County of Henrico

Henrico County Universal Broadband Project

Application ID: 95708252022122319

Application Status: Pending

Program Name: Virginia Telecommunication Initiative 2023 - Application

Organization Name: County of Henrico

Organization Address: 4301 East Parham Road

Henrico, VA 23228

Profile Manager Name: David Sacks

Profile Manager Phone: (804) 501-7611

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Project Name: Henrico County Universal Broadband Project

Project Contact Name: Travis Sparrow

Project Contact Phone: (804) 501-5976

Project Contact Email: spa62@henrico.us

Project Location: 4301 E Parham Road

Henrico, VA 23228-2745

Project Service Area: Henrico County

Total Requested Amount: \$501,620.00

Required Annual Audit Status: No Current Audits Found

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Budget Information:

Cost/Activity Category	DHCD Request \$501,620.00	Other Funding \$6,027,280.42	Total	
Telecommunications			\$6,528,900.42	
Construction	\$391,999.66	\$2,304,766.41	\$2,696,766.07	
Construction Related Soft Costs	\$109,620.34	\$644,514.01	\$754,134.35	
Other: Utility Middle Mile	\$0.00	\$3,078,000.00	\$3,078,000.00	
Total:	\$501,620.00	\$6,027,280.42	\$6,528,900.42	

Budget Narrative:

Questions and Responses:

1. Project Description and Need

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

Answer:

This application is for the Henrico County Fiber Deployment Initiative ("Initiative") and is submitted by Henrico County ("County") and All Points Broadband ("APB" or "All Points"), as applicant and co-applicant, respectively. Several responses exceeded the CAMS character limit, so we have followed DHCD guidance to provide responses to those questions elsewhere in the application.

The map included as Attachment 1 and related shape files demonstrate the specific boundaries of the proposed project area. The project encompasses neighborhoods in the eastern portion of the county. Communities within the project area include Varina and Elko.

To determine the proposed project area, All Points' field teams visited and visually inspected all areas within the County where incumbent broadband providers are not offering service according to publicly available data. Specifically, All Points personnel visited all the areas proposed to be served by the project to verify that each area is not currently served by wireline technology (cable or fiber) that can provide 100/20 mbps. Unserved locations within or adjacent to presumably served areas were visually confirmed to not have qualifying existing serviceability. All Points' preliminary analysis was reviewed by the County and compared to County information gathered from previous studies and analysis. The proposed project area was also compared to previous VATI applications submitted by the County and its FY22 Coapplicant, Comcast. Upon further review in preparation of the FY23 application, many of the locations in the FY22 were deemed to be passed by broadband.

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In 2022, the County partnered with All Points and Dominion to explore a project to achieve universal broadband across the County. The County, All Points and Dominion entered into an MOU (attached as 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.

Using field surveys, County coverage data, previous VATI application, All Points then developed a proposed project area and published an online survey in which residents and property owners could complete to verify whether a specific location was served or unserved by broadband. Survey data was then used to refine the proposed service area and to ensure that the unserved locations in the County were included in the proposed project. An example of the crowd sourced verification survey is included with Attachment 3.

The project will extend FTTH infrastructure to 412 serviceable units in the County. Based on 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 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 all remaining unserved locations in the County. As described in the response to question 5 and listed in Attachment 4, none of the serviceable units can receive 25/3 mbps access today.

A secondary reason why the proposed project area was selected is because it is an ideal area in which Virginia Code §56-585.1:9, as amended, (the "Utility Leverage Statute") can be leveraged to achieve cost-effective universal broadband coverage in a county. The entire project area is within Dominion's electric service territory. 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 public subsidy funding than would otherwise be required to extend FTTH throughout the proposed project area.

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

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

Answer:

The wireline broadband providers in the County are Comcast and Verizon, both of which have a franchise agreement with the County. These providers offer service plans that deliver speeds above the 100/20 mbps threshold in many areas of the county. As is common in many rural areas, the services available according to FCC Form 477 data dramatically overstates service to specific locations because the basis of serviceability is at the census block level. This overstatement is present in much of unserved Henrico County.

The proposed project area contains those communities and neighborhoods where neither Comcast nor Verizon are required to complete network buildout in accordance with their franchise agreements. All Points has visited each of the proposed areas to be served by the project to visually verify that wireline broadband capable of 100/20 mbps does not exist at these locations. The County and Comcast, as co-applicant, applied for FY22 VATI funding in areas included in the current proposed project area.

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

Answer:

There are minimal Connect America Funds II (CAF) that were awarded to a provider in the west central area of the county; however, these locations are miles from the project area as demonstrated in Attachment 2. There are no portions of the County in or near the project area that have been funded by ACAM, ReConnect, or Community Connect. See Attachment 2 for the visualization of federally funded areas.

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

Answer:

As noted above, All Points conducted extensive field surveys, utilized a previous VATI application, and compared county data to determine the 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) capable of providing 100/20 mbps service. Field verification of existing infrastructure occasionally misses underground or otherwise hidden cables serving a neighborhood; however, we anticipate the number of potentially served locations within the project to be substantially below the 20% threshold. These verified areas were then mapped to determine the project area and com pared to publicly available FCC data, the Commonwealth Connection Map, and data from the County. The map of the FY22 VATI application is included as Attachment 3.

5.

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Total Passings: Provide the number of total serviceable units in the project area. Applicants are encouraged to prioritize areas lacking 25 Megabits per second download and 3 Megabits per second upload speeds, as they will receive priority in application scoring. For projects with more than one service area, each service area must have delineated passing information. Label Attachment: Attachment 4 – Passings Form.

- a. Of the total number of VATI passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area.
- b. If applicable, of the total number of RDOF passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area.
- c. If applicable, provide the number of passings that will require special construction costs, defined as a one-time fee above normal service connection fees required to provide broadband access to a premise. Describe the methodology used for these projections.
- d. If applicable, provide the number of passings included in the application that will receive broadband access because special construction costs have been budgeted in the VATI application. Describe the methodology used for determining which passings with special construction costs were budgeted in the application.
- e. Provide the number of passings in the project area that have 25/3 Mbps or less. Describe the methodology used for these projections. (up to 15 points)

Answer:

As noted in Attachment 5, there are 412 total serviceable units in the project area. Verizon reports ADSL technology able to serve many census blocks; however, a review of the Form 477 data revealed that maximum download speeds of Verizon ADSL to be 15 mbps and frequently much lower. All locations within the project area lack access to 25/3 mbps broadband from a wireline service provider. Wireless 25/3 mbps service may be available via satellite or mobile hotspot on a case-by-case basis.

A. To determine the number of residential, business, non-residential and community anchor institutions in the proposed project area, each of the 412 locations in the proposed project area were cross-referenced to parcel-specific land use data in the County's GIS database or the USPS service address database. This process resulted in 376 passings categorized as residential, 22 passings categorized as non-home-based businesses, 13 residential passings where a home-based business was located, 3 community anchor institutions, and 11 passings categorized as non-residential.

The project area also includes several significant community anchor institutions. The project will make high quality internet access available at Wilton Farm, the Malvern Hill Battlefield, a County 911 tower site, the Good Neighbor Village, and a County recreation and park facility, Wilton Farm is a 1,194-acre tract of very historic property along the James River that was recently acquired by Henrico County; its future includes some residential and business development, a welcome center/museum, and secondary education programming for Henrico County Public Schools. Malvern Hill is a 427-acre historic conservation area with numerous historic structures and improvements. The mission of Good Neighbor Village is "To provide a residential opportunity in a community setting for adults with mild to moderate intellectual disabilities. The Village exists to meet with comfort and dignity the housing, administrative, fellowship and community needs of the residents as they strive to be, to the best of their ability, productive and independent members of the community." The Good Neighbor Village will be provided complimentary broadband service.

B. There are provisional RDOF awards within the proposed project area, most of which had been provisionally

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awarded to SpaceX which has recently been disqualified from receiving RDOF funding. We estimate that 14 locations within the project area have been provisionally awarded RDOF funding to Connect Everyone, LLC; however, that RDOF award has not been fully authorized.

C. None of the passings included in the proposed project area will require special construction costs. All Points commits to providing a Standard Installation, regardless of drop length, to all locations in the project for the same fixed fee of \$199.00 during the first year of service availability. Therefore, all the passings within the proposed service area will be considered serviceable units.

D. As noted above, none of the passings included in the proposed project area will require special construction costs. All Points commits to providing a Standard Installation, regardless of drop length, to all locations in the project for the same fixed fee of \$199.00 during the first year of service availability. 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. All 412 of the passings in the proposed project area lack access to broadband service of at least 25/3 mbps. Neither of the County's cable franchisees are offering service in the proposed project area. Verizon offers ADSL service in certain portions of the project area; however, Form 477 data and a spot-check on the Verizon service website indicates that only speeds well below 25/3 mbps are available. All Points has also conducted extensive field surveys to determine the existence of wired broadband service. Further, many of the locations included in the proposed project were included in Henrico's FY22 VATI application with Comcast. Therefore, there is no verified provider offering wired broadband of 25/3 Mbps or greater in the proposed project area. There are no terrestrial fixed wireless providers in the area.

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

Answer:

Attachment 5 includes a map showing the minimal number of locations provisionally awarded RDOF funding in the project area and a table of location by census block. The project includes 142 locations provisionally awarded to SpaceX. On August 10, 2022, the Federal Communications Commission (FCC) rejected the long form RDOF applications for all SpaceX awarded locations, including those in Virginia. Following the rejection of SpaceX's provisional RDOF funding, these locations are even more at risk for remaining completely unconnected without a funded VATI project in FY23. After removing these passings, All Points estimates that 14 locations within the project area have been provisionally awarded RDOF funding to Connect Everyone, LLC; however, the RDOF award for these passings has not been fully authorized.

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

Answer:

Wireless infrastructure is not applicable as this project will provide FTTH based on XGS-PON standards to all locations

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

Answer:

The project is a new FTTH deployment based on XGS-PON standard that will make FTTH service available to all currently unserved locations in the County. The network includes 87 miles of fiber, of which approximately 35.7 miles will be built by All Points and approximately 51.3 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.

At completion, the network will include two upstream connection points to All Points' network core in the data center cluster in Ashburn, Virginia, and path-diverse connections to All Points' redundant network core in the Cermak data center in Chicago, Illinois.

The network will utilize a 32:1 ratio XGS-PON network, capable of delivering 10 gigabit, symmetric service to each location and capacity to accommodate future demands of network subscribers over the life of the infrastructure. All new fiber distribution infrastructure will be sourced from AFL Telecommunications ("AFL") as the principal cable manufacturer. The project will future-proof the network with cables of various strand counts, 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. During times of supply chain uncertainty, having committed US-based manufacturing capacity sets this project apart from others in the region.

Approximately 80% of the fiber distribution routes will be aerial and 20% of fiber distribution routes will be underground. The network will include approximately 93 fiber feeder hubs and fiber distribution hubs. Service drops will be made to one of approximately 252 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. Terminals, hubs, and related components will be sourced by

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Anixter Wesco as described in Attachment 13

All customer premises equipment, including optical network terminals and Wi-Fi internet access gateways will be from the industry-leading Calix ecosystem. All network optronics will use the XGS-PON (ITU G.9807.1) architecture, which can deliver 10 gigabit, symmetric service to all end users. As indicated in the letter included in Attachment 13, Calix has allocated manufacturing capacity to support the Henrico project bill of materials.

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 24 fiber strands will be reserved to accommodate future needs and in some routes this count will reach 288 strands. 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 and throughout the life of the infrastructure.

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.

Bills of materials derived from the high-level process have been reviewed and verified by various third-party partners as described in Attachment 13.

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

Answer:

The last-mile FTTH network will initially offer three speed tiers that are fully symmetrical: 50/50 Mbps, 100/100 mbps, and 1/1 Gbps, with no data caps. The intended, initial non-promotional, monthly pricing for residential service levels is \$59.99, \$89.99, and \$119.99, respectively, with a \$5 service fee to cover applicable taxes and FCC fees. Standard commercial service levels will be offered up to 2/2 Gbps and custom levels up to 10/10 Gbps

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 \$19.99 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 in accordance with XGS-PON standards. All Points has designed the network to consistently deliver advertised speeds as though all customers subscribed to the 1/1 Gbps service. All Points is committed to open and transparent network operations as described in the company's Open Internet Statement, which is available at https://allpointsbroadband.com/legal/ois/.

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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:

This project includes all 412 locations in the County that remain unserved and completing the project will achieve universal broadband in the County.

Achieving universal broadband access has been a long-term objective of the County. The areas included in this submission are the remaining areas that other broadband providers have forgone serving because of unprofitable density, difficult terrain, and/or land use status (including agricultural areas and large parcels). All Points was selected by the County in part due to its steadfast commitment to universal service provided by cost-effective FTTH.

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 incumbent providers are not offering service and verified that each such area is not currently served by wireline technology (cable or fiber) that can provide 100/20 mbps service. As there are no fixed wireless providers in eastern Henrico, the only alternative Internet service for these homes and businesses comes from satellite or mobile hotspots. Locations deemed to have service have been removed from the proposed project area.

The Commonwealth Connection map provided another useful data set to determine unserved areas. All Points inspected all areas indicated by that mapping service to be potentially unserved. Potentially unserved areas were inspected inperson or remotely to verify existing service.

The vast majority of the 412 passings included in the proposed project have been available for public review and remain unchallenged by incumbent providers based on the previous VATI application. All Points' preliminary analysis was reviewed by the County and compared to County information gathered from previous studies and analysis. Multiple years of broadband expansion efforts of the County have culminated in this universal application.

11.

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Project Readiness

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

Answer:

The County, All Points and Dominion entered into an MOU (Attachment 8) setting forth the overall timeframes for applying for VATI support and for submitting the SCC petition in accordance the Utility Leverage Statute. Furthermore, the County and All Points have fully executed a Broadband Partnership Agreement and an Agreement for Participation in Cooperative Procurement. These types of agreements would not be in final executed status if the stakeholders were committed to any objective other than universal broadband access. Project mobilization is only contingent on VATI funding.

In Q2 2022, All Points completed high-level network design for the project in collaboration with Dominion, and the network design incorporates the specific routes to be constructed by Dominion. The high-level network design is now complete. To accelerate materials procurement, bills of materials have been reviewed by appropriate vendors as described in Attachment 13.

Through the 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 administrative 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 will complete low-level 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.

As indicated in the letter included in Attachment 13, AFL Telecommunications, APB's cable manufacturer, has allocat

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ed 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 material unit estimates are provided in Attachment 12.

Dominion anticipates initiating contact with potentially affected property owners regarding the project and commenc ing discussions regarding easements and related rights promptly after final VATI approval. 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 prepare 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 commence network construction in accordance with the Utility Leverage Statute.

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.

Several critical path activities have already been completed, as described on the project timeline attachment, including executed MOU/BPA, completed field verifications, high-level design, and materials supply chain risk mitigation. Once construction commences, All Points will be able to rapidly deliver service to customers who have pre-registered 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 ensure the network is successfully and promptly used by presently unserved locations, All Points will implement the communications plans described in this application, including emphasis on low to moderate income households enrolling in the Affordable Connectivity Program.

The County's project lead, Travis Sparrow, is a former outside plant engineer and has extensive experience in managing OSP projects including the navigation of easement and right of way issues.

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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 agreement reflecting the terms of this application. It is anticipated that substantial completion of the project will require 18 months from the final grant award.

During the high-level design process, APB eliminated railroad crossings and minimized other fiber paths requiring new easements.

The project does not cross or interact with federally owned lands and parks. The project does not serve any mobile home parks.

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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:

The County has not previously received VATI grants.

All Points has received VATI grants in the FY21 and FY22 VATI grant rounds for projects that achieve universal FTTH access in 19 counties. For the FY21 grant round, these counties include King George, Westmoreland, Richmond, and Northumberland. For the FY22 grant round, these counties include Lancaster, King William, Hanover, Culpeper, Loudoun, Fauquier, Clarke, Frederick, Warren, Rappahannock, Rockingham, Page, Augusta, Middlesex, and Pulaski. Similar to the project proposed in this application, 12 of these 19 counties have utilized a partnership between All Points, Dominion, and a county.

Construction of fiber distribution routes is underway and customer installations are ongoing for projects awarded in the FY21 grant round. All Points has stayed within budget, on-schedule, and is poised to complete the Northern Neck network and fulfill the VATI grant terms by Q4 2023. The SCC petition for approval of Dominion's participation in the Northern Neck Initiative was submitted in September 2020, and the SCC's final order approving that project was issued in March 2021.

For projects awarded in the FY22 grant round, All Points and its co-applicants have either executed the award contracts as of August 2022 or submitted necessary materials for projects funded by state general funds and State & Local Fiscal Recovery Fund, and the project timelines have commenced. One project funded by Capital Projects Fund is subject to an environmental checklist review period expected to be completed after the FY23 VATI application date. All existing VATI projects have fully executed Grant Administration Agreements, and we anticipate the final SLFRF award to be under contract shortly after the FY23 VATI application date. All existing VATI projects have fully executed Grant Administration Agreements. These projects range in timeline from 12-36 months and all projects remain on schedule, with the necessary construction materials already procured from All Points' suppliers. The SCC petition for approval of Dominion's participation in Lancaster and King William Counties was submitted May 2022, with a hearing date of September 8, 2022. Dominion is expected to submit the SCC petitions for the remaining counties for SCC within the parameters set forth in the Utility Leverage Statute.

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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. If applicants and co-applicants are seeking to include prior expended funds as matching funds, Attachment 11 must be completed. Label Attachments: Attachment 9 - Funding Sources Table; Attachment 10 - Documentation of Match Funding; Attachment 11 - Prior Expended Match Form

Answer:

The total cost of the proposed project is \$6.5 million. This application is requesting VATI funds in the amount of \$501,620 representing 7.7% of the total project cost. All Points will be responsible for providing \$1.49 million, representing 23% of the total project cost. The County is contributing \$1.45 million, representing 22% of the total project cost. Dominion is anticipated to invest \$3 million, representing 47% of the total project cost, pending SCC approval of Dominion's participation in this project.

The County's commitment of \$1.45 million is reflected in the County's documentation of match 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. Searchlight is one of the nation's leading investors in FTTH deployments and is committed to doing its part to close the digital divide in Virginia.

Dominion is providing support for the project through the Utility Leverage Statute. 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 during the planning process that resulted in the proposed project. T ravis Sparrow, the County's Director of the Department of Information Technology has participated in 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. Finally, the County will administer the VATI grant funds and support project construction without charging administrative costs to the project. The substantial project development and administrative costs expended by the County are not being counted as match in Attachment 9. Instead, the County is leveraging those costs to improve cost efficiency of the overall project.

All Points committed substantial resources to project development, high-level design, and unserved field verification. Those sunk costs are considered as leverage since repayment will not be requested.

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 \$43,000 marketing budget for the project in its first two years (which is not included in the project budget set forth in this application). Due to the proximity to existing projects in the Richmond region in Hanover and King William Counties, the proposed project will leverage economies of scale and reduce costs that otherwise would be incurred if not adjacent to these networks. The Henrico network will share a regional office, construction prep yard, service vehicles, and other facilities/equipment with APB networks providing service to the other Richmond regional counties. Field sales representatives, fiber technicians, and office personnel serving the Richmond region will also service the Henrico project, reducing staffing and labor costs dramatically. The estimated savings from leveraging the Richmond regional projects are \$232,000 compared to a stand-alone network.

Dominion has also contributed significant amounts in the planning process at no cost to the project, including providing valuable input during the formulation of the project's high-level design. The most impactful leverage from Dominion's participation is that no VATI funding will be needed for the construction of fiber miles within Dominion's network to serve the project.

Support from the locality and electric utility partners will continue through low-level design and construction. The relevant County representatives 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, which are not included in the project construction costs.

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Henrico County Universal Broadband Project

- 15. Communications Plan: Describe efforts to keep the public informed of project progress and the broadband adoption plan.
 - a. Explain how you plan on communicating the project status to stakeholders, including but not limited to County leadership, project areas residents, etc. (Up to 10 points)
 - b. Explain how you plan to promote customer take rate, including marketing activities, outreach plan, and other actions to reach the identified serviceable units within the project area. Provide the anticipated take rate and describe the basis for the estimate. (up to 10 points)
 - c. Describe any digital literacy efforts to ensure residents and businesses in the proposed project area sufficiently utilize broadband. Please list any partnering organizations for digital literacy, such as the local library or cooperative extension office.

Answer:

1. A. All Points will provide the County with a written report each month of the project timeline, detailing APB's progress against established project milestones. This report will include a breakdown of progress against project milestones consistent with the DHCD-required report format. The County and All Points will also hold a quarterly coordination meeting during which All Points will present a report on progress against established project milestones in the previous quarter, and an update on project activities anticipated in the next quarter. Quarterly coordination will include the county's project lead as well as representatives from All Points, and Dominion (as appropriate).

The County, All Points and Dominion (as appropriate) will hold at least two public events in Henrico, which will be coordinated with the county. The first event will be a public webinar, in which All Points and the County will provide an overview of the awarded network, the project map, the service levels, and the project timeline. Henrico residents will be able to participate in the webinar and ask questions regarding the project.

The subsequent public events will be chosen from several options, selected by the County as most appropriate for their community and stakeholders, to be an in-person event marking the project's progress. These events could include:

1. 1. Commencement of Construction / Groundbreaking

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nty of Henrico rico County Universal Broadband Project
1. 2. Lighting of First Fiber Distribution Area / Initial Customer Access
1. 3. Construction Progress or Completion of Utility Middle-Mile Fiber
1. 4. Construction Progress or Completion of Distribution Network
1. 5. Other County Selected Events
In addition to events open to the public, All Points and DEV (as appropriate) will invite local media for project tours / construction ride-outs during construction. All Points will also provide a project update before the Henrico Board of Supervisors on a semi-annual basis, on a timeframe coordinated with the County's project lead.
A sample of the communications plan is attached for reference. In addition to large-scale events and webinars, All Points will fund several channels of communications to project area residents, including social media ads, yard signs, door hangers, mail flyers, and small-scale community events as described below. All these communications will encourage eligible households to pre-register for the Affordable Connectivity Program.
Finally, All Points plans to participate in County-led digital literacy, adoption, and equity events held by community organizations.

B. All Points prepared an extensive marketing campaign to ensure that customers are connected to the network as soon

as it is available as described in Attachment 18, including the basis for the anticipated take rate.

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All Points has dedicated a sales manager to oversee marketing and adoption activities and allocated a \$43,000 marketing budget for the project. This marketing budget is not included in the VATI project budget.

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

During the pre-construction marketing phase, all marketing communications will direct potential customers to All Points' mobile-friendly tool to register for notifications or subscribe to service as soon as it is available. All Points will use this tool to accept pre-registrations from customers and to keep those customers informed regarding the deployment schedule, so that they will be ready to subscribe and receive service as soon as it is available at their locations.

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.

Approximately 90 days before service is available at a specific location, All Points will send an additional series of direct mail to potential customers that have not pre-registered for service. These mailers will highlight the project, the services soon to be available, and any promotions to encourage registering, such as half-off installations or a free streaming device with installation. Customers will receive a printed user guide to their Internet connection which includes descriptions of services not previously available to an unserved resident and basic troubleshooting steps.

All Points' marketing materials will also highlight the commitment, for the first 12 months after it is available, to providing a Standard Installation, regardless of drop length, to all funded serviceable units for an installation fee of \$199.00. This unique offering differs greatly from the special construction fee policy of current incumbent providers and is projected to increase take rates within the VATI funded area.

See Section 20: Additional Information for the remainder of response to Question 15.b due to character count limit.

C. See Attachment 19 summary for the remainder of response to Question 15.c due to character count limit.

16.

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

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See attachment 20

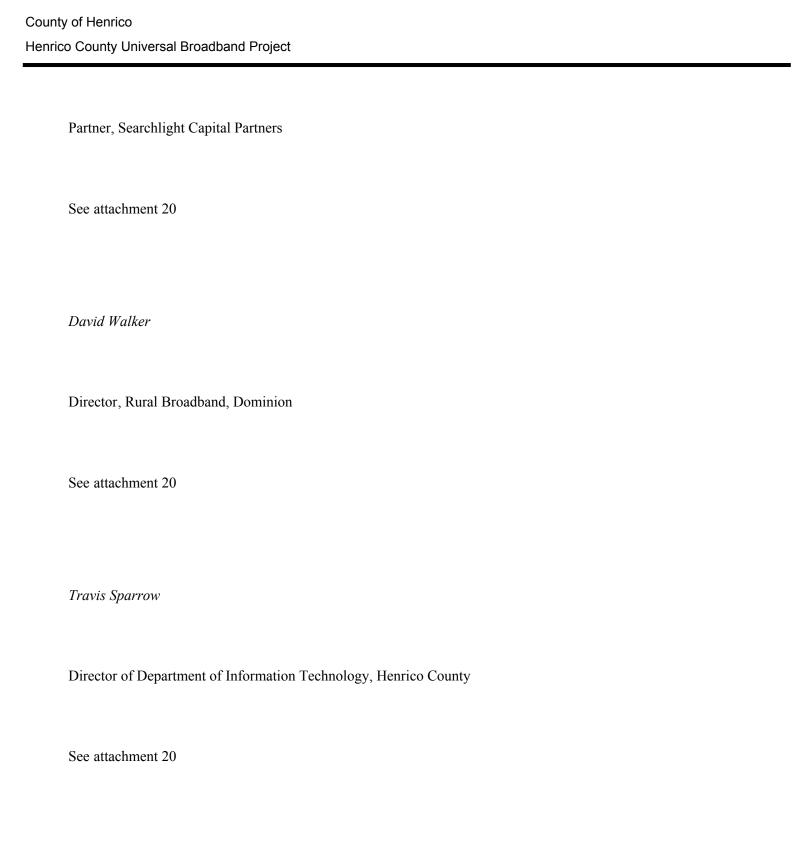
County of Henrico Henrico County Universal Broadband Project		
	Tom Whitaker	
	COO, APB	
	See attachment 20	
	Brandon Ogilvie	
	CFO, APB	
	See attachment 20	
	Tom Innes	
	SVP of Public-Private Partnerships, APB	
	See attachment 20	

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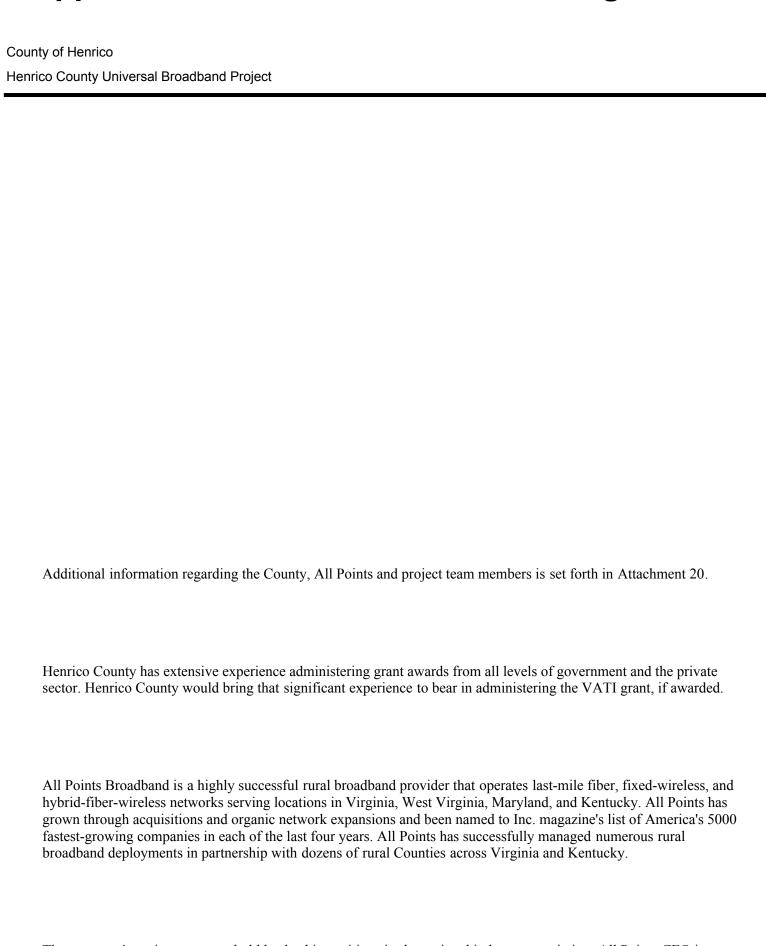
	of Henrico County Universal Broadband Project
Se	ean Flora
D	Pirector of Fiber Construction
S	ee attachment 20
C	'huck Hogg
S	VP of FTTH Deployments, APB
S	ee attachment 20
D	Parren Glatt
P	artner and Co-Head of Infrastructure Investing, Searchlight Capital Partners
S	ee attachment 20

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Ajit Pai



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The company's senior managers hold leadership positions in the national industry association. All Points CEO is a

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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, Seachlight has invested more than \$1.7 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 \$6.5 million.

The Derivation of Costs divides the project into the following categories: Final Design and Engineering, Project & Construction Management, Headend/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. Bills of materials and labor requirements were verified by appropriate vendors as described elsewhere in this application.

All Points' primary suppliers of fiber optic cables, connectors, terminals, and related hardware, and Calix, All Points' primary supplier of customer premise equipment. Both AFL and Calix have also allocated committed manufacturing capacity to support APB's materials requirements and specific schedule for this project. AFL, Calix, and All Points' primary distributor Anixter Wesco have reviewed the bill of materials for the project and provided the pricing used for all relevant cost categories included in the project budget. Due to the extremely competitive nature of materials procurement, the unit cost of most items has been redacted from the bill of materials. Several of All Points' primary labor contractors have also reviewed the project parameters and have provided pricing that have informed the project budget. As is the case for materials, the rate card of third-party labor services cannot be provided publicly due to the competitive nature of those agreements. Attachment 13 contains letters specifying these points from primary All Points vendors.

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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 \$501,620.
- B. There are 412 serviceable units.
- 19. Commonwealth Priorities (Up to 50 points)

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

- a. Businesses, community anchors, or other passings in the proposed project area that will have a significant impact on the locality or region because of access to broadband.
- b. Unique partnerships involved in the proposed project. Examples include electric utilities, universities, and federal/state agencies.
- c. Digital equity efforts to ensure low to moderate income households in the proposed project area will have affordable access to speeds at or above 100/20 mbps, include information regarding the internet service provider's participation in the Affordable Connectivity Program
- d. The co-applicant's efforts to mitigate supply chain constraints, including labor shortages and order-to-delivery delays on telecommunications materials required to construct broadband networks.
- e. The applicant's and co-applicant's efforts to promote broadband adoption, including, but not limited to: telehealth, smart farming, e-entrepreneurship, and distance learning.

Answer:

An error has occurred while processing HtmlTextBox 'rtbAnswer': List item () must be in a list (or).

20.

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Additional Information

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

Attachment 14 – Letters of Support.

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

Label Additional Attachments as:

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

Answer:

Response continued from Question 15.b.

Throughout the construction phase, All Points 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, All Points will place door hangers at each serviceable location, yard signs in each serviceable neighborhood, and door-to-door sales.

To estimate take rates, All Points commissioned a third party to perform a residential survey and conjoint analysis for Virginia markets. Redacted excerpts from this third-party analysis are attached as part of Attachment 18. As demonstrated in the attached excerpts, the analysis concluded that All Points 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. All Points have applied these projections across the proposed project to estimate a take rate of 75% for the project.

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Response to Question 19.c

Digital equity and inclusion are critically important to all broadband deployments, especially when connecting currently unserved locations. All Points proudly participates in the FCC's Affordable Connectivity Program (ACP) and all service offerings made available through the proposed project will be eligible for ACP. All Points will provide an unlimited 100/100 Mbps service level at \$59.99 per month, reflecting the ACP discount. The entry level service of 50/50 mbps, capable of streaming 10 simultaneous video feeds, will be offered at \$29.99 for ACP-enrolled households.

As detailed in Attachment 19, the ACP program is aggressively promoted across All Points' outreach and marketing portfolio, including a dedicated webpage to the program, an ACP specific page in a customer's welcome package, a banner on the landing webpage to register for service, and inclusion of ACP program promotions on advertising materials (mailers, door hangers, etc.) All Points' customer service representatives are trained in the ACP program parameters and the process for registering. All Points has launched a mobile-friendly eligibility and ACP registration site for current and future customers.

All Points marketing collateral and customer paperwork will include instructions & tips to further reduce telecommunications expenses of subscribers. This includes "cutting the cord" of traditionally bundled offerings or cancelling high-cost mobile hotspot services.

As part of our digital equity strategy, All Points recognizes the importance of lowering the cost of long drops. Therefore, for the first twelve months after service is available, All Points commits to providing a Standard Installation, regardless of drop length, to all locations for the same fixed fee of \$199.00. This promotion will be included in All Points' marketing materials, including door hangers, yard signs, mailers, digital advertising, and other methods. While not all installation costs can be avoided or waived, those fees will be presented to the County and future customers in a transparent & consistent fashion.

Henrico County won a Nation Association of Counties' award in 2020 for its digital literacy efforts through its public library system ("HCPL"). Specifically, HCPL sought to modernize its services and meet the needs of jobseekers with

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advanced digital literacy and skill-building classes in its Digital Media Labs. Henrico County Public Schools also has a strong and expansive plan for digital access to learning. Information on that program is included in Attachment 19.

APB has developed a Digital Inclusion Academy through Google for Education (see Attachment 19), 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.

Attachments:

Map(s) of project area, including proposed infrastructure

Attachment1ProjectAreamapHenrico8252022123520.pdf

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

Attachment2DocumentationofFederalFundingAreaHenrico8252022123528.pdf

Documentation that proposed project area is unserved based on VATI criteria

Attachment3DocumentationUnservedAreaVATICriteriaHenrico8252022123543.pdf

Passings Form (Use template provided)

Attachment4PassingFormHenrico8252022123552.pdf

Documentation of RDOF awarded area in VATI project Area (Use template provided)

Attachment5RDOFTableandMapHenrico8252022123604.pdf

Timeline/Project Management Plan

Attachment7HenricoTimelineManagementPlan8252022123658.pdf

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

Attachment8APBHenricoBPAandMOU8252022123708.pdf

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Henrico County Universal Broadband Project

Funding Sources Table (Use template provided)

Attachment9Henrico8252022123720.pdf

Documentation of Match Funding

Attachment10HenricoCountyAPBSCPDEV8252022123729.pdf

Derivation of Cost/Project Budget (Use template provided)

Attachment12Henrico8252022123740.pdf

Documentation of Supporting Cost Estimates

Attachment13HenricoSummaryBOMandLetters8252022123757.pdf

Letters of Support

Attachment14Henrico8252022123835.pdf

Two most recent Form 477 submitted to the FCC or equivalent

Attachment15TwoMostRecentForm477s8252022123844.pdf

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

Attachment16PointandPolygonShapefilesHenrico8252022123853.zip

Optional

Attachment18MarketingAnalysisandCollateral8252022123910.pdf

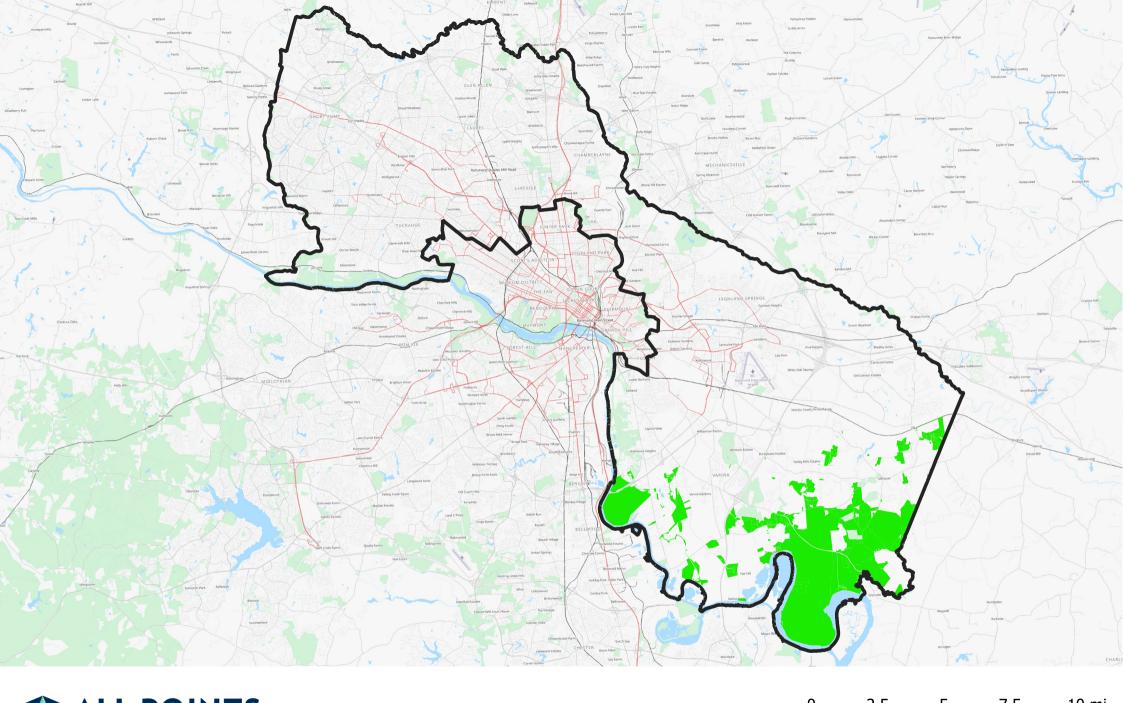
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Attachment19DigitalEquityInclusionAdoptionHenrico8252022123932.pdf

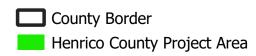
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Attachment20ManagementTeamBiosAPBandHenrico8252022123952.pdf

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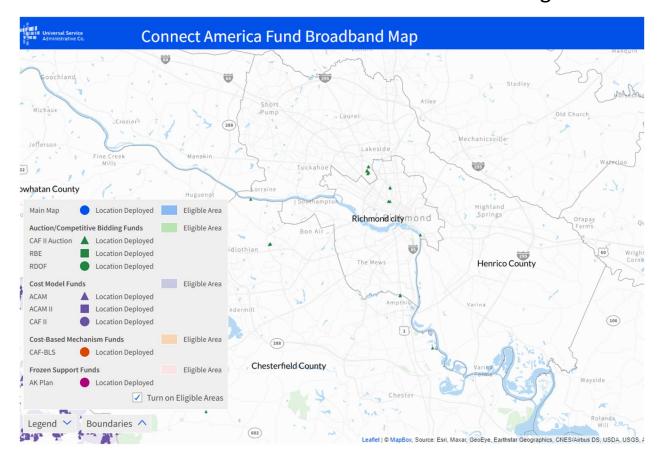


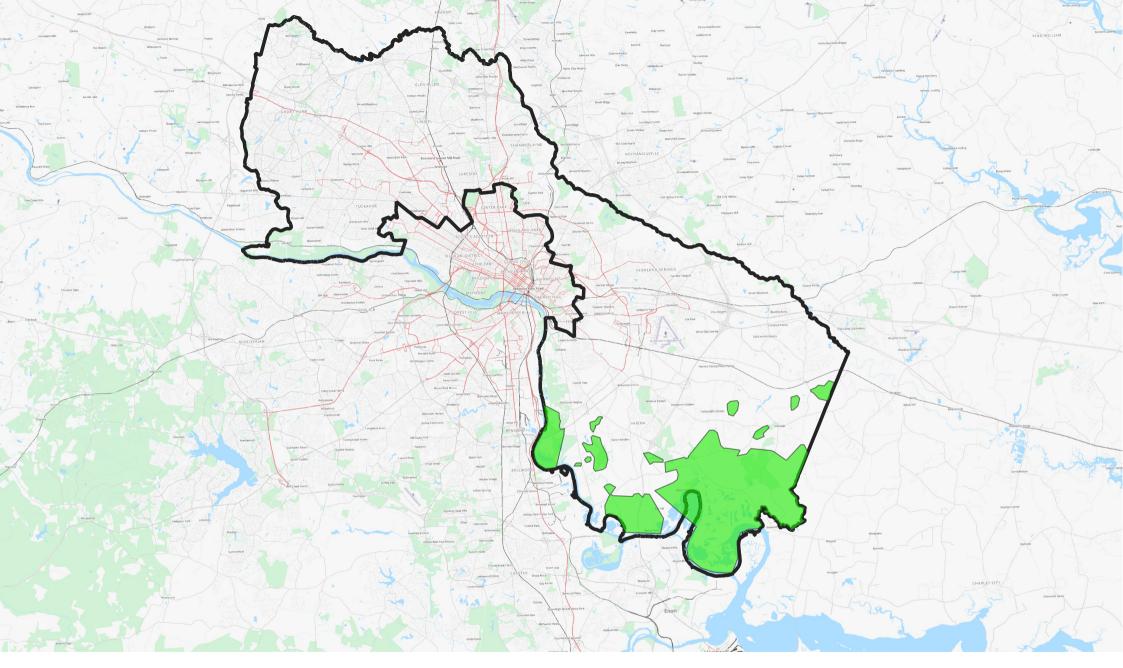




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Attachment 2 - Documentation of Federal Funding Area







Henrico Unserved Area VATI Criteria

2022 Unserved Field Survey Results

County Border



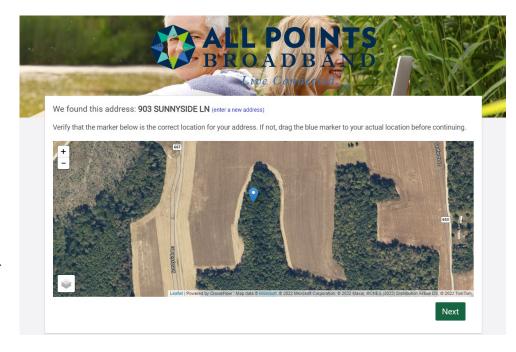
Crowd Sourced Survey to Verify Access

ALL POINTS FREQUENTLY ASKED QUESTIONS FIBER ZONES BROADBAND Live Connected. technology to homes and businesses in communities throughout Virginia, Gig Fiber Broadband in Your Home All Points Broadband is engaged with its electric utility partners in several large scale fiberto-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 Points standard FTTH architecture is capable of offering 10Gbps 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 NO COMMITMENTS. PAY NOTHING UPFRONT. JUST SHOW YOUR INTEREST!

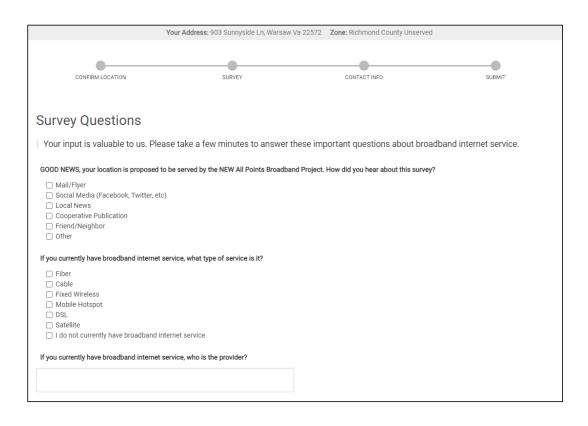
https://fiber.allpointsbroadband.com

Steps to verify whether a location currently has broadband access:

- 1. Enter your address and click Go
- 2. The next page will ask for you to verify your home's location within the parcel

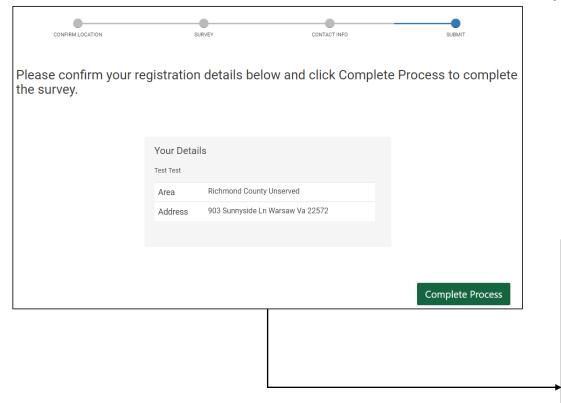


Crowd Sourced Survey to Verify Access



- Survey questions for locations predicted to be unserved by field verification and existing broadband mapping will receive a Good News notification.
- Locations predicted to be served will receive an alternate set of survey questions.
- To make sure the VATI application removes currently served locations, the survey requires residents to indicate whether they receive broadband service today.

Crowd Sourced Survey to Verify Access



- To complete the survey, respondents need to verify their address and contact information.
- We will then provide a verification notice that you have registered.
- Preregistering is not a service commitment but it does enroll the respondent in APB's Marketing & Communications Plan.

6.

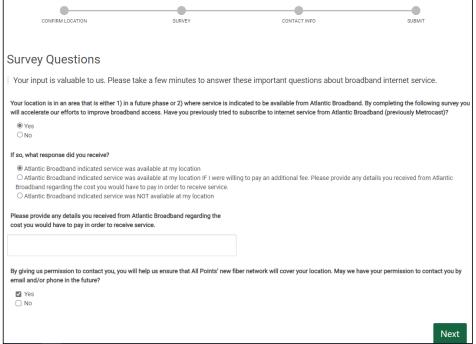
CONFIRM LOCATION SURVEY CONTACTINEO SUBMIT Thank you for registering your address to receive gigabit-capable, fiber internet! As the project proceeds, we will use this email address to contact you with updates and announcements. Before we begin construction, we will contact you again and request a deposit to confirm your desire to subscribe to fiber. Please share our website link (https://fiber.allpointsbroadband.com)with your neighbors - we need to hear from as many people as possible so we can start construction ASAP! Go to Dashboard 🕒 Your Details Test Test Richmond County Unserved Area 903 Sunnyside Ln Warsaw Va 22572 Address

Crowd Sourced Survey Response to Location Presumed to be Served

If a submitted location is presumed to be served, the survey response will indicate that service is available and present alternative questions



- Respondent will verify existing service
- If unable to access broadband previously, the respondent will be prompted to explain their experience
- Respondent can sign up for future notifications



2023 Virginia Telecommunication Initiative (VATI) Passing Form

Type of Passings	Total Number of Passings in the Project Area ¹	Passings in the Project Area, without Special Construction Costs Required ²	Construction Costs budgeted	Number of Passings with Speeds at 25/3 or below in Project Area ⁴
Residential	376	376		376
Businesses (non-home based)	22	22		22
Businesses (home-based)	13	13		13
Community Anchors	3	3		3
Non-residential	11	11		11
Total	412	412		412

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.

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

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

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

Definitions

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

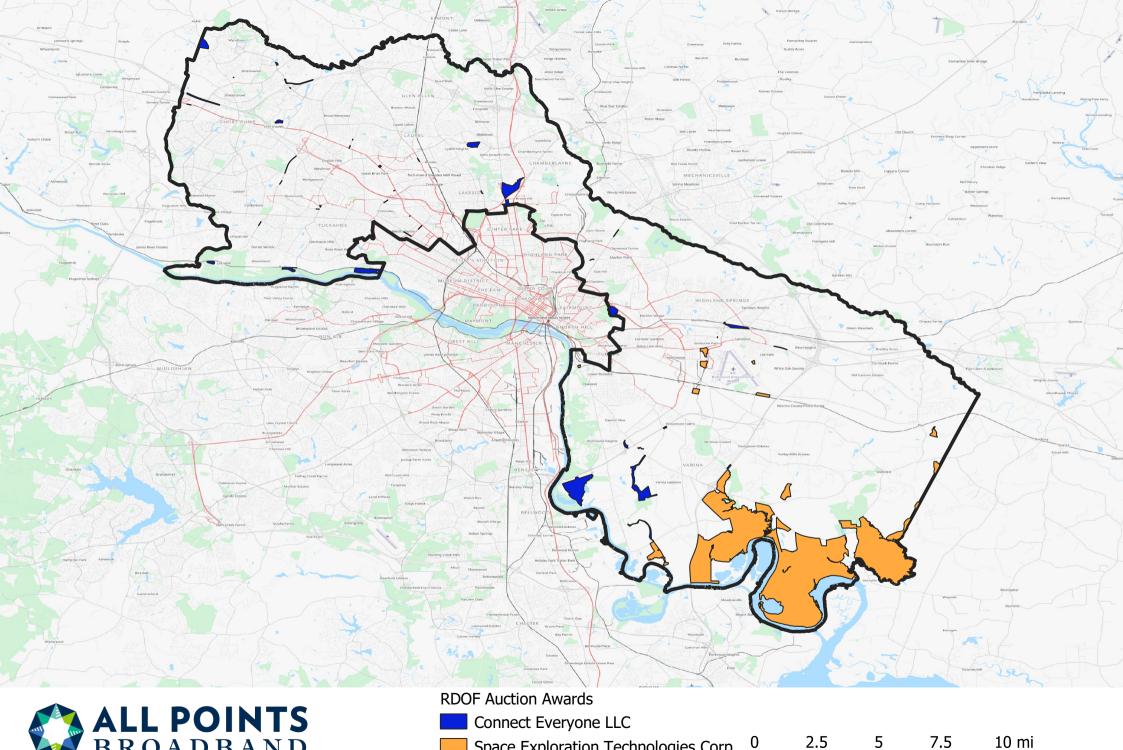
Business – An organization or entity that provides goods or services in order to generate profit. Businesses based in residential homes can count if they are a registered business (BPOL, LLC, etc.).

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

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

Attachment 5 - RDOF-Awarded Areas Locations & Passings Table Henrico County RDOF Data

Provisional RDOF Awardee	RDOF-Awarded Census Block Group ID	Addresses within In Census Block Group	Estimated Passings in RDOF awarded areas within the VATI project area
on ies	510872015021		3
ce atic ogi	510872016011	7	5
pa lora inol	Corp. 210872016011		53
S Exp ech			81
			142
Connect Everyon e LLC	510872016021		14
Total		191	156



ALL POINTS BROADBAND Live Connected.

Space Exploration Technologies Corp. 02.5 5 7.5 County Border



Henrico County Project Timeline

Previously Completed Prior to Project Kickoff:

1. Execute MOU with County/APB/Dominion

2. Field Verification of Unserved Locations

3. High Level Designs by APB

4. VATI Contract Execution

5. Secure US-Based Fiber/Electronics Materials

4. VATI Contract Execution 5. Secure US-Based Fiber/Electronics Materials							_	1888	Plan Durat													
ACTIVITY	RESPONSIBLE PARTY	RESPONSIBLE INDIVIDUAL	PLAN	PLAN	Months	18		7777	• Plan Durat	ion												
Secure Fiber/Electronics Materials	APB	DIRECTOR OF IT	START 1	DURATION 1	1/1/1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Contact and Advise Property Owners Along Fiber Routes	APB	SVP OF FTTH DEPLOYMENTS	1	3	9//	9000	000	c,														
Complete and Submit Environmental and Local Permitting	APB	SVP OF PUBLIC-PRIVATE PARTNERSHIPS	1	3	300			8														
Middle Mile Low Level Design	DOMINION	RURAL BROADBAND DIRECTOR	,	2	777			3														
Final Design and Engineering for SCC Petition	DOMINION/APB	RURAL BROADBAND DIRECTOR/DIRECTOR OF FIBER CONSTRUCTION	3	2		1///		000	;													
SCC Petition Preparation	DOMINION/APB	RURAL BROADBAND DIRECTOR/CHIEF EXECUTIVE OFFICER	3	2			1///															
SCC Petition Submission and Review	DOMINION	RURAL BROADBAND DIRECTOR	5	6			(1)11	9999	2000	999	11111	999	200	200								
Last Mile Low Level Design	APB	DIRECTOR OF FIBER CONSTRUCTION	5	6							977		///									
Grant Compliance and Reporting	COUNTY	DIRECTOR OF IT	5	14					977	///			977	900	000	1111	1111	000	1111	999	999	11111
Social Media Marketing Campaign	APB	SVP OF PUBLIC-PRIVATE PARTNERSHIPS	6	16									///				977		900			<i>1111</i> 1.
Obtain Necessary Easements and Secure Rights	DOMINION/APB	RURAL BROADBAND DIRECTOR/CHIEF OPERATIONS OFFICER	7	4							977		///							7777		17777
Marketing and Pre-Registration for Service	APB	SVP OF FTTH DEPLOYMENTS	8	12										900	999	000	000	000	000	999	999	(///
SCC Petition Approved	DOMINION	RURAL BROADBAND DIRECTOR	10	1								*****	999	777		e se se se s	(1111)	esese.	11111	77777		7777
Middle Mile Construction	DOMINION	RURAL BROADBAND DIRECTOR	11	3										erre.	1111	900	900					
Make Ready Engineering and Fielding	DOMINION/APB	RURAL BROADBAND DIRECTOR/DIRECTOR OF FIBER CONSTRUCTION	11	3																		
Make Ready Construction	DOMINION	RURAL BROADBAND DIRECTOR	12	4											****		////	999	999			
Headend Outfit	APB	CHIEF OPERATING OFFICER	12	2															.,,,,			
Splice Middle Mile Fiber for Last Mile Network	APB	DIRECTOR OF FIBER CONSTRUCTION	13	1												,	900					
Last Mile Mainline Fiber Construction (Aerial)	АРВ	DIRECTOR OF FIBER CONSTRUCTION	13	10												,			////	911		1000
Last Mile Mainline Fiber Construction (Underground)	АРВ	DIRECTOR OF FIBER CONSTRUCTION	13	10												,	900		910			<i>}////</i> /
Customer Drop Construction	АРВ	DIRECTOR OF FIBER CONSTRUCTION	13	11												,	////		9//			1000
Public Events Recognizing Project (Including Webinar)	COUNTY/APB	DIRECTOR OF IT/CHIEF EXECUTIVE OFFICER	6	15						900	900			911)						900	999	<i>800</i>
Install Communication Huts	АРВ	DIRECTOR OF FIBER CONSTRUCTION	14	2															900			
Last Mile Lateral Construction (Aerial)	APB	DIRECTOR OF FIBER CONSTRUCTION	15	6															1111			9777.
Last Mile Lateral Construction (Underground)	APB	DIRECTOR OF FIBER CONSTRUCTION	15	4															1111			<i>800</i> 0
Customer Installation	APB	DIRECTOR OF FIBER CONSTRUCTION	14	11														999	900	9//		<i>!////</i> /
Submit Project Closeout Report	COUNTY	DIRECTOR OF IT	18	1																		100

PHASE ONE MEMORANDUM OF UNDERSTANDING

This Phase One Memorandum of Understanding (this "Memorandum") is made effective as of July 8, 2022 (the "Effective Date"), by and between Virginia Electric and Power Company dba Dominion Energy Virginia, a Virginia public service corporation ("Dominion"), All Points Broadband Partners, LLC, a Virginia limited liability company ("All Points"), and Henrico County, Virginia (the "County"). Dominion and All Points are the "Organizing Parties." Dominion, All Points and the County are each a "Party" and are, collectively, the "Parties."

RECITALS

- A. Pursuant to the Virginia Code § 56-585.1:9, effective July 1, 2019 (the "Broadband Statute") the Commonwealth of Virginia is seeking to expand broadband service into unserved areas of the Commonwealth. The Broadband Statute further permits electric utilities to pursue deployments with broadband providers and counties and municipalities to facilitate such expansion.
- B. Dominion and All Points have explored the feasibility of Dominion deploying middle mile service to facilitate All Points' extension of last-mile service to unserved areas and have identified the County as viable candidate based on the requirements of the Broadband Statute.
- C. The Parties will pursue a relationship whereby: (i) pursuant to the Broadband Statute, Dominion would construct a fiber route that maximizes the number of unserved areas to be served by All Points within 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 County will collaborate to recruit and engage other partners, including other electric utility companies as appropriate, to advance the Project, and (v) the County will share relevant information with the Organizing Parties and collaborate with the Organizing Parties to advance the Project. The efforts of the Parties herein in the County shall be referred to as the "Project."
- D. It is the intention of the Parties that the Project will result in the deployment of a fiber-to-the-premises last-mile broadband network to offer service to all locations within the County that are unserved 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.
- E. The Organizing Parties have divided the Project into three phases.

NOW, THEREFORE, the Parties hereby agree as follows:

1. INFORMATION SHARING AND COORDINATION

- a) The County and the Organizing Parties each agree 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. Upon request

- from time to time, All Points will provide updates to Dominion as to the status 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.
- d) Notwithstanding anything to the contrary hereunder, in no event does this Memorandum require any Party to disclose confidential or proprietary information not otherwise authorized for release to any Party or Parties.

2. PHASE ONE TIMEFRAME AND ACTIVITIES

- a) The Parties anticipate that Phase I of the Project will continue until approximately August 10, 2022.
- **b)** During Phase I:
 - i. All Points will evaluate submission of a Utility Leverage Program ("ULP") unserved determination.
 - ii. The Organizing Parties will conduct community and stakeholder engagement activities in the County.
 - iii. The Organizing Parties will collaborate to develop preliminary plans and design criteria that: (i) are consistent with the Broadband Statute, and (ii) facilitate the extension of broadband availability to as many presently unserved locations as possible.
 - iv. All Points will perform a last-mile feasibility study ("<u>Initial Feasibility Study</u>") for the Project within the County and All Points will complete preliminary last-mile designs for the Project based upon the middle-mile infrastructure of Dominion. Such last-mile designs will be tailored to maximize each Project's eligibility for all available state and federal grant, loan, loan guarantee, and other support mechanisms (collectively, "Public Support Mechanisms").
 - v. All Points will prepare a preliminary financial analysis for the Project within the County.

c) At the Conclusion of Phase I:

- i. All Points, in coordination with Dominion, will present the results of the Initial Feasibility Study and financial analysis to the County.
- ii. All Points will identify the cost of proceeding to Phase II for the County and identify grants and other sources of potential funding to reduce or eliminate the County's out-of-pocket costs to proceed.
- iii. The County will decide whether or not to continue to Phase II. Counties that elect to withdraw from the Project at the conclusion of Phase I will have no further obligations under this Memorandum.

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 December 31, 2022.
- b) During Phase II:
 - i. All Points will prepare an application to the Virginia Telecommunication Initiative ("VATI") program, and other relevant

Public Support Mechanisms, to receive state and/or federal funds to support the Project. The County, and each Organizing Party, as applicable, will support an application for one or more Public Support Mechanisms ("Phase II Grants") to partially offset the cost of the activities to be conducted during Phase II. All Points will coordinate and oversee the development and submission of applications for Phase II Grants.

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

c) At the Conclusion of Phase II:

- i. If the County elects to proceed, the County will enter into negotiations with All Points for one or more binding mutual definitive agreements ("<u>Definitive Agreements</u>"), to the extent not already described in the Phase II Grant Applications, setting forth their respective commitments and obligations and such particulars as the parties thereto may deem appropriate.
- ii. Counties that elect to withdraw from the Project at the conclusion of Phase II will have no further obligations under this Memorandum.
- Dominion and All Points will prepare a petition (the "Petition") under iii. the Broadband Statute to the Virginia State Corporation Commission (the "Commission") seeking approval of the Project on a timeframe consistent with the Broadband Statute. All Points will serve as the nongovernmental internet service provider pursuant to the Broadband Statute. All Points and each of the other Parties will provide such information and assistance to Dominion as each may reasonably request to advance the Project and will commit to continuing to be involved in the Petition and any other regulatory proceedings that may be required until and after approval of the Petition and/or other regulatory proceedings is received. The Parties agree that implementation of each Project shall be contingent upon Commission approval, or such other regulatory approval as may be necessary, of such Project on terms and conditions approved by Dominion, depending on the location of the Project, that are not materially adverse to Dominion.

4. EXPENSES

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

5. GOOD FAITH COMMITMENT TO THE PROJECT

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

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

6. TERMINATION

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

7. LIMITATION OF LIABILITY

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. <u>Governing Law</u>. This Memorandum shall be governed in all respects by the laws of the Commonwealth of Virginia.
- 8.2. <u>Amendments</u>. 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. <u>Binding Effect: Assignment.</u> 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 5, 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. <u>Counterparts</u>. 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. <u>Relationship of Parties</u>. 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. <u>Notices</u>. All notices, requests and other communications hereunder shall be in writing and delivered by hand, by nationally-recognized delivery service that guarantees overnight delivery, or by first-class registered or certified mail, return receipt requested, postage prepaid, addressed as follows:

If to Dominion:

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

with a copy to:

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

If to All Points:

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

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

Any Party may change its address at any time upon notice to the other Parties.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, the Parties have executed this Memorandum as of the Effective Date.

VIRGINIA ELECTRIC AND POWER COMPANY DBA DOMINION ENERGY VIRGINIA

DocuSigned by:

David Walker

Name: David Walker

Title: Director Rural Broadband

ALL POINTS BROADBAND PARTNERS, LLC

DocuSigned by:

James Gerrit Carr

Name: James G. Carr

Title: Chief Executive Officer

COUNTY OF HENRICO. VIRGINIA

Digitally signed by: Oscar Knott

DN: CN = Oscar Knott email = kno008@henrico.us C = US O = County of Henrico, Virginia OU = Department of Finance

- Purchasing Division

Name: Oscar Knott, CPP, CPPO, VCO

Title: **Purchasing Director**

Notice details:

County of Henrico

Department of Finance/Purchasing Division

PO Box 90775

Henrico, VA 23273-0775

Attn: Oscar Knott

Approved as to Form:

BROADBAND PARTNERSHIP AGREEMENT

This Broadband Partnership Agreement (this "<u>Agreement</u>") dated as of the date last set forth below, is entered into by and between Henrico County, Virginia (the "County") and All Points Broadband Partners, LLC ("<u>APB</u>"). The County and APB are each a "<u>Party</u>" and are, 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 the County's government can conduct business via teleworking and other remote means; and

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

WHEREAS, the County 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 County 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 "RFP Response"); and

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

NOW THEREFORE, the County and APB agree as follows.

- 1. <u>Contract Documents</u>. The "<u>Contract Documents</u>" consist of:
 - a. This Agreement; and
 - b. The Procurement and RFP Response, as amended with all addenda, as in effect with King William County as of the date hereof.

Where the terms and provisions of this Agreement vary from the terms and provisions of the other Contract Documents, the terms and provisions of this Agreement shall prevail over the other 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 that is not contained in the Contract Documents, and that all terms and conditions with respect to this Agreement are expressly contained herein.

- 2. <u>Engagement of APB as Broadband Partner</u>. The County engages APB as its exclusive 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 ("<u>Dominion</u>") and Virginia Code § 56-585.1:9 (the "<u>Broadband Statute</u>") to make fiber-to-the-home ("<u>FTTH</u>") broadband access available to all of the County's currently unserved locations.
- 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>").
- 4. <u>Broadband Service Objectives</u>. In performing the APB Services, APB shall develop the deployment of a gigabit-capable, FTTH network in the County.
- 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 County 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 once established.
- 7. <u>Information Sharing and In-Kind Support for Grant Applications and Regulatory Proceedings</u>. Upon request from APB, the County agrees to provide APB with all relevant information in its possession that will facilitate APB's provision of the APB Services. The County agrees to designate one point of contact on the County's GIS team, or equivalent, to serve as the primary interface for APB's broadband design and deployment activities. The County 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 in-kind assistance described in this Agreement, the County shall not have any further obligation to provide local matching funds or other financial support for deployment activities (collectively, "<u>Local Match</u>"), unless such Local Match is specifically agreed to by the County in writing. For the avoidance of doubt, APB will not be providing design or construction services to the County; rather, APB will undertake all design and construction activities independently and on its own account.

- 9. <u>Assignment</u>. No Party may assign any of its rights, interests, or obligations hereunder without the prior written consent of the other Party, except that APB may assign this Agreement to an affiliated entity upon written notice to the County.
- 10. <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:

HENRICO COUNTY, VIRGINIA

By: Ser to

Title: Parchasmy Director

Date: 6/17/22

ALL POINTS BROADBAND PARTNERS, LLC

By: Name: James G. Carr

Title: Chief Executive Officer

Date: 6/15/22

Approved as to form:

Allison L. Bridges, Sq. Assistant County Attorney 6/16/2022

ATTACHMENT 9 - FUNDING SOURCES TABLE

Source	Amount		%	Status
Requested VATI	\$	501,620	7.7%	Pending
County Match	\$	1,450,000	22.2%	Secured
All Points Broadband	\$	1,499,280	23.0%	Secured
Dominion Energy Virginia	\$	3,078,000	47.1%	SCC Pending
Total Funding Sources	\$	6,528,900	100.0%	



COUNTY OF HENRICO

August 18, 2022

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

RE: Documentation of Match Funding

Dear Dr. Holmes:

Henrico County and All Points Broadband are jointing submitting a VATI request that, if awarded, will provide universal access to high-speed broadband internet service throughout Henrico County.

This letter serves as official "documentation of match funding" that Henrico County will provide match funding equal to 20% of the total project cost, or approximately \$1,450,000. These funds are currently reserved for this purpose within our General Fund Balance and will be appropriated upon receipt of grant award.

County Manager



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: FY 2023 VATI Application

Dear Dr. Holmes:

This letter will confirm All Points Broadband's ("<u>APB</u>") support for this application to the 2023 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



August 24, 2022

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 – 2023 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 2023 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 four thousand currently unserved locations in Virginia. Collectively, we refer to these projects as the 2023 Accelerated Fiber Deployment Initiative (the "Initiative"). Each project in the Initiative has been designed to achieve universal FTTH access in the relevant county and/or region. Detailed bills of material and cost estimates based on current pricing have been prepared for each project and All Points and its vendors have secured materials required to execute the Initiative. In light of the pressures on the global supply chain for FTTH construction, the best way to secure required materials and labor at the lowest unit pricing is to aggregate multiple large projects into significant volume commitments. This is the approach that All Points and Searchlight have taken for the 2023 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' 2023 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 three years, Seachlight has invested in excess of \$1.7 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' 2023 Accelerated Fiber Deployment Initiative

The projects comprising the All Points 2023 Accelerated Fiber Deployment Initiative will extend FTTH broadband to more than four thousand currently unserved locations in the Commonwealth and finally bridge the digital divide for three entire counties. Searchlight has committed all equity financing required to complete all of the projects set forth in the VATI applications submitted by All Points. We look forward to providing the significant private capital that will make Virginia the first state in the nation to achieve universal broadband access.

Sincerely,

Darren Glatt

Partner & Head of Infrastructure Investing

Searchlight Capital Partners, L.P.

Davin Statt

Dominion Energy Virginia Rural Broadband Program 600 Canal Plaza, Richmond, VA 23219 DominionEnergy.com



August 25, 2022

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: 2023 VATI Applications from All Points Broadband

Dear Dr. Holmes:

Dominion Energy Virginia ("<u>Dominion</u>") is pleased to be a party to several Memoranda of Understanding with All Points Broadband and the Counties of Henrico and Chesterfield (each, a "<u>Participating County</u>").

Dominion and All Points 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 2023 Virginia Telecommunication Initiative to be submitted by All Points and our Participating County partners named above. Dominion's specific investments that will support each proposed project will be set forth in petitions under the Utility Leverage Statute that will be submitted to the State Corporation Commission ("SCC"). Dominion's participation in each project, and its specific level of related investment, will be subject to the approval of the SCC and the terms set forth in the SCC's Final Order related to each project.

Sincerely,

David 7 Walker

David F. Walker Director Rural Broadband

Attachment 12 - Derivation of Costs Henrico County

Project / Product Cost Category		Total VA		VATI		Non-VATI	Source of Estimate	Date, Most Recent Revision
Final Design and Engineering	\$	198,324	\$	28,828 \$ 169,496		APB	8/23/22	
Project & Construction Mgmt.	\$	245,916	\$	35,746	\$	210,169	APB	8/23/22
Headend/Central Office	\$	58,377	\$	8,486	\$	49,892	APB	8/23/22
Field Network Equipment	\$	74,232	\$	10,790	\$	63,441	APB/Anixter	8/23/22
Aerial Make Ready & Construction	\$	1,395,252	\$	202,813	\$	1,192,439	APB/DRG	8/23/22
Underground Construction	\$	536,236	\$	77,947	\$	458,290	APB	8/23/22
Serviceable Units Preconstruction & Construction	\$	772,183	\$	112,244	\$	659,940	APB/DRG	8/23/22
Serviceable Units Equipment & Labor	\$	125,983	\$	18,313	\$	107,671	APB/Anixter	8/23/22
Other Capex	\$	44,396	\$	6,453	\$	37,943	APB	8/23/22
Utility Middle Mile	\$	3,078,000	\$	-	\$	3,078,000	APB / DEV	8/23/22
Total	\$	6,528,900	\$	501,620	\$	6,027,280		

^{**} please see Attachment 13 for unit basis assumptions used to tabulate total cost

Attachment 13 – Documentation of Supporting Cost Estimates

Summary of Attachment 13

And

Response to Question 19. d. The co-applicant's efforts to mitigate supply chain constraints, including labor shortages and order-to-delivery delays on telecommunications materials required to construct broadband networks.

All Points mitigates supply chain constraints through a variety of strategies and has so far avoided most of the supply chain issues plaguing other broadband providers in the current environment. First, 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. Through All Points and other investments, Searchlight is the fourth largest builder of FTTH passings in the nation. Similarly, All Points' strategic partnerships with electric utilities such as Dominion have benefited its ability to purchase sufficient volume and secure manufacturing capacity for future projects. Upon being notified of a project award, All Points coordinates with its suppliers and distributors to secure sufficient additional production capacity of long lead-time materials and equipment. All Points issues purchase orders to lock-in this capacity, then stores these materials across a combination of its distributors and company-operated warehouses. For example, All Points has already procured all distribution fiber, related electronics, and cabinets for 2023's construction requirements. All Points also manages costs by pooling the demand across projects to increase its purchasing power.

As detailed in Attachment 13 and described previously, All Points' primary suppliers and labor contractors have reviewed the specifics of the proposed project and have committed to executing the project within the provided timeline and budget. Both AFL and Calix have also allocated committed manufacturing capacity to support APB's materials requirements and specific schedule for this project. AFL, Calix, and All Points' primary distributor Anixter Wesco have reviewed the bill of materials for the project and provided the pricing used for all relevant cost categories included in the project budget. Due to the extremely competitive nature of materials procurement, the unit cost of most items has been redacted from the bill of materials. Several of All Points' primary labor contractors have also reviewed the project parameters and have provided pricing that have informed the project budget. As is the case for materials, the rate card of third-party labor services cannot be provided publicly due to the competitive nature of those agreements. Attachment 13 contains letters specifying these points from primary All Points vendors.

All Points has implemented a Labor Continuity Plan to mitigate labor availability risks and to ensure compliance with future federal funding requirements. Routine and frequent reporting by labor contractors provide All Points confidence that the project will be completed on time and on budget. Leading indicators of labor insufficiencies will be flagged in advance on any issue that would impact construction. Since All Points relies on multiple contractors, including one of the largest employee-owned companies in the United States, we can increase or decrease the amount of construction labor as needed per project. To avoid any gap in labor utilization and ensure continuity of work, All Points will generate a backlog of at least 30 days' worth of permitted and constructable fiber route miles before mobilizing a construction crew.

Attachment 13 - Documentation of Supporting Cost Estimates, Verified BOM

Group	Id	Description	Unit	Quantity	In Stock, Avail.	Unit Cost	Total Cost
Cable installation - Aerial	AER-PATH	Total distance between poles that have at least 1 cable between them (excluding drops), or total length of strand if using strand	feet	842,418.05	Yes		
Cable installation - Aerial	AER-PATH-DROP	Total distance between poles that have only drop cables between them	feet	284,621.42	Yes		
Cable installation - Underground	UG-PATH	Total length of path with at least 1 underground cable (excluding drops)	feet	303,781.86	Yes		
Cable installation - Underground	UG-PATH-DROP	Total length of path with only drop cables	feet	95,334.89	Yes		
Poles	AER-POLE	Total number of poles that are supporting at least 1 cable (including drops) or device	count	1,805.00	Yes		
Pedestals, flowerpots, pits, vaults etc	UGS-XS	Total number of underground structures that do not contain any hubs or splices (e.g. for pulling through a drop)	count	153.00	Yes		
Pedestals, flowerpots, pits, vaults etc	UGS-S	Total number of underground structures that contain a drop hub (and nothing else)	count	166.00	Yes		
Pedestals, flowerpots, pits, vaults etc	UGS-M	Total number of underground structures that contain a splice attached to the end of cables up to 144ct	count	39.00	Yes		
Pedestals, flowerpots, pits, vaults etc	UGS-L	Total number of underground structures that contain a distribution hub or a splice attached to the end of cables larger than 144ct	count	1.00	Yes		
Cables	AER-1ct-DROP	Total length of Aerial drop cable, 1ct	feet	264,485.79	Yes		
Cables	AER-12ct	Total length of Aerial cable, 12ct	feet	292,909.66	Yes		
Cables	AER-24ct	Total length of Aerial cable, 24ct	feet	67,461.16	Yes		
Cables	AER-48ct	Total length of Aerial cable, 48ct	feet	93,907.51	Yes		
Cables	AER-144ct	Total length of Aerial cable, 144ct	feet	123,653.93	Yes		
Cables	UG-1ct-DROP	Total length of Underground drop cable, 1ct	feet	90,598.06	Yes		
Cables	UG-12ct	Total length of Underground cable, 12ct	feet	149,611.22	Yes		
Cables	UG-24ct	Total length of Underground cable, 24ct	feet	10,950.49	Yes		
Cables	UG-144ct	Total length of Underground cable, 144ct	feet	50,766.49	Yes		
Cables	AER-D-100	Total count of Aerial and Transitional drop between 0ft (inclusive) and 100ft (exclusive)	count	12.00	Yes		
Cables	AER-D-200	Total count of Aerial and Transitional drop between 100ft (inclusive) and 200ft (exclusive)	count	36.00	Yes		
Cables	AER-D-300	Total count of Aerial and Transitional drop between 200ft (inclusive) and 300ft (exclusive)	count	17.00	Yes		
Cables	AER-D-300+	Total count of Aerial and Transitional drop 300ft (inclusive) and higher	count	228.00	Yes		
Cables	UG-D-100	Total count of Underground drop between 0ft (inclusive) and 100ft (exclusive)	count	4.00	Yes		
Cables	UG-D-200	Total count of Underground drop between 100ft (inclusive) and 200ft (exclusive)	count	12.00	Yes		
Cables	UG-D-300	Total count of Underground drop between 200ft (inclusive) and 300ft (exclusive)	count	10.00	Yes		
Cables	UG-D-300+	Total count of Underground drop 300ft (inclusive) and higher	count	100.00	Yes		
Terminals, cabinets, splitters	AER-DROP-4	Drop hub with 4 ports, pole mounted or pole adjacent	count	80.00	Yes		
Terminals, cabinets, splitters	AER-DROP-8	Drop hub with 8 ports, pole mounted or pole adjacent	count	5.00	Yes		
Terminals, cabinets, splitters	AER-SPL-M	Aerial splice case to branch cables of size up to 144ct	count	54.00	Yes		
Terminals, cabinets, splitters	UG-DROP-4	Drop hub with 4 ports, pedestal or buried	count	162.00	Yes		
Terminals, cabinets, splitters	UG-DROP-8	Drop hub with 8 ports, pedestal or buried	count	5.00	Yes		
Terminals, cabinets, splitters	UG-SPL-M	Underground splice case to branch cables of size up to 144ct	count	39.00	Yes		
Terminals, cabinets, splitters	PRI-1x32	Primary Splitter Module - 1x32 (in Distribution hubs)	count	14.00	Yes		



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

August 25, 2022

RE: Letter of Support for APB's Response to Henrico County VATI Application

To Whom It May Concern:

AFL Global ("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") on the Broadband Expansion Project that will deliver best-in-class fiber-to-the-home broadband access to currently unserved locations across Henrico County.

AFL has a strong working relationship with All Points Broadband and will serve as APB's strategic supplier for all of public private partnerships. AFL's fiber-optic 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 APB's project. 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 response. 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 County.

Sincerely,

Ryan O'Sullivan

Director, Rural Fiber to the Home (RFTTH) Program Management



RE: Letter of Support for APB's Henrico VATI Project

To Whom It May Concern:

Calix is a leading global manufacturer of fiber optic network electronics, customer premises equipment, software, and related hardware necessary for broadband deployments including the FCC required Performance Testing. Headquartered in San Jose, California, Calix has offices throughout the United States where our solutions are engineered, supported and developed.

Calix is excited to be partnering with All Points Broadband ("APB") on the Henrico County VATI Project that will deliver best-in-class fiber-to-the-home broadband access to hundreds of currently unserved locations throughout the County.

Calix has a strong working relationship with APB and serves as APB's strategic supplier for its public private partnerships. APB evaluated multiple technology solutions, ultimately selecting Calix as the best fit for its rural fiber-optic projects. APB will deploy a Calix XGS-PON network in Henrico County, capable of delivering 10 Gbps speeds to the home with enough capacity to scale for future growth.

This letter will confirm that Calix is committed to supporting APB's Henrico project. Calix and APB have reviewed the specific project and related bills of materials associated and Calix has provided APB with pricing that is incorporated in APB's response. Calix 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 Henrico.

Sincerely,

Mark Johnson

Vice President – Sales East



RE: Letter of Support for APB's Henrico County VATI Project

To Whom It May Concern:

Davey Resource Group, Inc. ("DRG") is one of the nation's premier telecommunications services companies, providing a full suite of solutions from make ready engineering to large fiber deployments. Founded in 1880 and employee-owned since 1979, DRG has over 10,000 employees and is the eighth-largest employee-owned company in the nation.

DRG is excited to be partnering with All Points Broadband ("APB") on the Henrico County VATI Project that will deliver best-in-class fiber-to-the-home broadband access to hundreds of currently unserved locations throughout the County. DRG has a strong working relationship with All Points Broadband and has provided make ready engineering and OSP construction solutions to several of APB's current projects, including the Northern Neck Initiative.

This letter will confirm that DRG is committed to supporting All Points Broadband's Henrico VATI Project. DRG has reviewed the specific project scope and related labor needs, provided APB with pricing that is incorporated in APB's response, and is committed to supporting APB's requirements and project schedules if the Henrico VATI Project is awarded. DRG successfully mitigates labor shortages by:

- National recruiting with regional redeployments
- Partnerships with Trade Schools
- Cross training with other areas of company to mitigate season changes and volume demands

We appreciate the opportunity to support this important initiative to bridge the digital divide in Henrico County.

Sincerely,

James "Jay" Martin Davey Resource Group



RE: Letter of Support for APB's Henrico County VATI Project

To Whom It May Concern:

National OnDemand is one of the nation's fastest growing OSP fiber construction companies and hires and trains local residents for contract fiber construction work across the nation. Headquartered in Burlington, North Carolina, National OnDemand teams consist of leaders that are well experienced in large project management and all aspects of OSP fiber construction, from fiber splicing and testing to construction of both aerial and underground fiber plant to last mile delivery of the services to the end user.

National OnDemand is excited to be partnering with All Points Broadband ("APB") on the Henrico County VATI Project that will deliver best-in-class fiber-to-the-home broadband access to hundreds of currently unserved locations throughout the County. National OnDemand has a strong working relationship with All Points Broadband and serves as APB's primary fiber construction contractor for APB's Northern Neck Initiative.

This letter will confirm that National OnDemand is committed to supporting All Points Broadband's Henrico VATI Project. National OnDemand has reviewed the specific project scope and related labor needs, provided APB with pricing that is incorporated in APB's response, and is committed to supporting APB's requirements and project schedules if the Henrico VATI Project is awarded. National OnDemand successfully mitigates labor shortages by promoting internally, providing industry-leading compensation and benefits, establishing world class training schools and maintaining a strong, motivated HR and recruiting team.

We appreciate the opportunity to support this important initiative to bridge the digital divide in Henrico County.

Sincerely,

Wade Boteler

Director, Business Development



RE: Letter of Support for APB's Henrico County VATI Project

To Whom It May Concern:

WESCO | Anixter is a leading provider of business-to-business (B2B) distribution, logistics services and supply chain solutions. WESCO | Anixter streamlines complex supply chain challenges with best-in-class customizable distribution and logistical services including consultation, asset management, eProcurement, VMI, warehousing, project management and kitting. Headquartered in Pittsburgh, PA with warehouse facilities in Ashland, VA, WESCO | Anixter has deployed over 100,000 miles of fiber optic broadband and is set to complete 25,000 miles in 2022 alone.

WESCO | Anixter is excited to be partnering with All Points Broadband ("APB") on the Henrico County VATI Project that will deliver best-in-class fiber-to-the-home broadband access to hundreds of currently unserved locations throughout the County. WESCO | Anixter has a strong working relationship with All Points Broadband and serves as APB's primary logistics and supply chain management vendor for APB's current Virginia deployments.

This letter will confirm that WESCO | Anixter is committed to supporting APB's Henrico VATI Project. WESCO | Anixter has reviewed the specific project scope and related supply chain needs, provided APB with pricing that is incorporated in APB's response, and is committed to supporting APB's requirements and project schedules if the Henrico VATI Project is awarded. WESCO | Anixter helps APB successfully mitigate supply chain constraints by coordinating with APB engineering and design team to forecast their material needs to meet the construction schedule timelines. WESCO | Anixter and APB communicate via weekly calls to monitor progress on lead-times, supply chain fluctuations and manage inventory.

We appreciate the opportunity to support this important initiative to bridge the digital divide in Henrico County.

Sincerely,

Jay Monahan

Jay Monahan – Sales Manager

jay.monahan@anixter.wescodist.com

804.731.1372

HENRICO COUNTY PUBLIC SCHOOLS

DR. AMY E. CASHWELL SUPERINTENDENT OF SCHOOLS



POST OFFICE BOX 23120 HENRICO, VIRGINIA 23223-0420 (804) 652-3600

August 23, 2022

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

Dear Dr. Holmes:

On behalf of Henrico County Public Schools (HCPS), I am writing in strong support of Henrico County's application for VATI grant funding to support broadband infrastructure and services in our presently unserved communities in Varina.

HCPS is strongly committed to removing all barriers to equitable learning for our students and families, particularly as it relates to broadband access and technology. In partnership with Henrico County Government, we share a modern vision for a community that provides a high quality of life to all our residents and meaningful access to robust, innovative learning for all our students. Universal broadband is an incredibly meaningful part of making that vision a reality for all our citizens.

If you have any questions about the support and commitment of the school division in this important endeavor, please feel free to contact me at (804) 652-3717.

Sincerely,

Amy E. Cashwell, Ed.D.



Henrico County Public Library

August 18, 2022

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

Dear Dr. Holmes:

The Henrico County Public Library fully supports any and all efforts to achieve digital literacy and equity across Henrico County including VATI broadband grant funding.

Our library system has for years invested in providing technology for our community in order to address digital equity and the "digital divide" via free public computing, free Wi-Fi in our buildings and parking lots, and most recently, through a popular pilot project where we circulate 100 hotspots in the County. This initiative has been popular with hotspots routinely checked out and with people on waiting lists.

To assist the public with digital literacy, the Henrico County Public library offers many free classes at multiple library locations. Classes range from "Computer Basics" (that familiarizes people with a keyboard and mouse) and "Internet Basics" to Microsoft Office classes like Word and PowerPoint, to photo-editing and 3D printing instruction. HCPL - Digital Media Lab (henricolibrary.org/); HCPL - Digital Media Lab (henricolibrary.org/)

Our mission states that we promote reading and lifelong learning, connect people with information they need, and enrich community life. By supporting broadband access to residents who need it, we can help achieve this mission, close gaps in service, and increase digital equity, digital literacy, and bridge the digital divide.

Sincerely,

Barbara F. Weedman, M.L.S.

Director, Henrico County Public Library

COMMONWEALTH OF VIRGINIA



County of Henrico

August 22, 2022

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

Dear Dr. Holmes:

Henrico County takes pride in the way we provide information and resources to underserved communities. In the eastern part of the county, the Varina district has a 10.9% poverty rate, which is 25% higher than the rest of the county and 10% higher than the state of Virginia, according to Henrico Census Data.

During the height of the pandemic, the county used GIS and Census data to identify areas where income levels were at or below the poverty level, then used that information to provide those residents with Henrico County Care Kits, which consisted of COVID safety information in 11 different languages and PPE. Through three contactless distribution events led by teams of volunteers, we were able to use these kits to provide updated health information to those who may not have access to the internet.

We continue to partner with Henrico County Public Schools and the faith community to equip families identified as "McKinney-Vento" and living in hotels along the Williamsburg Road corridor with care kits, food, and other resources. For example, the Henrico Minister's Conference, comprised of several churches in the Varina and Fairfield districts, provides resources such as personal hygiene items and health information to schools that have been identified as Title I schools because of the percentage of students eligible for free or reduced-price meals. In addition, these partnerships ensure the needs of immigrants, refugees, and aging adults living in poverty are all met, giving them access to resources and vital information.

If you have questions about our many efforts to support various residents living at or below the poverty level, please feel free to contact me via email at smi201@henrico.us or phone at 804-314-0774.

Sincerely

Monica Smith-Callahan

Deputy County Manager for

Community Affairs



Virginia Cooperative Extension Henrico County Office

8600 Dixon Powers Drive PO Box 90775 Henrico, VA 23273-0775 804-501-5160 Fax: 804-501-5169

http://henrico.ext.vt.edu

August 17, 2022

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

Dear Dr. Holmes:

I am submitting this letter in support of Henrico County's application to expand Broadband across the County. This project will foster digital equity in the rural parts of the county that can spur local economy and improve outcomes for all county residents.

The Extension Office supports this project because it is vital to community wellbeing.

Sincerely,

Unit Coordinator

Extension Agent, Family & Consumer Sciences

Limberly A. Edmonds

COMMONWEALTH OF VIRGINIA



HOUSE OF DELEGATES

RICHMOND

COMMITTEE ASSIGNMENTS: COMMERCE & ENERGY TRANSPORTATION RULES

SEVENTY-FOURTH DISTRICT

August 25, 2022

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

Dear Dr. Holmes,

I am writing to express my support for Henrico County's Virginia Telecommunication Initiative (VATI) Grant Application. In partnership with All Points Broadband, this project will provide universal broadband services to approximately 430 homes and businesses in eastern Henrico County. If funded, this project would deliver world class fiber internet to unserved constituents in my district.

Broadband has become an essential utility and those without it are being left behind. With universal broadband access throughout the County, residents can telework, participate in distance learning, utilize telemedicine, and enjoy the 21st century amenities that accompany a reliable and fast internet connection. The lack of quality broadband is one of the top issues I hear about from constituents. The universal broadband coverage that would be provided through this proposed project will greatly improve the quality of life in the community and expand opportunity for all.

I would appreciate your consideration of this VATI application. Please let me know if you have any questions or need additional information.

Sincerely,

Lamont Bagby

Member, 74th District

Virginia House of Delegates

Chair, Virginia Legislative Black Caucus

3/1/22, 9:34 PM Form 477
OMB 3060-0816

Form 477 Filing Summary

FRN: 0023524705

Data as of: Dec 31, 2021

Operations: Non-ILEC **Submission Status:** Original - Submitted

Last Updated: Mar 1, 2022 09:33

PM

Filer Identification

Section	Field	Response
Filer Information	Company Name	All Points Broadband
	Holding Company Name	Virginia Everywhere
	Filing Type	Non-ILEC
	SAC ID	N/A
	499 ID	831251
Data Contact Information	Data Contact Name	
	Data Contact Phone Number	
	Data Contact E-mail	
Emergency Operations Contact Information	Emergency Operations Name	
	Emergency Operations Phone Number	
	Emergency Operations E-mail	
Certifying Official Contact Information	Certifying Official Name	
	Certifying Official Phone Number	
	Certifying Official E-mail	

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	FCC477-Deployment-DEC2021.csv	Mar 1, 2022 09:28 PM	26,371
Fixed Broadband Subscription	fcc477_20211231.csv	Mar 1, 2022 08:35 PM	823
Fixed Voice Subscription	fcc477_voip_20211231.csv	Mar 1, 2022 11:52 AM	32

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks	

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	
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				Î
	Terrestrial Fixed Wireless				
Maryland	Terrestrial Fixed Wireless				
Virginia	Optical Carrier/Fiber to the End User				
	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
1.000	1.000			
2.000	1.000			
2.000	2.000			
3.000	0.500			
3.000	0.512			
3.000	1.000			
3.000	1.500			
4.000	1.000			
5.000	1.000			
5.000	2.000			
5.000	5.000			

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Tota
6.000	1.000			
6.000	2.000			
9.000	2.000			
10.000	2.000			
10.000	3.000			
10.000	4.000			
10.000	5.000			
10.000	10.000			
12.000	2.000			
12.000	3.000			
15.000	2.000			
15.000	3.000			
15.000	4.000			
15.000	5.000			
15.000	15.000			
20.000	4.000			
20.000	5.000			
20.000	20.000			
24.000	3.000			
25.000	2.000			
25.000	3.000			
25.000	5.000			
25.000	25.000			
30.000	10.000			
30.000	30.000			
35.000	5.000			
50.000	3.000			
50.000	10.000			
50.000	20.000			
50.000	50.000			
100.000	100.000			
200.000	200.000			

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
250.000	250.000			
300.000	300.000			
Total				

Fixed Broadband Subscriptions by Technology, Bandwidths and End User Type

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Busines /Govt.	Total
Optical Carrier/Fiber to the End	10.000	10.000			
User	25.000	25.000			
	30.000	30.000			
	50.000	50.000			
	100.000	100.000			
	200.000	200.000			
Terrestrial Fixed Wireless	1.000	1.000			
	2.000	1.000			
	2.000	2.000			
	3.000	0.500			
	3.000	0.512			
	3.000	1.000			
	3.000	1.500			
	4.000	1.000			
	5.000	1.000			
	5.000	2.000			
	5.000	5.000			
	6.000	1.000			
	6.000	2.000			
	9.000	2.000			
	10.000	2.000			
	10.000	3.000			
	10.000	4.000			
	10.000	5.000			
	10.000	10.000			
	12.000	2.000			

1		Form 477			
Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
	12.000	3.000			
	15.000	2.000			
	15.000	3.000			
	15.000	4.000			
	15.000	5.000			
	15.000	15.000			
	20.000	4.000			
	20.000	5.000			
	20.000	20.000			
	24.000	3.000			
	25.000	2.000			
	25.000	3.000			
	25.000	5.000			
	25.000	25.000			
	30.000	10.000			
	35.000	5.000			
	50.000	3.000			
	50.000	10.000			
	50.000	20.000			
	50.000	50.000			
	100.000	100.000			
	200.000	200.000			
	250.000	250.000			
	300.000	300.000			
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	0	0		

State	Total VGE Lines	Consumer VGE Lines	Total VoIP Subscriptions	Consumer VoIP Subscriptions
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/Govt.	Sold w/ Internet	Sold w/o Internet	FTTP	Coax	Fixed Wireless	Copper	
Kentucky				i						
Virginia										
Total										

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

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

Federal Communications Commission 45 L St NE, Washington, DC 20002

Phone: 1-888-225-5322

TTY: 1-888-835-5322

<u>Videophone: 1-844-432-2275</u>

Fax: 1-866-418-0232

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<u>Media</u>

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Wireless

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Offices

9/2/2021 Form 477

OMB 3060-0816

Form 477 Filing Summary

FRN: 0023524705

Data as of: Jun 30, 2021

Operations: Non-ILEC **Submission Status:** Original - Submitted

Last Updated: Sep 2, 2021 10:10

AM

Filer Identification

Section	Field	Response
Filer Information	Company Name	All Points Broadband
	Holding Company Name	Virginia Everywhere, LLC
	Filing Type	Non-ILEC
	SAC ID	N/A
	499 ID	831251
Data Contact Information	Data Contact Name	
	Data Contact Phone Number	
	Data Contact E-mail	
Emergency Operations Contact Information	Emergency Operations Name	
	Emergency Operations Phone Number	
	Emergency Operations E-mail	
Certifying Official Contact Information	Certifying Official Name	
	Certifying Official Phone Number	
	Certifying Official E-mail	

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	FCC477-Deployment-JUN2021.csv	Sep 1, 2021 05:30 PM	
Fixed Broadband Subscription	fcc477_20210630.csv	Aug 23, 2021 10:36 AM	
Fixed Voice Subscription	fcc477_voip_20210630.csv	Aug 23, 2021 11:58 AM	

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks

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	
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					
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
1.000	1.000			
2.000	1.000			
2.000	2.000			
3.000	0.500			
3.000	0.512			
3.000	1.000			
3.000	1.500			
4.000	1.000			
5.000	1.000			
5.000	2.000			
5.000	5.000			
6.000	1.000			

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Tot
6.000	2.000			
8.000	2.000			
9.000	2.000			
10.000	2.000			
10.000	3.000			
10.000	4.000			
10.000	5.000			
10.000	10.000			
12.000	2.000			
12.000	3.000			
15.000	2.000			
15.000	3.000			
15.000	4.000			
15.000	5.000			
20.000	4.000			
20.000	5.000			
20.000	20.000			
24.000	3.000			
25.000	2.000			
25.000	3.000			
25.000	5.000			
25.000	25.000			
30.000	10.000			
30.000	30.000			
35.000	5.000			
50.000	3.000			
50.000	20.000			
50.000	50.000			
100.000	100.000			
200.000	200.000			
250.000	250.000			
300.000	300.000			
Total				

Fixed Broadband Subscriptions by Technology, Bandwidths and End User Type

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Tota
Optical Carrier/Fiber to the End	10.000	10.000			
User	25.000	25.000			
	30.000	30.000			
	50.000	50.000			
	100.000	100.000			
	200.000	200.000			
Terrestrial Fixed Wireless	1.000	1.000			
	2.000	1.000			
	2.000	2.000			
	3.000	0.500			
	3.000	0.512			
	3.000	1.000			
	3.000	1.500			
	4.000	1.000			
	5.000	1.000			
	5.000	2.000			
	5.000	5.000			
	6.000	1.000			
	6.000	2.000			
	8.000	2.000			
	9.000	2.000			
	10.000	2.000			
	10.000	3.000			
	10.000	4.000			
	10.000	5.000			
	10.000	10.000			
	12.000	2.000			
	12.000	3.000			
	15.000	2.000			
	15.000	3.000			
	15.000	4.000			
	15.000	5.000			

		FOIII 477	-		
Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
	20.000	4.000		i	
	20.000	5.000			
	20.000	20.000			
	24.000	3.000			
	25.000	2.000			
	25.000	3.000			
	25.000	5.000			
	25.000	25.000			
	30.000	10.000			
	35.000	5.000			
	50.000	3.000			
	50.000	20.000			
	50.000	50.000			
	100.000	100.000			
	200.000	200.000			
	250.000	250.000			
	300.000	300.000			
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			

State	Total		Consumer		Business/Govt.				
Total									
ll Other \	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/Govt.	Sold w/ Internet	Sold w/o Internet	FTTP	Coax	Fixed Wireless	Coppe
Kentucky									
Virginia									

Reminder: You must continue to use Census 2010 geographic codes in FCC Form 477.

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

Federal Communications Commission 445 12th Street SW, Washington, DC 20554

Phone: 1-888-225-5322

TTY: 1-888-835-5322

<u>Videophone: 1-844-432-2275</u>

Fax: 1-866-418-0232

Contact Us

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Website Policies & Notices

FOIA

No Fear Act Data

FCC Digital Strategy

Open Government Directive

Plain Writing Act

RSS Feeds & Email Updates

Disability Rights

CATEGORIES

About the FCC

Proceedings & Actions

Licensing & Databases

Reports & Research

News & Events

For Consumers

BUREAUS & OFFICES

Consumer

Enforcement

Inspector General

<u>International</u>

<u>Media</u>

Public Safety

Wireless

Wireline

Offices



FTTH Rapid Assessment

Follow Up Results

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

Results

Results

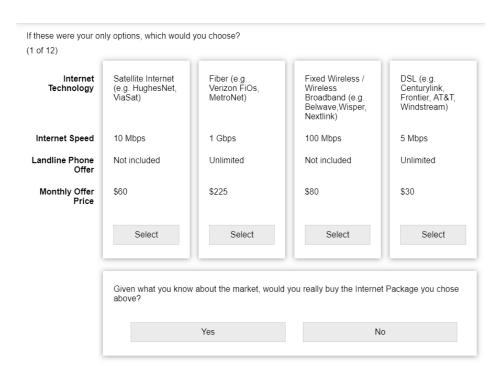
Not have access to Cable

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		Draft Fin

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

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

Sample Choice Based Conjoint (CBC) Question



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

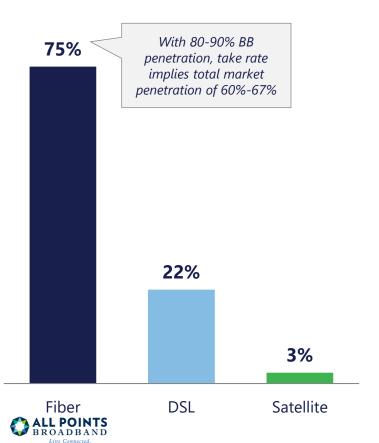
Note: This page would be proceeded by a description page which defines each attribute and level, including the channels included in each channel package Sources: Underserved BB Survey (N=1042), Altman Solon Research & Analysis

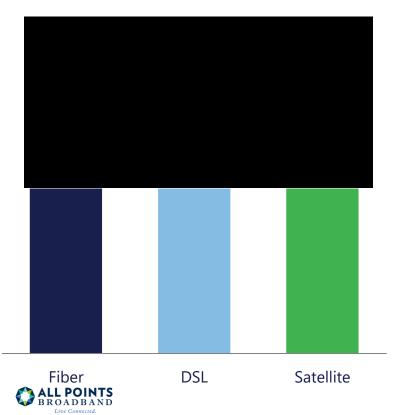


In Satellite + DSL markets with baseline prices, we observe 75% take rate and an ARPU well in line with APB targets

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

ARPU by Technology N=1042, Simulated ARPU¹





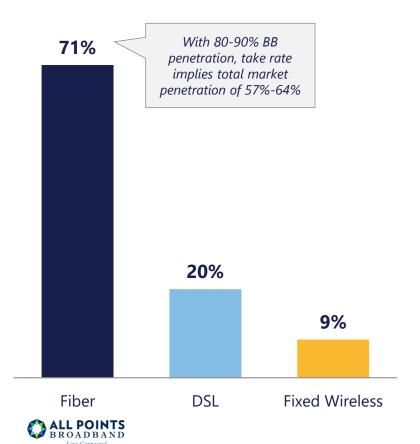
Notes: Calculated by multiplying take rate of each existing promo offer by cost of the promo offer Sources: Underserved BB Survey (N=1042), Altman Solon Research & Analysis

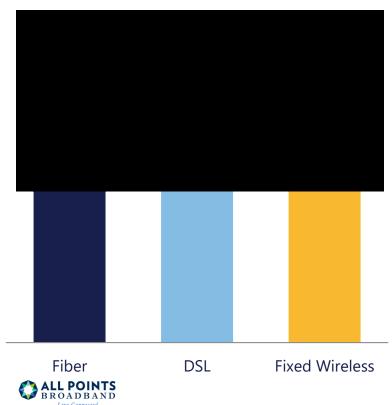
B

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



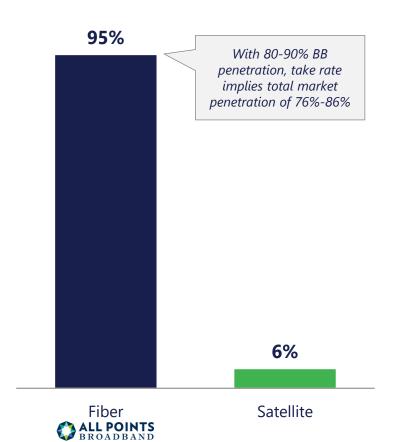


Notes: Calculated by multiplying take rate of each existing promo offer by cost of the promo offer Sources: Underserved BB Survey (N=1042), Altman Solon Research & Analysis

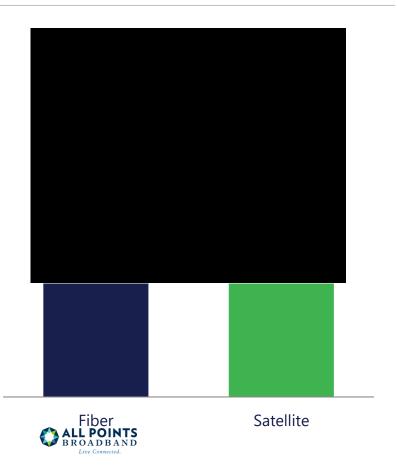
C

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



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

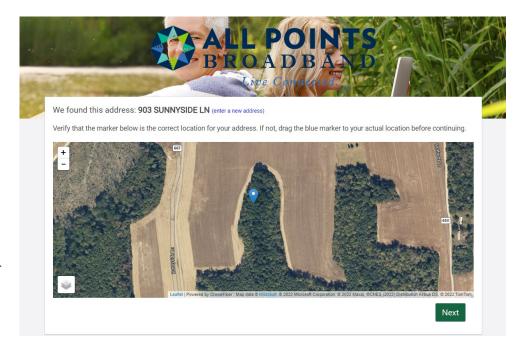
Crowd Sourced Survey to Verify Access

ALL POINTS FREQUENTLY ASKED QUESTIONS FIBER ZONES BROADBAND Live Connected. technology to homes and businesses in communities throughout Virginia, Gig Fiber Broadband in Your Home All Points Broadband is engaged with its electric utility partners in several large scale fiberto-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 Points standard FTTH architecture is capable of offering 10Gbps 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 NO COMMITMENTS. PAY NOTHING UPFRONT. JUST SHOW YOUR INTEREST!

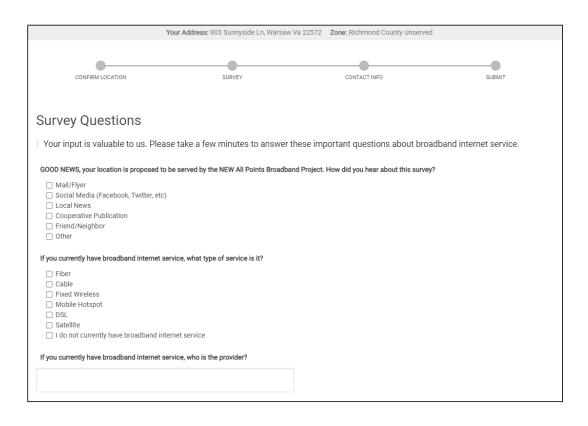
https://fiber.allpointsbroadband.com

Steps to verify whether a location currently has broadband access:

- 1. Enter your address and click Go
- 2. The next page will ask for you to verify your home's location within the parcel

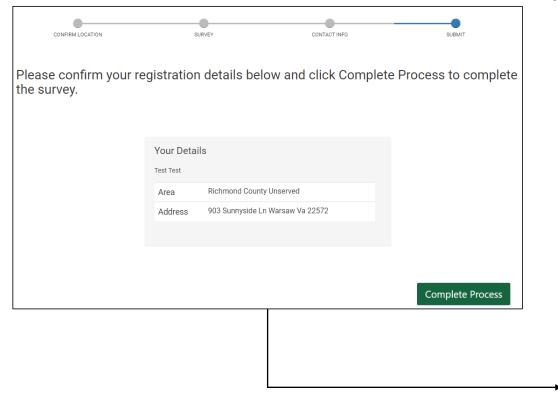


Crowd Sourced Survey to Verify Access



- Survey questions for locations predicted to be unserved by field verification and existing broadband mapping will receive a Good News notification.
- Locations predicted to be served will receive an alternate set of survey questions.
- To make sure the VATI application removes currently served locations, the survey requires residents to indicate whether they receive broadband service today.

Crowd Sourced Survey to Verify Access



- To complete the survey, respondents need to verify their address and contact information.
- We will then provide a verification notice that you have registered.
- Preregistering is not a service commitment but it does enroll the respondent in APB's Marketing & Communications Plan.

6.

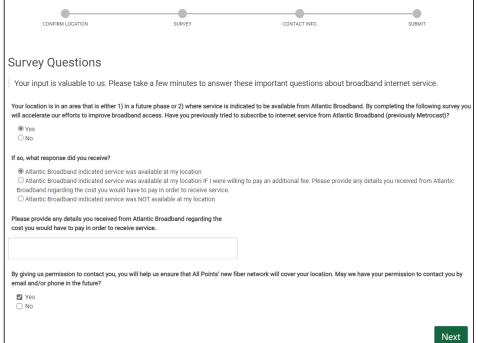
CONFIRM LOCATION SURVEY CONTACTINEO SUBMIT Thank you for registering your address to receive gigabit-capable, fiber internet! As the project proceeds, we will use this email address to contact you with updates and announcements. Before we begin construction, we will contact you again and request a deposit to confirm your desire to subscribe to fiber. Please share our website link (https://fiber.allpointsbroadband.com)with your neighbors - we need to hear from as many people as possible so we can start construction ASAP! Go to Dashboard 🕒 Your Details Test Test Richmond County Unserved Area 903 Sunnyside Ln Warsaw Va 22572 Address

Crowd Sourced Survey Response to Location Presumed to be Served

If a submitted location is presumed to be served, the survey response will indicate that service is available and present alternative questions



- Respondent will verify existing service
- If unable to access broadband previously, the respondent will be prompted to explain their experience
- Respondent can sign up for future notifications





Eligibile Customers Can Save \$30 Per Month

INTERNET SERVICES *



Everyone deserves access to high speed fiber broadband. All Points Broadband is helping our communities Live Connected by participating in the Affordable Connectivity Program (ACP).

The ACP was created by Congress and is administered by the Federal Communications Commission (FCC), with a goal of helping to ensure that households can afford the broadband they need for work, school, healthcare and more.

You may be eligible for an ACP discount if:

- 1. You or a member of your household meets at least one of the following requirements.
- Is eligible to receive Supplemental Nutrition Assistance Program (SNAP or food stamps), Medicaid, or Supplemental Security Income (SSI) benefits, or participates in another Lifeline qualifying program;
- · Receives Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) benefits;
- · Participates in the National School Lunch Program or the School Breakfast Program;
- . Is enrolled in a school that offers free breakfast or lunch through the USDA Community Eligibility Provision (CEP);
- Received a Federal Pell Grant during the current award year;
- If your gross annual household income is at or below the 200% of the federal poverty guidelines; or, for residents of qualifying Tribal Lands, meets

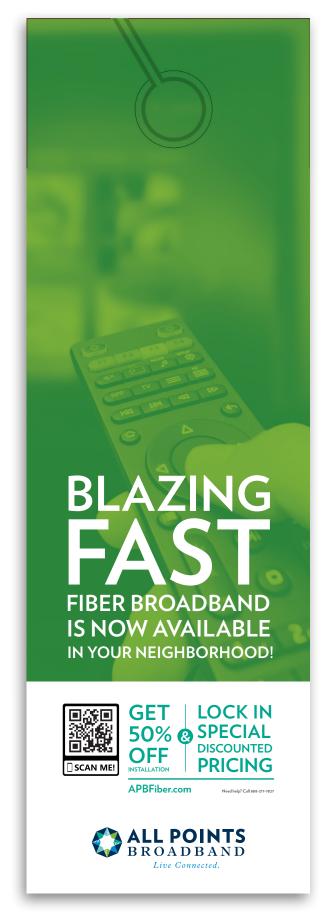
FRONT BACK





FRONT

BACK





FIBER BROADBAND IS COMING



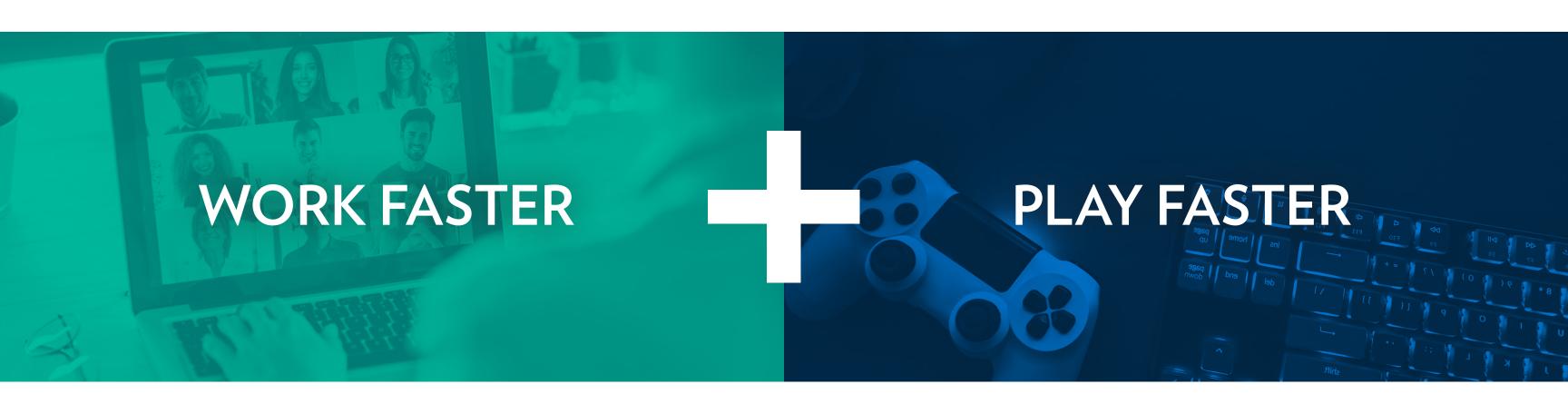


FIBER BROADBAND IS COMING





FIBER BROADBAND IS HERE

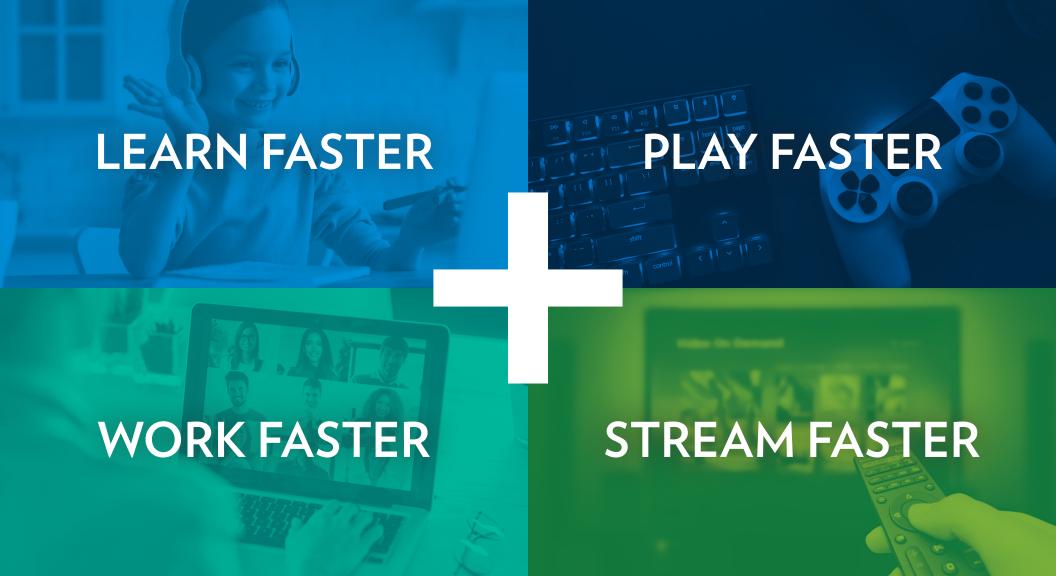




FIBER BROADBAND IS HERE







Postal Indicia Here

COMING SOON: BLAZING-FAST FIBER BROADBAND IS HEADED TO YOUR HOME

IT'S NEVER BEEN EASIER TO LIVE CONNECTED WITH ALL POINTS BROADBAND FIBER IN PARTNERSHIP WITH RICHMOND COUNTY

Whether you're working from home, a movie buff or a gamer, you'll appreciate our super-fast broadband service coming to your area. It's everything you need to live connected. Use the OR code to sign up now.







1 GIG



Enjoy unlimited

DATA



Managed router with built-in

WI-FI



Monthly plans as low as



All weather. service is

RELIABLE

Don't wait! Get started today at APBfiber.com Need help? Call 888-217-7827.



Live Connected.



SIGN UP NOW FOR 50% OFF INSTALLATION

& PRIORITY SCHEDULING

Resident 1234 Any Street Any Town, US 12345-6789



Postal Indicia Here

NOW INSTALLING: BLAZING-FAST FIBER BROADBAND TO YOUR HOME

IT'S NEVER BEEN EASIER TO LIVE CONNECTED WITH ALL POINTS BROADBAND FIBER

Put the web to work for you with high-speed broadband. Just what you need to start watching, zooming and gaming. Sign up now to save 50% on your installation and receive priority scheduling.









LEARNING



GAMING



CALLING



STREAMING





Live Connected.



SIGN UP NOW FOR 50% OFF INSTALL ATION

& PRIORITY SCHEDULING

Resident 1234 Any Street Any Town, US 12345-6789



IT'S HERE! BLAZING-FAST FIBER BROADBAND IS NOW AVAILABLE IN YOUR HOME

Postal Indicia Here

IT'S NEVER BEEN EASIER TO LIVE CONNECTED WITH ALL POINTS BROADBAND FIBER

Don't miss your chance to get faster, more reliable internet. Experience speeds up to 1 Gigabit (1000 Mbps), 24/7 service and unlimited data with monthly plans that work with your budget.







*ELIGIBLE HOUSEHOLDS SAVE AN EXTRA \$30 THROUGH THE AFFORDABLE CONNECTIVITY PROGRAM.

Don't wait! Get started today at APBfiber.com Need help? Call 888-217-7827.

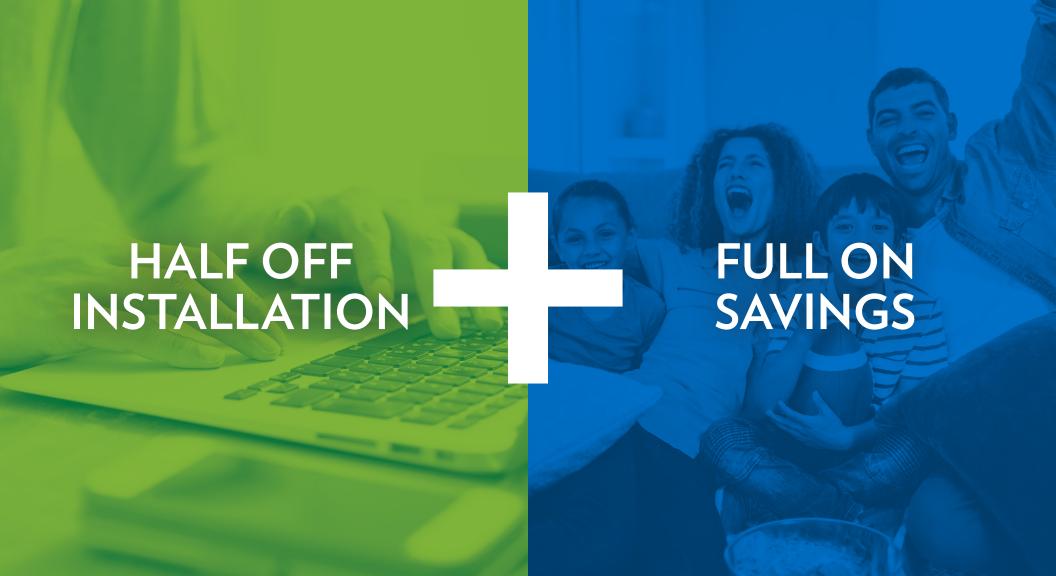


Live Connected.





Resident
1234 Any Street
Any Town, US 12345-6789



DON'T MISS OUT ON BLAZING-FAST FIBER BROADBAND IN YOUR HOME

IT'S NEVER BEEN EASIER TO LIVE CONNECTED WITH ALL POINTS BROADBAND FIBER

Stream, game, learn or work faster with fiber broadband. You'll get unlimited data for every connected device and 24/7 customer service if you ever need it. Compare for yourself!

	FIBER	FIXED WIRELESS	SATELLITE	BASIC \$59% \$29% \$29%
Cost	\$\$	\$\$\$	\$\$\$\$\$	50 MBPS / THROUGH THE ACP*
Speed	1,000 Mbps+	~25 Mbps	~50 Mbps	BLAZE \$8999 \$5999 THROUGH THE ACP*
Unlimited Data No Throttling	~	Х	X	* ******
Reliability	****	*	**	BOLT \$11999 / \$8999 MO THROUGH THE ACP*

^{*}ELIGIBLE HOUSEHOLDS SAVE AN EXTRA \$30 THROUGH THE AFFORDABLE CONNECTIVITY PROGRAM.

See website for details



Live Connected.





Resident
1234 Any Street
Any Town, US 12345-6789



Live Connected.

WELCOME TO ALL POINTS BROADBAND



These resources will help to ensure that you enjoy reliable, fast broadband Internet and phone service and help you Live Connected



In this Welcome Packet we will go over the following:

- 1 Setting Up The APB Connect Mobile App
- Installing and troubleshooting your router
- 3 Setting up your VOIP service
- 4 Streaming TV services and available options

- 5 Managing your account
- 6 Affordable Connectivity Plan
- 7 Contacting All Points Broadband
- 8 Upgrade Service





Here is your network login information. Please store in a secure place.

	_		
Netv	unrl.	Nla	ma
IACIA	VUI N	110	HIC.

Password:

Make the most of your new network with the APB Connect App

Thanks for choosing All Points Broadband for your internet service.

You are getting the best internet and Wi-Fi experience possible. Now that your professional installation and whole home Wi-Fi optimization is complete, you're ready to start tailoring your Wi-Fi.

Before you begin your All Points Broadband internet service, download the APB Connect Wi-Fi app now.



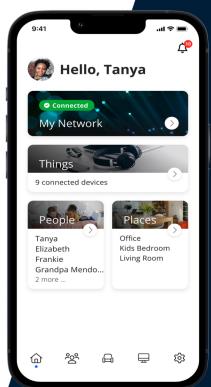
STEP 2 Search for APB Connect Wi-Fi app.



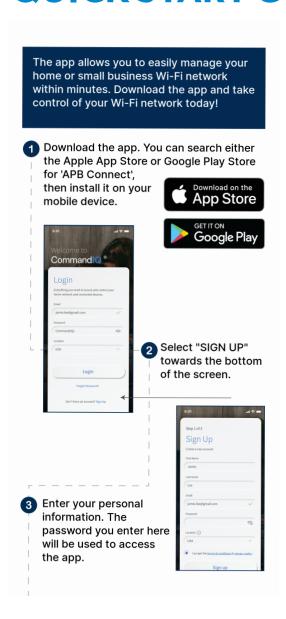
STEP 3
Download the app!

For detailed app setup instructions, review the APB Connect app quick start guide.





APB CONNECT QUICK START GUIDE













Need help Additional Help?

Contact support: www.allpointsbroadband.com 1-888-217-7827





Experience the True Power

of the APB Connect App

Check your internet speed.

Run bandwidth tests to monitor your network performance and give bandwidth priority to specific devices.





Easily set-up a guest network.

Keep your network passwords secure by setting up separate guest networks for your visitors.

View and manage all devices connected to your network.

Track a device's bandwidth usage, pause its network access, or disconnect it.

Set parental controls.

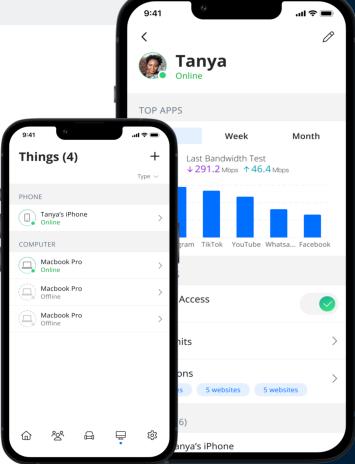
See what apps your kids are using, how long they're used for, and tailor their experience by blocking inappropriate sites and content, or setting usage limits.

Active threat protection.

View total threats, intrusions, and viruses blocked over time. You can even see protected devices and total protection uptime.



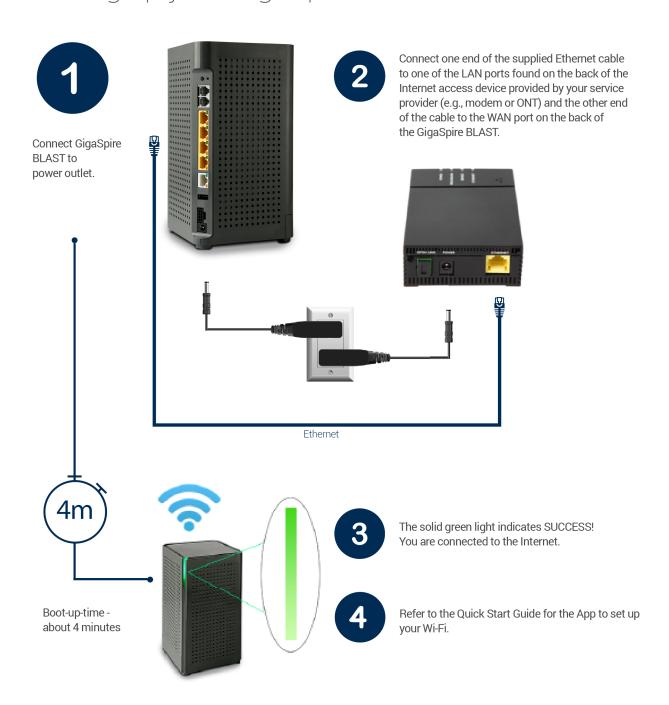
Live Connected.



QUICK START GUIDE SETTING UP YOUR GIGASPIRE BLAST U6

Quick Start Guide:

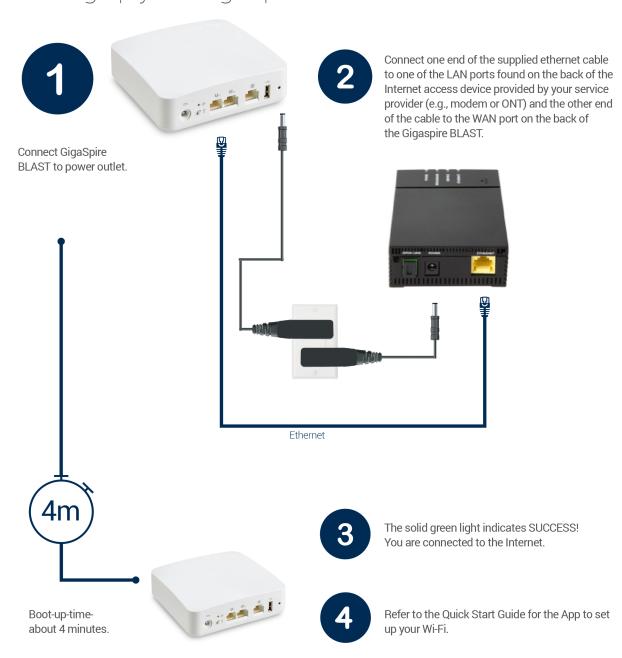
Setting up your GigaSpire BLAST



QUICK START GUIDE SETTING UP YOUR GIGASPIRE BLAST U4

Quick Start Guide:

Setting up your GigaSpire BLAST u4



TROUBLESHOOTING YOUR INTERNET SERVICE



Check the Internet on other devices

Sometimes when you have trouble accessing the internet, the root cause can be related to the computer or device you are using. Try another device to see if the internet works, if so then the issue is related to that specific device. A simple reboot can typically fix most problems.

Reboot Your Equipment

Issues that occur with your internet connection can be caused by your equipment. Typically, the simple process of rebooting your equipment can fix most issues. This means powering the equipment off, wait about 20 seconds, and then powering it back on.

- > Starting with your equipment to access our network. Locate the Power Supply (POE) and unplug it from traditional power, making sure all the indicator lights (if applicable) have turned off. Wait approximately 5 seconds and then plug the power back in. You'll need to wait approximately 60 seconds for the equipment to re-associate with the network.
- Now let's also do the same for the wireless router. Locate the wireless router, and unplug it from traditional power, making sure all the indicator lights have turned off. Wait approximately 5 seconds and then plug the power back in. Again, you'll need to wait approximately 60 seconds for the equipment to startup and begin working.
- > **Next** check your device to make sure it is attached to your Wi-Fi or network and see if you can get online. If that does not resolve your issue, please call our office at 888.217.7827.



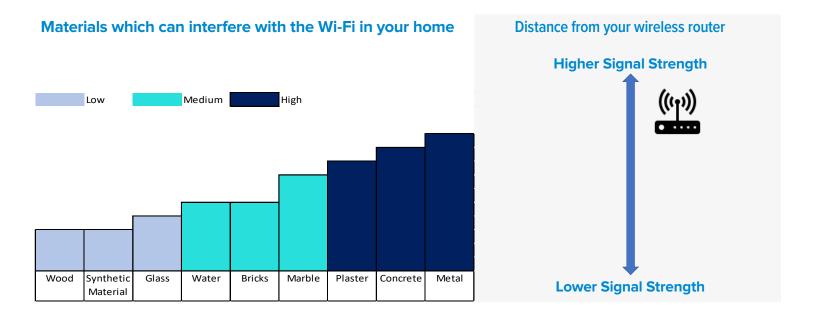
Wireless Interference

In some cases, the wireless equipment in your home can be a factor in creating issues for your wireless service. Devices such as wireless cameras, baby monitoring devices, etc. can interfere with your internet service. If you have one of our managed wireless routers, we can typically identify sources of interference. Neighboring networks and even old devices can negatively interfere with your Wi-Fi signal.



Material Interference

Our Wi-Fi routers are capable of amazing speeds. However, certain man made barriers and your device distance from the wireless router can impede a signal from getting to the far reaches of your home. If you are experiencing low connectivity issues you may want to consider upgrading your router from a U4 to a U6 or installing a mesh unit in your home.

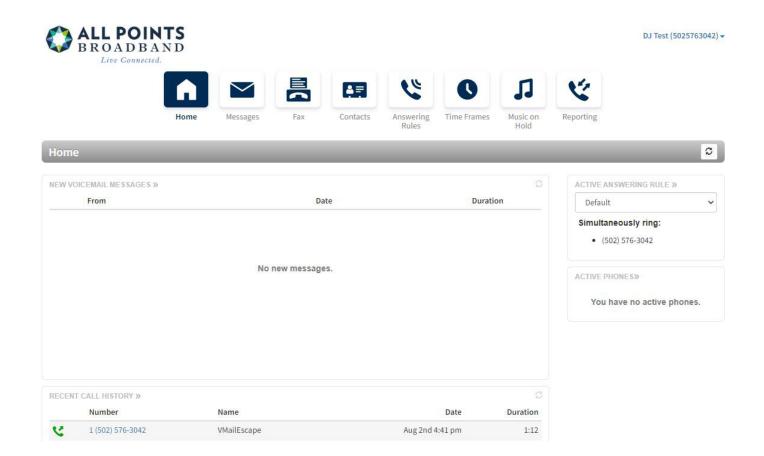


SETTING UP YOUR VOIP SERVICE

VOIP Instructions

The portal is located at voip.allpointsbroadband.net/portal/ and can be accessed using the login name and password that will be provided to you. Your login name will be your phone number followed by @apbresidential.com. For example a login name would be 8041112222@apbresidential.com. Make sure to use the area code with your login in name





Setup your Voicemail: By clicking on the Messages icon towards the top you can enable/disable voicemail as well as set and record your voicemail greeting.



Change your password Select the drop down field at the top right corner with the customer name to access your Profile. Here you can change your



Active Call Log and Contacts: our online portal will display an active log of recent calls and corresponding call status. You can add contacts to your account by clicking the Contact icon at the top and entering their information.

STREAMING TV USING YOUR INTERNET SERVICE

STREAMING VIDEO 101

What is streaming video?

Streaming video refers to entertainment delivered via the internet rather than a traditional cable TV connection.

What equipment do I need?

To enjoy streaming video, you need:

- · Fast and reliable internet.
- · A streaming device such as:
 - an Amazon Fire TV Stick, Apple TV, or Roku Streaming Stick that is connected to your TV and Wi-Fi. Streaming devices include a universal remote control to sync with your TV.
 - o a Smart TV that is connected to the internet.
 - o a tablet, laptop, or smartphone that is connected to Wi-Fi or data.
- A subscription to a streaming service or channel such as Netflix, Disney Plus, YouTube Live, HBO Max, Prime Video, or ESPN Plus.



















How do I subscribe?

Subscribing to new streaming channels and services is simple. Once you have your streaming capable device connected to the internet and have set up an account, you can then simply navigate to the app menu in your device and select the desired service or channel to preview. Information will be included such as a description of the service and monthly cost. To subscribe, you select the desired service and agree to subscribe.

STREAMING TV USING YOUR INTERNET SERVICE

What channels or TV shows are included with a streaming service?

Services like https://mybundle.tv make it simple to view channels included. Simply navigate to "Find My Bundle", enter basic information such as who is watching, your zip code, preferences and favorite channels, and it will make a recommendation for you. You can even search for your favorite TV show to find new ways to watch it via streaming. Select "TV Shows & Movies" from the top menu to search for a specific show like Gunsmoke. You can also visit the website of specific streaming providers such as YouTube Live or Hulu Live and browse the individual channel lineups.

What are the benefits of streaming video?

- Cost savings. One of the main reasons people switch to TV streaming is to cut costs. Many free streaming channels are available such as Peacock Free, Pluto TV, and Crackle. Netflix is less than \$20 per month and is the most popular choice for movies and binge-watching TV. Disney+ is a highly rated service for family-friendly content and is less than \$10 per month. Services with a channel lineup similar to traditional TV are also available including YouTube Live, Hulu Live, and Sling. These services are generally \$20–\$30 less per month than similar offerings from cable TV providers.
- Convenience. Streaming TV lets you enjoy the services or channels you subscribe to in multiple places and on multiple devices. Unlike traditional TV, with most subscription streaming services you can start a movie on your Smart TV at home, continue watching it on your smartphone while working out at the gym, and then finish it on your tablet out on your patio.
- Skip the commercials. Many of the most popular subscription streaming services let you watch your favorite shows whenever you want and completely commercial free!

What types of streaming services are available?

- On-Demand streaming. On-Demand streaming allows the subscriber to watch a selected movie or TV show whenever he or she likes. Many On-Demand providers allow viewers to pause, play, fast-forward, rewind or rewatch shows as often as they like. Popular On-Demand providers include Netflix, Disney+, HBO Max, and Amazon Prime Video.
- Live streaming. Live video streaming lets subscribers watch entertainment like local news, sports, and TV shows live. Features such as video recording, pause, and rewind vary by provider. Popular live streaming platforms include YouTube Live, Sling, DirecTV Stream and Hulu Live.
- On-Demand and live streaming. Many providers with live streaming also offer On-Demand content. This means you can watch live shows as they are broadcast, go back and watch them later, or browse On-Demand content to watch whenever you like.

MANAGING YOUR ACCOUNT



Customer Portal Instructions

The portal is located at https://support.allpointsbroadband.com and can be accessed using the email address and password you entered when creating your account.

Update your information by clicking on the Billing Info link on the left side and submitting your credit card information (VISA, MasterCard, Discover) or your Bank acct/routing details for ACH payment.

Change your password by clicking "Edit" next to the Password field under Account Info. **Update your account** contact information by clicking on the Address and Phone links on the left side





Additional Resources

How To Videos and guides: Are you still stuck with connectivity issues? The customer portal can help to serve as a valuable guide with print resources and videos to ensure you remain connected.

Upgrade Services: You can upgrade services with the click of a button. Interested in transitioning your existing landline to All Points Broadband, we have a solution for you. Increase to Gig speeds and experience streaming like never before or purchase a battery backup to keep the phone up and running in case of a storm.



Notify Us: Plan your next move with limited service disruption. You can notify us that you are moving through the customer portal and we will work with you to ensure limited interruption of service. You may even be able to transfer service if you are remaining in an area that All Points broadband serves.



AFFORDABLE

CONNECTIVITY PROGRAM



TWO STEPS TO ENROLL

Step 1: Visit your customer portal to find a direct link to apply or email support for the link

Step 2: Contact All Points Broadband after your approval and have the discount applied to your bill.

Eligible households must both apply for the program and contact All Points Broadband after approval.

WHO IS ELIGIBLE?

A household is eligible if one member of the household meets at least one of the criteria below:

- Has an income that is at or below 200% of the Federal Poverty Guidelines.
- Participates in certain assistance programs, such as SNAP, Medicaid, Federal Public Housing Assistance, SSI, WIC, or Lifeline.
- Participates in Tribal specific programs, such as Bureau of Indian Affairs General Assistance, Tribal TANF, or Food Distribution Program on Indian Reservations.
- Is approved to receive benefits under the free and reduced-price school lunch program or the school breakfast program, including through the USDA Community Eligibility Provision.
- Received a Federal Pell Grant during the current award year Meets the eligibility criteria for a participating broadband provider's existing low-income program.

Find out more about ACP qualifications.

Visit Our Website: https://allpointsbroadband.com/acp/

Contact Us: acp@allpointsbroadband.com

CONTACT ALL POINTS BROADBAND

We look forward to hearing from you

Upgrade your plan

Do you want to harness the power of the U6 router with Gig speeds to stream, game, or talk like never before. Upgrading is as easy as signing onto your customer portal, but we are happy to speak with you over the phone. For examples of upgrade items please refer to the last page of the welcome packet.

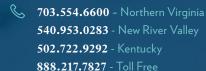
Connectivity issues:

Are you still experiencing connectivity issues after attempting the troubleshooting steps in the welcome packet and reviewing the self help tutorials available through the customer portal? We have a live support staff available to help. Email or call the customer support line below and we will get you back online as soon as we can.



TECHNICAL SUPPORT 24 Hours a Day 7 Days a Week

SALES AND BILLING M-F / 8 AM - 6 PM





support@allpointsbroadband.com



Happy with your All Points Broadband Service.?

We want to hear about it. Please leave us a review on Google and let us know how you are Living Connected with your new broadband internet service.

UPGRADE YOUR SERVICE

GET MORE OUT OF YOUR ALL POINTS BROADBAND EXPERIENCE

Router Upgrades:

While the standard base Wi-Fi unit does a great job of connecting your home, you can upgrade to the Wi-Fi Plus unit and experience more coverage in the home. Help to ensure that you are gaming, streaming, working, and learning with the power the connectivity.





Speed Upgrades:

If you are not taking advantage of the lighting fast speeds of Gig broadband service easily upgrade today experience the difference. Game with confidence knowing that you have a leg up on the competition using the APB Bolt speed tier.

ADD VOIP and Battery Backup:

It's time to switch to All Points Broadband VOIP phone service and bundle your services. Most customers save over higher priced landline phone services offered by competitors. Help to ensure your phone and internet stay connected during a power outage by adding a battery backup unit.



Attachment 19 -- Digital Inclusion and Literacy

Summary of Attachment 19 Digital Inclusion & Literacy

and

Response to 15.c. Describe any digital literacy efforts to ensure residents and businesses in the proposed project area sufficiently utilize broadband. Please list any partnering organizations for digital literacy, such as the local library or cooperative extension office.

The County will leverage community events with partner organizations to ensure that residents are aware of their access to broadband and the positive impact it can have on their lives. Jointly, the County and All Points will conduct outreach to farmers' markets, public libraries, and local chambers of commerce as well as other organizations to partner in ways to inform the population how to use broadband access to improve their quality of life and access to economic opportunity.

As shown in Attachment 19 and also as a letter of support in Attachment 14, County libraries have a variety of digital literacy efforts that will promote adoption among the newly connected citizens. Digital literacy programming includes "computer basics" and "internet basics" to Microsoft Suite instruction, photo-editing and 3D printing classes.

Also included in Attachment 19 is the Henrico County Public Schools 2022 Digital Learning Resources guide which outlines the four pillars of the school system's academic excellence through broadbandenabled resources: Digital Learning, Digital Literacy, Digital Citizenship, and Digital Equity & Access. Specific programs include LifeReady Digital Literacy, Cool Tools for Student Learning, HCPS University, The Connection, Henrico Virtual Academy, and many others. School children within the project area do not have sufficient broadband access to fully take advantage of all these resources. With cost-effective, high quality broadband from APB, all students in eastern Henrico County will be afforded the same top-quality resources as those in the currently served areas of the county.

All Points will offer a free a Digital Inclusion Academy through Google for Education (see Attachment 19), based on best practices and recommendation from the National Digital Equity Center, the National Digital Inclusion Alliance, and NTIA's BroadbandUSA toolkits. The online courses include valuable digital literacy topics like "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.

Additional information for response to 19.c and summary of Henrico's award-winning digital literacy program

Henrico County won a Nation Association of Counties' award in 2020 for its digital literacy efforts through its public library system ("HCPL"). Specifically, HCPL sought to modernize its services and meet the needs of jobseekers with advanced digital literacy and skill-building classes in its Digital Media Labs. HCPL opened its first Digital Media Lab at the Libbie Mill Library in 2015 after piloting the concept at its Twin Hickory location. Library staff created curricula to develop digital literacy skills in applications like Adobe Creative Suite software, 3D modeling and printing, and coding while continuing to offer traditional computer classes like Microsoft Office and Internet Basics. The Varina Area Library, which is closest to the proposed project area, opened in 2016 with a Digital Media Lab, and staff created applied concept classes like 3D printed crafting, video game programming, and other engaging subjects that offered an accessible entry point to learning digital skills for patrons of all ages. The new Fairfield Area Library opened in 2019 with a Digital Media Lab, and HCPL updated the Twin Hickory and

Attachment 19 -- Digital Inclusion and Literacy

Tuckahoe Area Libraries' labs with comparable technology to the existing labs. Now all five Area Libraries, one in each magisterial district in Henrico County, provide free access to high-tech digital literacy education and digital content creation tools, removing barriers to developing digital skills. Digital Media Lab classes are among HCPL's most popular offerings county-wide. Classes in 3D design, Photoshop, Illustrator, and programming languages like HTML and Javascript require registration and often fill up well in advance with a healthy waiting list. Patrons of all ages and skill levels use the Digital Media Lab. Attendance is strong and representative of the community with diversity of age, gender, race, and socioeconomic background among participants.



Henrico County Public Schools

2022 Digital Learning Resources

This document includes summaries of and links to resources that Henrico County Public Schools uses to promote Academic Excellence for all Henrico learners with an emphasis on digital access, digital learning, and digital citizenship for all students.

Academic Excellence

Overview of the Goal: To prepare students to be ready for life and have the knowledge, skills, experiences, and attributes to be successful in a rapidly changing world, Henrico County Public Schools will redesign its curricular, instructional and assessment support around a research based, common-learning model to go beyond Standards of Learning requirements. The model will provide all learners with personalized pathways through four Deeper Learning pillars, where learning is: anytime and anywhere; authentic and connected; student owned; and community supported.

Strategic Goal: Henrico County Public Schools will achieve academic excellence by transforming teaching and learning to provide engaging learner-centered experiences for all students.

Equity Focus: Equity, Opportunity, and Fairness

Objective: Students will have LifeReady experiences during their educational careers that lead to college or career readiness.

<u>Digital Learning</u>: Enhance Personalized, Equitable Student Learning Experiences with Technology

HCPS strives to promote and support student personalized, deeper learning experiences to demonstrate workplace readiness by creatively solving complex problems, thinking critically, collaborating, communicating and demonstrating responsible citizenship.

- <u>Digital Resources for All Schools:</u> This page provides an overview of the resources that were researched, vetted, and developed to provide innovative, personalized and deeper learning experiences for all students.
- Schoology, the HCPS Learning Management System (LMS): Henrico's LMS that supports a fully
 digital curriculum for all students and teachers. This link includes an overview of the
 number of users and examples of learning structures. The use of this resource supported
 the equitable distribution of digital curriculum and content creation tools and was
 recognized by the National Association of Counties for the aligned learning program.
- Seesaw for Schools: In addition to the Schoology LMS, Seesaw is provided for all students
 in grades PK-3 creating a powerful learning loop between students, teachers, and
 families. Students use built-in multimodal tools to capture what they know by taking
 pictures, drawing, recording videos, and more in Seesaw's digital portfolio so teachers see
 all stages of student thinking and progress which enables them to personalize teaching.

Families also gain a window into their student's learning and engage in home-to-school connections.

- <u>Digital Overview for Families</u>: This website provides families with resources that support digital learning PK-12. It is updated regularly and shared with families through the Henrico Schools website as well as school-based websites and efforts.
- Henrico Edflix Virtual Learning Initiative: Edflix was Henrico's response to pandemic school
 closures. It includes a variety of digital learning resources that was used to ensure
 learning continued. This effort was recognized by the National Association of Counties.
- Google Workspace: Henrico provides every learner and teacher with access to Google's powerful content design and creation tools that support the development of critical skills as defined by the Henrico Learner Profile.
- <u>Innovative Learning Coach Role Profile</u> Every school has an ILC to help students and teachers navigate the digital world.
- <u>Henrico Virtual Academy</u>: Henrico's first fully virtual school provided as a full-time option for students beginning in 2021-22.
 - LifeReady Learning Exhibition <u>2019 Program | Video</u> An annual showcase that highlights efforts with digital learning, literacy, and access for all HCPS students, families, and communities. Includes an engagement with families on the safe and responsible use of Technology for learning.
 - Technology and Computer Science cross-curricular connections start in elementary schools across all disciplines to provide all students with authentic opportunities to apply knowledge and skills that promote deeper learning aligned with the Virginia Standards of Learning.

<u>Digital Literacy</u>: Development of knowledge and skills necessary to access, evaluate, use and create information using technology.

HCPS implements the Virginia Department of Education's Standards of Learning for <u>Digital Learning Integration</u> which are designed to foster a student's progressive development of knowledge and skills necessary to access, evaluate, use and create information using technology. The focus is on learning to use technology effectively and wisely rather than learning about technology. This section includes links to resources Henrico Schools use with all stakeholders to develop these competencies.

- Henrico LifeReady Literacy LifeReady Literacy is the ability to identify, understand, interpret, create, compute, and communicate using visual, audible, and digital materials across disciplines and in any context.
 - o What is LifeReady Digital Literacy (Video)

Digital Literacy Supports

O Students and Families -

- <u>Cool Tools for Student Learning-</u> Resources for students that support digital learning and citizenship.
- Sora An online digital library with books at all levels for students to access anytime, anywhere

O Teachers and Leaders -

- <u>Tech Tips for Teachers</u> Resources for teachers that support teaching and learning using digital tools
- <u>HCPS University</u> HCPS U is a staff personalized professional learning catalog, organized by grade or content, with digital literacy professional learning opportunities.

<u>Digital Citizenship</u>: Development of knowledge and skills needed to successfully utilize technology for learning and life.

Preparing students, teachers, and families with the knowledge and skills they need to successfully utilize technology for learning and life is a key priority for Henrico Schools. As we support the Virginia Department of Education's Profile of a Virginia Graduate and Deeper Learning, we remain committed to ensuring that all stakeholders have what they need to successfully and safely harness technology.

- Safety & Security Audit Protocol HCPS Office of Safety and Security reviews all safety procedures and protocols annually to ensure they reflect State guidelines and national best practices, which include digital citizenship. We exceed State requirements with our Comprehensive Safety Audit process.
 - <u>Become a Common Sense District</u> HCPS has earned the Common Sense District recognition for the last 4 years, 2018-2022. To earn your district badge:
 - Seventy-five percent of schools in your district must have a current Common Sense School badge, earning recognition during the previous or current school year.
 - Engage families district-wide in at least three ways with Common Sense resources.
- HCPS uses Common Sense Education resources for digital citizenship to help students take ownership of their digital lives. All students need digital citizenship skills to participate fully in their communities and make smart choices online and in life.
 Common Sense offers an award-winning K–12 Digital Citizenship Curriculum which:
 - Addresses top concerns for schools.
 - o Prepares students with critical 21st-century skills.
 - Supports educators with training and recognition.
 - Engages the whole community through family outreach.



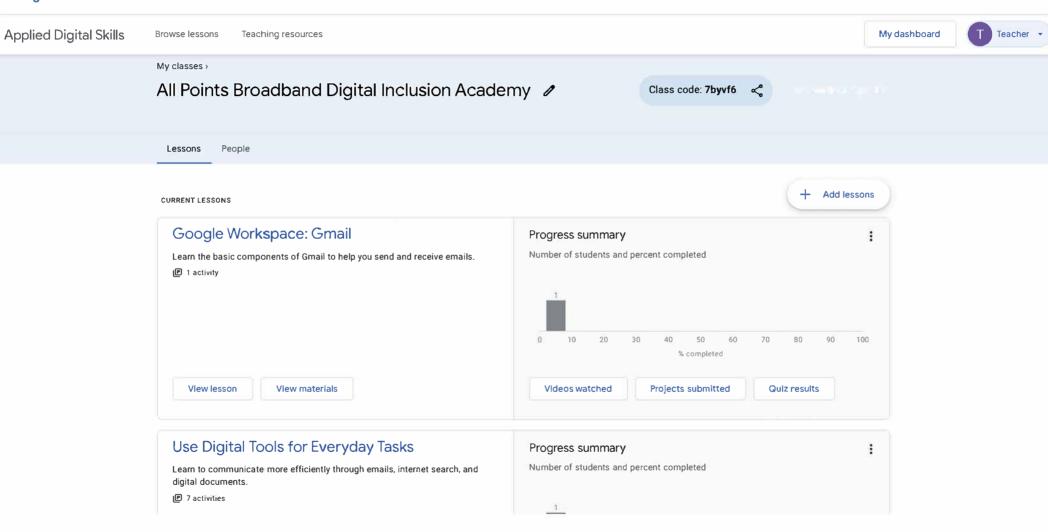
<u>Digital Equity and Access</u>: Promote and support a secure and robust technology infrastructure to support access, adequacy, and equity.

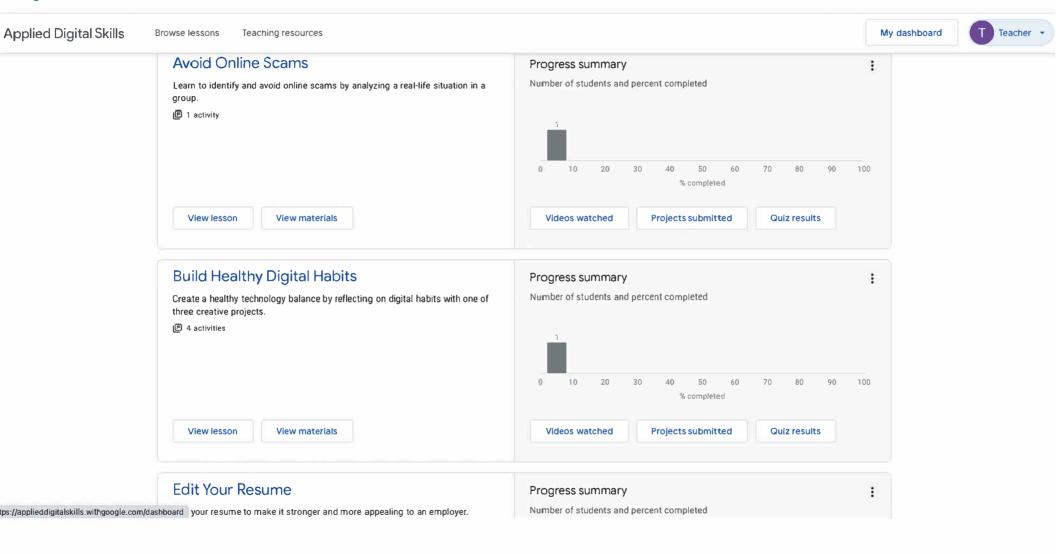
Henrico County Public Schools works to create community-friendly schools in which families, students, and employees feel valued, respected, and acknowledged.

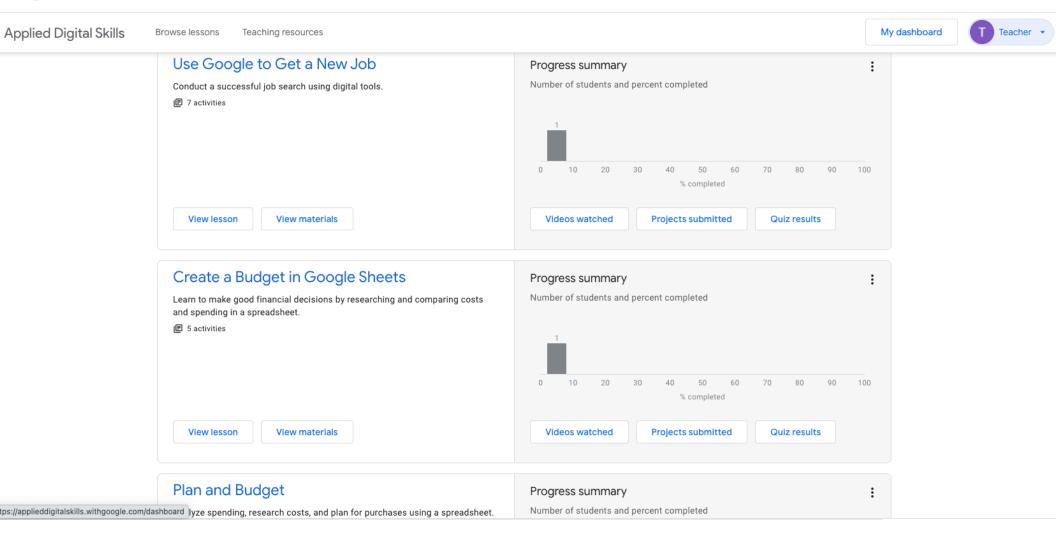
 Participation in the Greater Richmond Area Education Technology Consortium (GRAETC) Executive Committee for support across our Region (14 divisions). GRAETC's mission: To positively impact the Greater Richmond Area educational community by

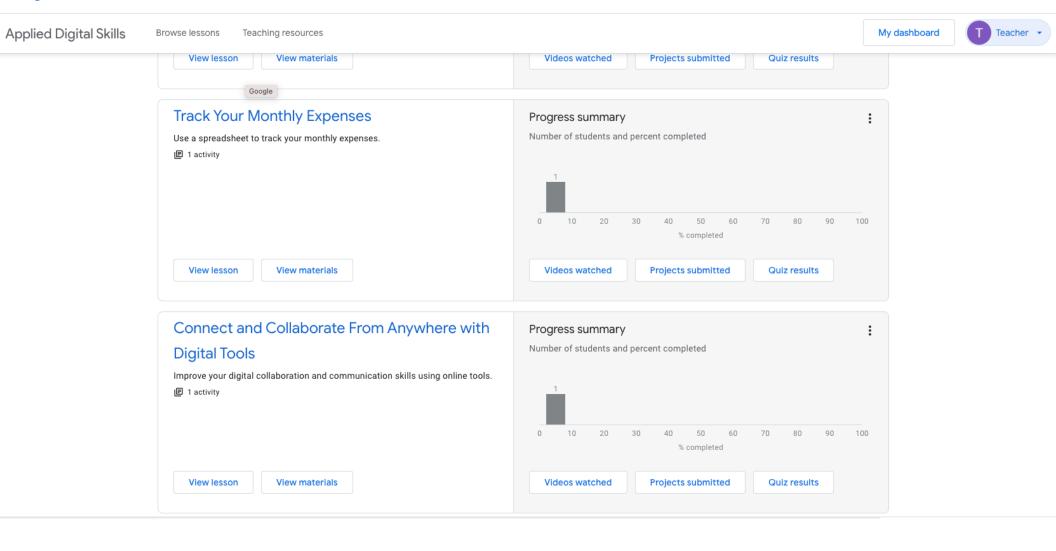
- providing connected learning opportunities to build capacity around innovative and sound pedagogical use of instructional technology resources.
- Clever Portal Students can access their digital resources via. The Clever portal. This
 offers bookmarks and Single Sign On for many of the resources specific to the division
 and their school.
- <u>The Connection Online services page</u>- This page offers support to families to understand digital systems for learning and support on how to monitor their child's learning.
 - <u>Cool Tools for Students Learning</u>: Device Support this section provides additional device specific support for students as they leverage the power of the technologies available to them.
- 1:1 devices for all PK-12 students, Windows 11 laptops for select part-time staff and all Windows 11 laptops for all full-time staff. The device access supports virtual learning anytime (PK-K students: iPad, 1-5th students: Chromebooks, 6-12th students: Windows 11 laptops, additional laptop cart in each elementary school are provided to utilize resources that may not be available on the Chromebooks or iPads)
- In the 21/22 school year, approximately 700 Henrico County Public School students'
 families expressed a dire need for permanent, broadband internet access in their
 homes for virtual learning. These families were provided paid-for broadband access
 by the school division to meet remote learning needs.
- Since 2020, over 3,000 T- Mobile hotspots issued during pandemic to student families in need
- Interactive Panels initiative of 1,400 deployed panels in all schools (2021-2022 and effort continues into future years)
- Technology Support Technicians (33 on-site supporting 73 HCPS schools)
- <u>Academic Planning</u> Academic and Career Planning is a student-driven, adult-supported process designed to guide students through the creation of a personalized vision for life after graduation. Through self-exploration, career exploration, and skill development, students will be prepared to accomplish their #LifeReady goals.

Attachment 19 - All Points Broadband Digital Inclusion Academy Sample











Applied Digital Skills

Prowse lessons

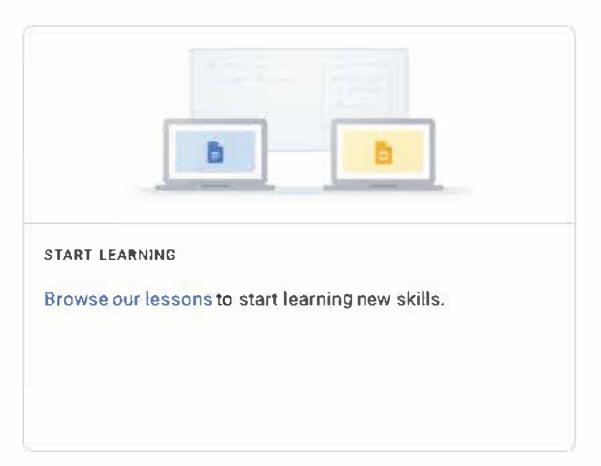








Welcome All Points Broadband Customer!



My classes



Glen Lea Health Clinic - Project Overview

Overview:

Glen Lea Elementary School's NEW Medical & Dental Service program is to provide access to healthcare for students in their school setting. Through the use of Telehealth technology, educators and healthcare providers will work together to support students' health and wellness along with their education.

Henrico County Public Schools (HCPS), Henrico Education Foundation (HEF), and Children's Hospital of Richmond at VCU (CHOR) partnered together to establish the first school health clinic using Telehealth technology. The school nurse, and the CHOR provider (medical, mental health, or dental), will work together to examine, diagnose and recommend a course of action for students.

These partners focused on a healthcare initiative that supports Henrico County in creating a centralized "hub" with a comprehensive level of care and "spokes" that provide some services to surrounding schools. Partnering with stakeholders would assist in the development and sustainability of this initiative.

Benefits:

- Any child enrolled at Glen Lea is eligible. There are no out-of-pocket costs for these services provided at the school and families can enroll their children at any time. Students can also withdraw at any time.
- Offering these services could reduce the number of days students will miss school for non-emergency
 medical conditions. The diagnosis will help determine if the student can stay in school or if they need an
 early dismissal. If the student is picked up, the family member will then learn when they can return to
 school without the requirement of a doctor's note.
- While this program does not replace a regular visit to a students' care provider, it can provide information and early warnings for families. A report will be provided to the family and the student's primary care provider if given permission.
- Our long-term goals would be to extend this service to several schools, have an on-site Nurse Practitioner and provide care to teachers, families, and community members.

Stakeholders:

- a. **Henrico County Public Schools**: HCPS will provide facilities, assist with legalities and employ a school nurse to oversee the clinic.
- b. Henrico Education Foundation: HEF is the financial backer of this effort.
- c. VCU School of Dentistry: The VCU School of Dentistry will provide all of the dental support.
- d. **Children's Hospital of Richmond:** CHOR will provide physical health services for students at Glen Lea Elementary.

Glen Lea Health Clinic - Project Overview

Committee/Workgroup Approach:

Program committees/workgroups were created that included members from HCPS, HEF and VCU. Monthly meetings were held that connected members in the planning process. Subcommittees were created for medical (physical health), dental and mental health services. We have moved to weekly progress updates during Summer/Fall 2021.

History:

In 2017 Community Health Status Assessment (CHSA) assisted community members, health and social service providers, and elected officials in learning about health trends and disparities in the community, determining priorities among numerous health issues, prioritizing resources, and planning and taking action to equitably improve health in Henrico County.

From this assessment, a partnership grew between HCPS, HEF, and VCU Core Health that focused on the effort to bring the first health clinic to the county. Based on the data analysis, Glen Lea Elementary School was chosen as the pilot program for a Telehealth Clinic that would provide services: medical, dental, and mental support for students and their families. Offering this program would be one of the four pillars of the Full-Service Community Schools model; Integrated student support.

Frequently Asked Questions:

How does one participate?

Families have been asked to complete the enrollment forms that have been sent home. Once completed and returned to the students teacher, it will be shared with tele-health clinic staff. They are then enrolled and have access to services.

Is health insurance required or can uninsured students and families be clients as well? Health insurance information will be requested, but it is not required.

Will the clinic provide telephone interpreters for the parents who are not English speakers?

As we become more familiar with the needs, processes and systems, future plans could include support from telephone interpreters.

Would you consider having a virtual instruction meeting so we all know how to utilize this service? A virtual Q&A will be scheduled for Glen Lea families to learn more about the tele-health clinic

Is this the beginning of HCPS' Community Schools initiative? If not, when did it start and what are the other projects?

The Community Schools initiative started in 2016 with the first Community Learning Center at Glen Lea Elementary in Henrico County. We are committed to continuing this effort to best support the students and families of Henrico County.

Glen Lea Health Clinic - Project Overview

Will I be able to see/ photograph the clinic during the Ribbon Cutting Ceremony? Yes.

Who spearheaded this project/ who would be the best person to talk with about its development, and will they be at the ribbon cutting tomorrow?

This is a collaborative effort amongst various partners. There will be several stakeholders in attendance that can speak to the development.

When will the clinic officially start running?

Enrollment forms have been sent home with students introducing the clinic to Glen Lea families and virtual Q & A's will take place in December to further educate our families and start the enrollment process.

What services will be provided?

Medical, dental, and mental health support will be provided.

How does the telehealth aspect work -- what happens if after the virtual appointment, it's determined that a student needs physical care?

Diagnosis will be sent to the students primary care physician.

Will the services be available specifically for Glen Lea students?

At this time, the clinic will service only Glen Lea students.

Who will staff the clinic?

An HCPS nurse oversees the clinic and helps facilitate the telehealth appointments.

How much is this expected to cost, and who is funding it?

Through partnership with



Henrico County Public Library

August 18, 2022

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

Dear Dr. Holmes:

The Henrico County Public Library fully supports any and all efforts to achieve digital literacy and equity across Henrico County including VATI broadband grant funding.

Our library system has for years invested in providing technology for our community in order to address digital equity and the "digital divide" via free public computing, free Wi-Fi in our buildings and parking lots, and most recently, through a popular pilot project where we circulate 100 hotspots in the County. This initiative has been popular with hotspots routinely checked out and with people on waiting lists.

To assist the public with digital literacy, the Henrico County Public library offers many free classes at multiple library locations. Classes range from "Computer Basics" (that familiarizes people with a keyboard and mouse) and "Internet Basics" to Microsoft Office classes like Word and PowerPoint, to photo-editing and 3D printing instruction. HCPL - Digital Media Lab (henricolibrary.org/); HCPL - Digital Media Lab (henricolibrary.org/)

Our mission states that we promote reading and lifelong learning, connect people with information they need, and enrich community life. By supporting broadband access to residents who need it, we can help achieve this mission, close gaps in service, and increase digital equity, digital literacy, and bridge the digital divide.

Sincerely,

Barbara F. Weedman, M.L.S.

Director, Henrico County Public Library

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 investorowned 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 and is an Eagle Scout.

Tom Whitaker, Chief Operating Officer

Tom is an experienced telecom industry leader with 37 years of experience building and operating wired and wireless communications networks. He has been a leader in startup companies and established service operators like Shentel, a Virginia based service provider since 1902. Tom's focus as a manager is to successfully support and elevate his team and share in the enjoyment of our success. With that ethos, he has been successful building and operating great broadband networks throughout his career.

Continuous improvement is an important core value for all leaders. Tom is passionate about leadership best practices and helping young leaders understand the attributes of top-level

leadership. Tom served on the Board of Directors at the National Cable Television Cooperative (NCTC). He attended and completed the SCTE Leadership Program at the Tuck School of Business at Dartmouth College in 2011 as well as the Change Management Certification Program at Cornell University. In the spring of 2020, Tom completed his graduate degree in Leadership from the University of Virginia. Tom earned his B.A.Sc from West Virginia Wesleyan College.

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-inclass, 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. He lives with his family in Henrico County, VA.

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. During the course of the previous three years, the

All Points PPP team has secured in excess of \$500M of public and private investment to fund universal FTTH access in 19 Virginia counties.

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 and is an Eagle Scout. He lives with his family in Henrico County, VA.

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. His methodolgy to verify broadband acces to specific locations results in 98% accuracy during grant funding challenge process. Prior to joining All Points, Chuck co-founded and spent 13 years growing Shelby Broadband, a highly successful, rural-focused ISP acquired by All Points in 2018.

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

Darren Glatt, Director and Operating Partner

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

Ajit Pai, Director and Operating Partner

Ajit Pai is a Partner at Searchlight Capital Partners who focuses on the firm's broadband and digital infrastructure efforts and is one of Searchlight's representatives on All Points' Board of Directors. Ajit served as Chairman of the FCC from January 2017 until January 2021. During Pai's tenure at the FCC as both Commissioner and Chairman from 2012-2021, he implemented

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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.

Travis Sparrow Director of Information Technology, Henrico County

Travis serves as the chief technology officer for Henrico County government, overseeing all hardware and software systems, data governance and integration, geographic information systems, and related infrastructure. Prior to joining Henrico County, he served as an outside plant engineer and right of way acquisition agent for another major service provider in the area. Multiple years' experience with underground and aerial cable plant design and construction. Also, in his current role as Director of Information Technology for Henrico County, he has managed the budget and installation of multiple private fiber-optic outside cabling plant installations throughout the county's network of facilities

- A. A. The project will bring FTTH to Wilton Farm, the Malvern Hill Battlefield, a County 911 tower site, the Good Neighbor Village, and a County recreation facility. Wilton Farm's future includes residential and business development, a welcome center, and secondary education programming for HCPS. The mission of Good Neighbor Village is to provide a residential opportunity in a community setting for adults with mild to moderate intellectual disabilities. Their cottages will be provided with complimentary broadband.
- B. This project is a partnership between the County, a last-mile ISP, and an electric utility, and is following the successful model developed by All Points and Dominion for 14 other Virginia Counties that were supported by VATI funding.

The project leverages the Utility Leverage Statute with an investor-owned utility to simultaneously upgrade and harden Virginia's electric grid while making FTTH available to all remaining unserved locations in the County. Pursuing these objectives simultaneously reduces aggregate costs for all the partners and benefits the entire community. Achieving universal broadband throughout the County will only be possible if this project is leveraged in coordination with Dominion's ongoing fiber-deployment activities consistent with the Statute.

C. See 20. Additional Information for the response to Question 19.c due to character count limit.

D. See the summary at the beginning of Attachment 13 for the response to Question 19.d due to character count limit.

• E. As shown in Attachments 14 and 19, County libraries have a variety of digital literacy efforts that will promote adoption among the newly connected citizens. Digital literacy programming includes "computer basics" and "internet basics" to Microsoft Suite instruction, photo-editing, and 3D printing classes. Henrico County won a National Association of Counties 2020 award for its library system's digital literacy program. The program showed users of all ages, backgrounds, and skill levels the unlimited options available with the click of a button on a broadband connection.

In 2021 HCPS launched its first telehealth clinic at Glen Lea Elementary School as described in Attachment 19. While initial enrollment focused on students, the long-term goal is to provide telehealth services to teachers, families, and community members. To the extent feasible, and in accordance with company network management policies, All Points will prioritize bandwidth for telehealth services.

Eastern Henrico, along the banks of the James River, has been an agricultural hub in the region for several hundred years since the founding of the Country. As agricultural practices need to become more efficient and precise, broadband access will also become increasingly necessary. This project will result in 100+ miles of 10 gigabit-capable fiber to support agriculture's next hundred years. As electric generation converts to renewable sources, many landowners may wish to convert from sunflowers to solar panels – infrastructure which requires broadband. All Points is committed to spreading awareness in collaboration with the Cooperative Extension Service and other rural stakeholders.

E-entrepreneurship relies, of course, on a high quality and consistent broadband connection. Businesses relying solely on e-commerce often require bandwidth well more than typical service levels. The All Points network standard of XGS-PON will be capable of 10 Gigabit symmetrical service to match demand. Several regional datacenters, including those of QTS and Facebook, are adjacent to the proposed project. These facilities attract the very type of entrepreneur that will need to rely on an XGS-PON network from All Points.

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Distance learning is a priority for HCPS as described in detail in Attachment 19. Programs include Henrico Virtual Academy, Edflix – Virtual Learning Initiative, Tech Tips for Teachers, and more. As a 1:1 device school system, HCPS realized the critical importance of connectivity for remote learning during COVID closures. Since 2020, the school system has provided more than 3,000 hotspots to families in need.