Identification	Filer Information	Company Name	All Points Broadband
		Holding Company Name	Virginia Everywhere, LLC
		SAC ID	
		499 ID	831251
	Data Contact Information	Data Contact Name	
	-	Data Contact Phone Number	(703) 554-6600
		Data Contact E-mail	
	Emergency Operations Contact Information	Emergency Operations Name	Don McElroy
		Emergency Operations Phone Number	(703) 554-6600
		Emergency Operations E-mail	
	Certifying Official Contact Information	Certifying Official Name	James Carr
		Certifying Official Phone Number	(703) 554-6600
		Certifying Official E-mail	

Data Submitted	Form Section	File Name	Date & Time	Number of Rows
	Fixed Broadband Deployment	FCC477-Deployment-1H2020.csv	Sep 1, 2020 12:56:17	
	Fixed Broadband Subscription	fcc477_20200901.csv	Sep 1, 2020 18:25:33	
	Fixed Voice Subscription	fcc477_voip_20200701.csv	Sep 1, 2020 18:28:08	

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Kentucky	All Points Broadband	Optical Carrier/Fiber to the End User	
		Terrestrial Fixed Wireless	
Maryland	All Points Broadband	Terrestrial Fixed Wireless	
Virginia	All Points Broadband	Terrestrial Fixed Wireless	
West Virginia	All Points Broadband	Terrestrial Fixed Wireless	

State	DBA Name	Technology	Blocks
Total			

Fixed Broadband Subscription

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

			Subscriptions				
State	Technology	Census Tracts	Consumer	Business / Govt	Total		
Kentucky	Optical Carrier/Fiber to the End User						
	Terrestrial Fixed Wireless						
Maryland	Terrestrial Fixed Wireless						
Texas	Terrestrial Fixed Wireless						
Virginia	Terrestrial Fixed Wireless						
West Virginia	Terrestrial Fixed Wireless						
Total							

Fixed Broadband Subscriptions by Bandwidths and End-user Type

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

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

Fixed Broadband Subscriptions by Technology, Bandwidths and End-user Type

	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
Optical Carrier/Fiber to the En User					

	Downstream Bandwidth (in	Upstream Bandwidth (in		Business /	
Technology	Mbps)	Mbps)	Consumer	Govt	1
Ferrestrial Fixed Wireless					

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
T1					
Total					

Fixed Voice Subscription

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

State	Total VGE Lines	Consumer VGE Lines	Total VoIP Subscriptions	Consumer VoIP Subscriptions
Kentucky				
Virginia				
Total				

Fixed Voice Subscription (iVoIP)

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

State	Total	Consumer	Business / Govt
Kentucky			
Virginia			
Total			

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

			by End-user Type		by Bundle		by Last-mile Medium		
State	Total	Consumer	Business / Government	Sold w/ Internet	Sold w/o Internet	FTTP	Coax	Fixed Wireless	Copper
Kentucky									
Vincinia	-								
Virginia									
Total									



(RETAIN FOR YOUR RECORDS) Form 477 Filing Summary

FRN: 0023524705 Data as of: Dec 31, 2020 Operations: Non-ILEC Submission Status: Original - Submitted Last Updated: Mar 16, 2021 15:11:37

Filer	Section	Question	Response
Identification	Filer Information	Company Name	All Points Broadband
		Holding Company Name	Virginia Everywhere, LLC
		SAC ID	
		499 ID	831251
	Data Contact Information	Data Contact Name	
		Data Contact Phone Number	(703) 554-6600
		Data Contact E-mail	
	Emergency Operations Contact Information	Emergency Operations Name	Don McElroy
		Emergency Operations Phone Number	(703) 554-6600
		Emergency Operations E-mail	
	Certifying Official Contact Information	Certifying Official Name	James Carr
		Certifying Official Phone Number	(703) 554-6600
		Certifying Official E-mail	

Data Submitted	Form Section	File Name	Date & Time	Number of Rows
	Fixed Broadband Deployment	fcc477Deployment_20201231.csv	Mar 16, 2021 15:01:06	
	Fixed Broadband Subscription	fcc477_20201231.csv	Mar 16, 2021 15:01:27	
	Fixed Voice Subscription	voip_20201231.csv	Mar 16, 2021 15:01:46	

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Kentucky	All Points Broadband	Optical Carrier/Fiber to the End User	
		Terrestrial Fixed Wireless	
Maryland	All Points Broadband	Terrestrial Fixed Wireless	
Virginia	All Points Broadband	Terrestrial Fixed Wireless	
West Virginia	All Points Broadband	Terrestrial Fixed Wireless	

State	DBA Name	Technology	Blocks
Total			

Fixed Broadband Subscription

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

	Technology		Subscriptions			
State		Census Tracts	Consumer	Business / Govt	Tota	
Kentucky	Optical Carrier/Fiber to the End User					
	Terrestrial Fixed Wireless					
Maryland	Terrestrial Fixed Wireless					
Texas	Terrestrial Fixed Wireless					
Virginia	Terrestrial Fixed Wireless					
West Virginia	Terrestrial Fixed Wireless					
Total						

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Tota

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

Fixed Broadband Subscriptions by Technology, Bandwidths and End-user Type

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
Optical Carrier/Fiber to the End User					

	1	1			
Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
		-			
Terrestrial Fixed Wireless					

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

Fixed Voice Subscription

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

State	Total VGE Lines	Consumer VGE Lines	Total VoIP Subscriptions	Consumer VoIP Subscriptions
California				
Kentucky				
Virginia				
Total				

Fixed Voice Subscription (iVoIP)

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

State	Total	Consumer	Business / Govt
California			
Kentucky			
Virginia			
Total			

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

			by End-user Type		by Bundle		by Last-mile Medium		
State	Total	Consumer	Business / Government	Sold w/ Internet	Sold w/o Internet	FTTP	Coax	Fixed Wireless	Copper
California									
Kentucky									
Virginia									

		by End-user Type		by Bundle		by Last-mile Medium			
State	Total	Consumer	Business / Government	Sold w/ Internet	Sold w/o Internet	FTTP	Coax	Fixed Wireless	Copper
Total									

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

Survey Overview & Methodology

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

Target Audience Process

We targeted Zip Codes to address the following priorities:

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



Qualification Criteria

Must

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

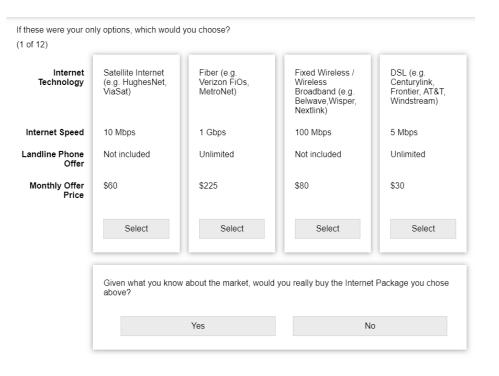
	Timeline	Week 1 (5/31)		Week 2 (6/7)	Week 3 (6/14)	
	FTTH Rapid Assessment		Build Survey & address initial client feedback. Survey Soft Launch	Survey Full Launch, Survey Analysis File & Preliminary Report	Final Survey Analysis Report	
Project kickoff Sources: Underserved BB Survey (N=1042), Altman Solon Research & Analysis			ff			nal

Confidential & Proprietary

Residential Survey - Conjoint Analysis

In our conjoint, respondents are asked to select product packages they are most likely to purchase

Sample Choice Based Conjoint (CBC) Question



- Respondents see 10-12 screens, and on each must select their **favored option out of the given options**, and indicate whether they would purchase this option in the marketplace
- A conjoint has two pieces:
 - **Attributes** (e.g., Internet Technology and Monthly Price)
 - **Levels** (e.g., DSL, Fiber, or \$60, \$120) which define the different options an attribute can take on
- By showing multiple randomized packages, conjoint surveys can determine the relative value of product features based on survey-taker tradeoffs
- Altman Solon uses Hierarchical Bayes estimations to determine relative importance of each attribute and level

Note: This page would be proceeded by a description page which defines each attribute and level, including the channels included in each channel package Sources: Underserved BB Survey (N=1042), Altman Solon Research & Analysis

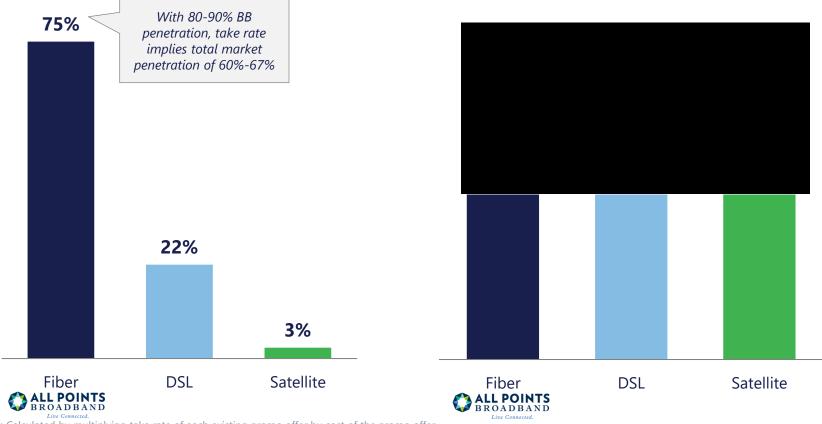


Simulation Results – Satellite & DSL

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

ARPU by Technology N=1042, Simulated ARPU¹

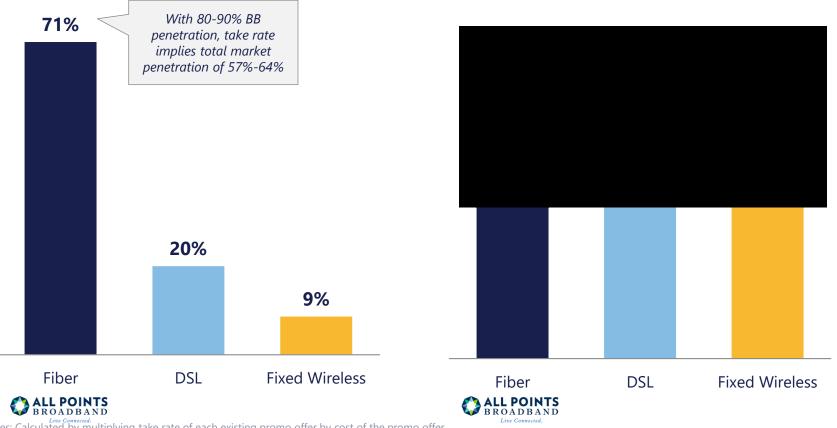


Notes: Calculated by multiplying take rate of each existing promo offer by cost of the promo offer Sources: Underserved BB Survey (N=1042), Altman Solon Research & Analysis

In 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

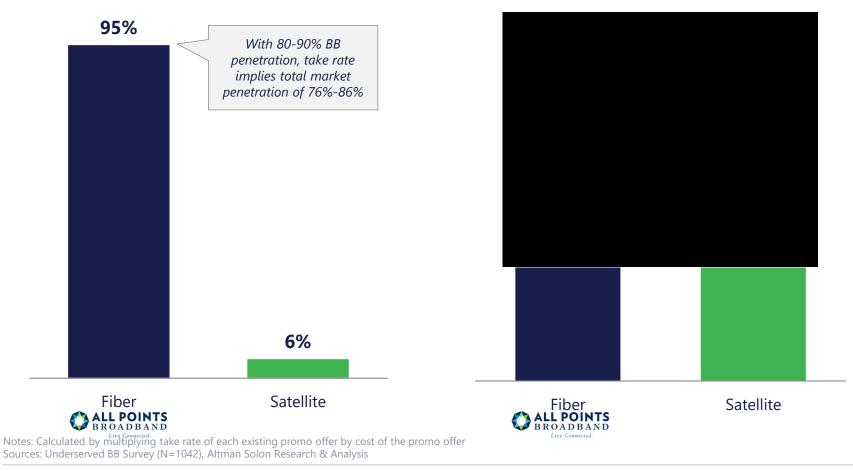
ARPU by Technology N=1042, Simulated ARPU



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

Simulation Results - Satellite In satellite only markets, we observe 95% take rate

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



ARPU by Technology

N=1042, Simulated ARPU¹

🔿 altman solon

Zip

Go



Live Connected.

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.

Register Here for Fiber to Your Home

Address

Unit

Gig Fiber Broadband in Your Home

CROWD FIBER LANDING PAGE

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

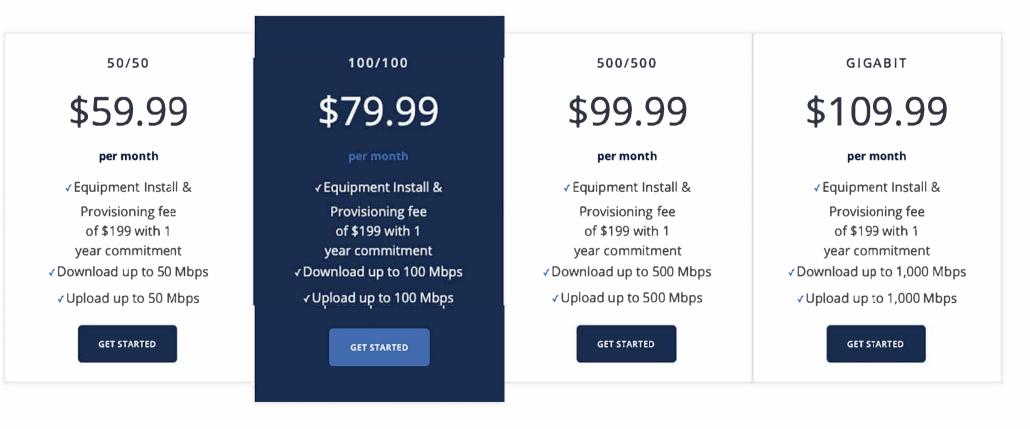
NO COMMITMENTS. PAY NOTHING UPFRONT. JUST SHOW YOUR INTEREST!



INTERNET SERVICES - ABOUT US - WEBMAIL MY ACCOUNT HELP - NETWORK STATUS

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.





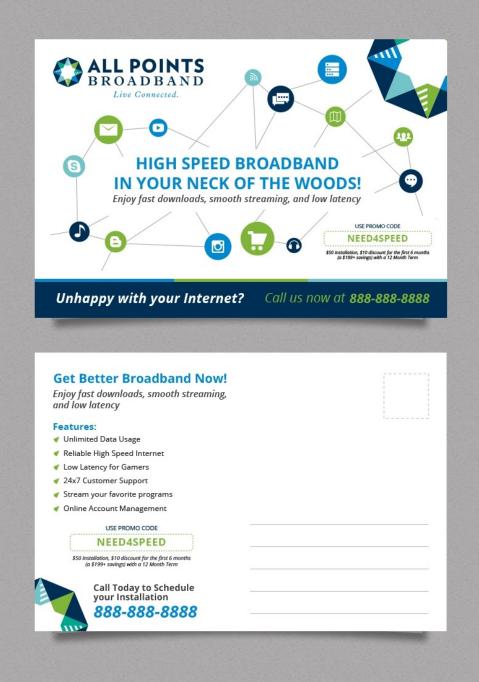
SAMPLE FLYERS & DOOR HANGERS





















USE PROMO CODE : NEED4SPEED

\$50 INSTALLATION, \$10 DISCOUNT FOR THE FIRST 6 MONTHS WITH A 12 MONTH TERM

\$199 SAVINGS

CALL TODAY TO SCHEDULE YOUR INSTALLATION 888-888-8888

FAST DOWNLOADS



G LOW LATENCY

ALL POINTS BROADBAND Live Connected.

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

FEATURES:

Unlimited Data Usage

Low Latency for Gamers

•

- 24x7 Customer Support
- Reliable High Speed Internet
- Stream your favorite programs
 Online Account Management
- CALL TODAY TO SCHEDULE YOUR INSTALLATION

1888-888-888

WWW.ALLPOINTSBROADBAND.COM

ALL POINTS BROADBAND Leesburg, Virginia 20175





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

FEATURES:

Low Latency for Gamers

Unlimited Data Usage

۲

- 24x7 Customer Support Stream your favorite programs
- Reliable High Speed Internet
 - Online Account Management
- CALL TODAY TO SCHEDULE YOUR INSTALLATION

888-888-8888I

WWW.ALLPOINTSBROADBAND.COM

ALL POINTS BROADBAND Leesburg, Virginia 20175



ALL POINTS BROADBAND Live Connected.

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

FEATURES:

Unlimited Data Usage

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- 24x7 Customer Support
- Reliable High Speed Internet

Low Latency for Gamers

Stream your favorite programsOnline Account Management

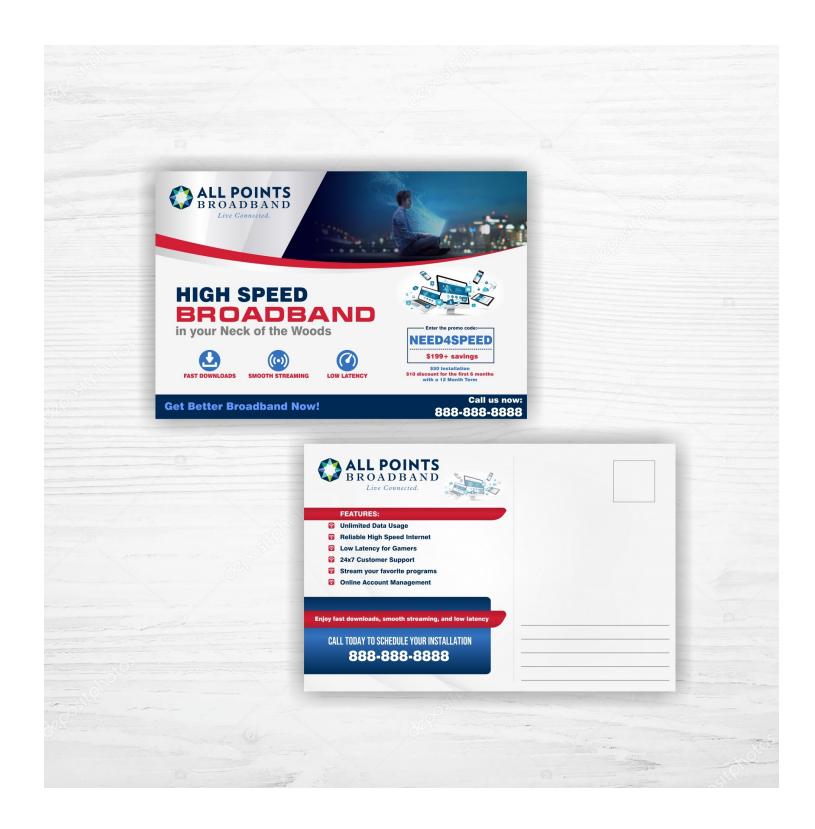
CALL TODAY TO SCHEDULE YOUR INSTALLATION

888-888-8888

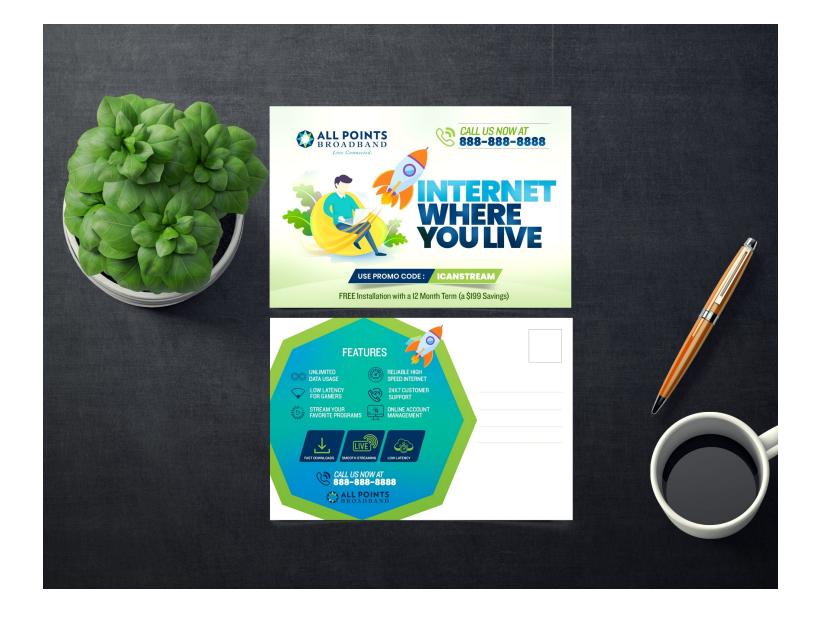
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Enjoy fast downloads, Smooth streaming, Low latency

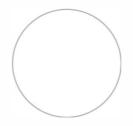
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GIGABIT BROADBAND INSTALLATION STARTING AT \$199

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

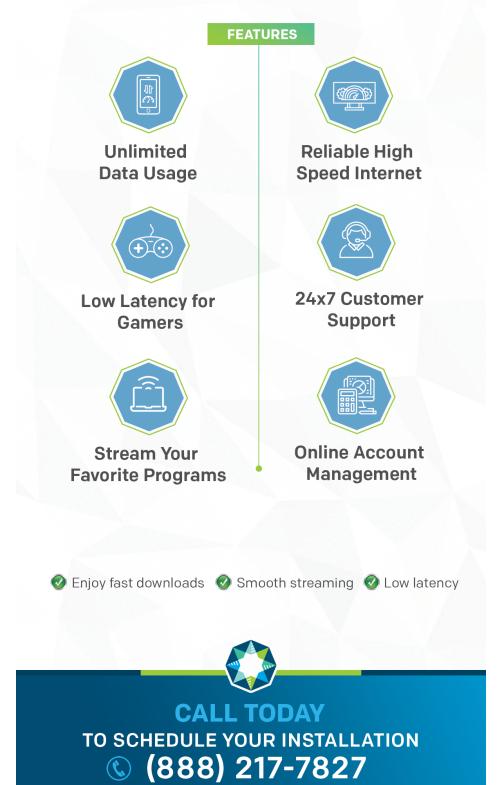
Sign Up NOW at:

https://fiber.allpointsbroadband.com



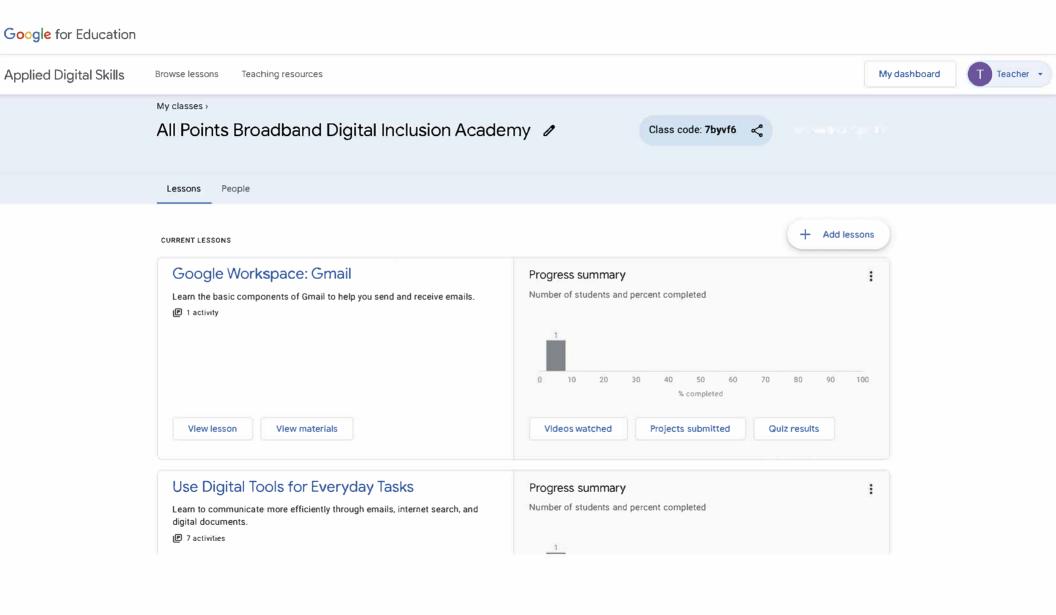
CALL TODAY TO SCHEDULE YOUR INSTALLATION (888) 217-7827



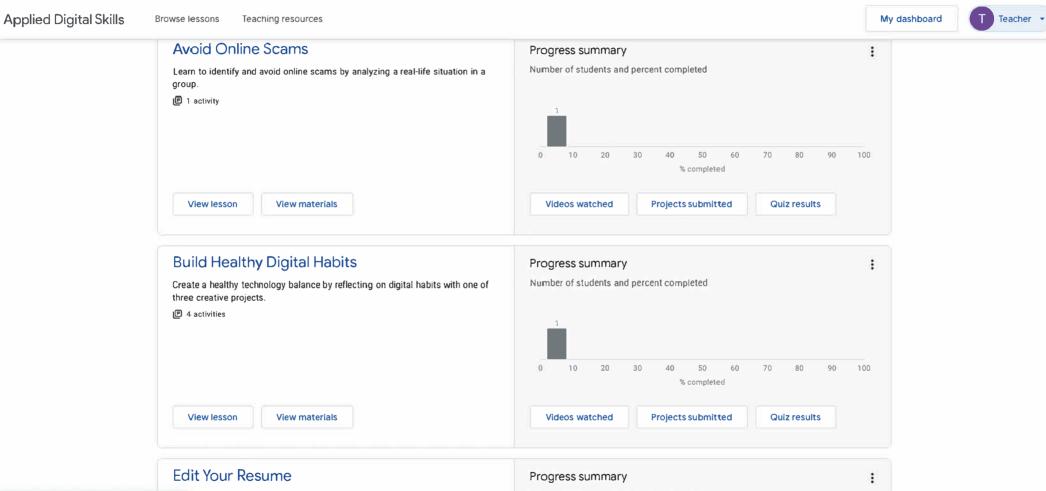




Attachment 18 - All Points Broadband Digital Inclusion Academy Sample



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tps://applieddigitalskills.withgoogle.com/dashboard your resume to make it stronger and more appealing to an employer.

Number of students and percent completed

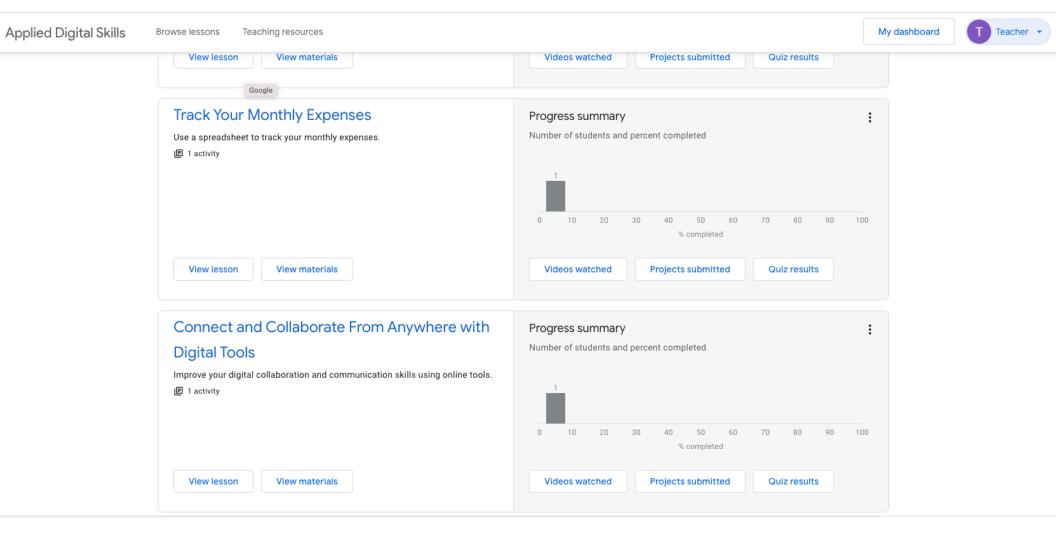
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Applied Digital Skills	Prowse lessons Teaching resources		My dashboard	T Teacher 🔹
	Use Google to Get a New Job Conduct a successful job search using digital tools. Image: 7 activities View lesson View materials	Progress summary Number of students and percent completed 1 0 10 20 30 40 50 60 70 80 90 10 % completed Videos watched Projects submitted Quiz results	10	
	Create a Budget in Google Sheets Learn to make good financial decisions by researching and comparing costs and spending in a spreadsheet. Image: Stativities View lesson View materials	Progress summary Number of students and percent completed 1 0 10 20 30 40 50 60 70 80 90 10 % completed Videos watched Projects submitted Quiz results		
	Plan and Budget	Progress summary	:	

tps://applieddigitalskills.withgoogle.com/dashboard lyze spending, research costs, and plan for purchases using a spreadsheet.

Number of students and percent completed

Google for Education



Applied Digital Skills Browse lessons



Welcome All Points Broadband Customer!

My classes



Key Individual	Roles and Responsibilities	Previous Experience
Jimmy Carr –	CEO, APB	See below
CEO (APB)		
Sean Flora	Director of Fiber Construction, APB	See below
Brandon Ogilvie	CFO, APB	See below
Tom Innes	SVP of Public-Private Partnerships, APB	See below
Chuck Hogg	SVP of FTTH Deployments, APB	See below
Darren Glatt	Partner and Co-Head of Infrastructure	See below
	Investing, Searchlight Capital Partners	
Ajit Pai	Partner, Searchlight Capital Partners	See below
Ed Diggs	Manager, Rural Broadband, Dominion	See below
Kevin Gentry	Director of Information Technology,	See below
	Middlesex County & Executive Director,	
	Middlesex Broadband Authority	

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

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.

Attachment 20 - Project Management Team

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 Cincinati 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.

Attachment 20 - Project Management Team

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, 1600ver90, 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.

<u>Kevin Gentry, Director of IT and Executive Director of Middlesex Broadband Authority</u> Kevin Gentry is Middlesex County's Director of Information Technology and the Executive Director of the Middlesex Broadband Authority. He has overseen the County's broadband expansion efforts for many years and will serve as the County's lead for this project.