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Culpeper County Fiber Expansion FY24

Application ID:	107411292023102705
Application Status:	Pending
Program Name:	Virginia Telecommunication Initiative 2024
Organization Name:	Culpeper County
Organization Address:	302 North Main Street Culpeper, VA 22701
Profile Manager Name:	Laura Loveday
Profile Manager Phone:	(540) 727-3410
Profile Manager Email:	lloveday@culpepercounty.gov
Project Name:	Culmoner County Fiber Expension EV04
	Culpeper County Fiber Expansion FY24
Project Contact Name:	Laura Loveday
-	Laura Loveday
Project Contact Name:	Laura Loveday
Project Contact Name: Project Contact Phone:	Laura Loveday (540) 727-3410

Total Requested Amount: \$3,594,291.00

Required Annual Audit Status: Accepted

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Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	\$3,594,291.00	\$13,787,714.00	\$17,382,005.00
Construction	\$3,594,291.00	\$13,787,714.00	\$17,382,005.00
Total:	\$3,594,291.00	\$13,787,714.00	\$17,382,005.00

Budget Narrative:

The total estimate for the project is \$17,382,005. The amount of subsidy requested is \$3,594,291 and Verizon's match will be \$13,787,714. The project costs includes the following: Inside Plant Costs (\$150,000). The Inside Plant costs encompass Design, Engineering, Equipment Costs, as well as Installation Test and Turn up activities. Aerial Outside Plant Costs (\$7,926,722) and Buried Outside Plant Costs (\$9,305,283) The Outside Plant costs include Design, Engineering, Permitting, Materials/Equipment, Construction, Network Create, Testing, and Activation activities.

Questions and Responses:

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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:

Culpeper County (the County) has researched Internet service availability for over a decade. In 2021, the County hired All Points Broadband to conduct a countywide assessment of broadband availability in advance of our FY22 VATI grant proposal. All Points' field teams visited and visually inspected all areas within the County where incumbent cable providers are not offering service. The currently funded All Points and Culpeper County fiber to the home Initiative is solely located in the census blocks that were not claimed to be served by Comcast. As the project moved forward, FCC data became more refined and Culpeper became aware of a number of locations without Internet service that are in the census blocks where All Points is not funded to provide service. The County has received comments from citizens and businesses on the lack of internet in areas of the County identified in this proposal and has analyzed them in order to propose a project that achieved universal broadband coverage in Culpeper County.

The design proposed by Verizon Virginia LLC (Verizon) addresses the 453 unserved and underserved addresses of the project area that the County has determined do not have access to qualifying broadband. Verizon proposes to deploy 124 miles of new fiber that will provide qualifying broadband to all of these locations.

Verizon is ready to move forward with this project. Verizon was the first to build fiber optic broadband on a large scale, and now serves over 6 million broadband customers with its Fios service. Verizon is a global corporation, ranked number 26 on the Fortune 500, but still has a local project office on the ground in the County. There are more than 6,000 Verizon employees across the Commonwealth of Virginia. Their capacity to fully staff the project with experienced, skilled, and reliable people is unmatched. This project team's command of the regulatory environment enables the ability to anticipate and tackle problems - local, state or federal - efficiently and completely. The Verizon team, from engineering to planning and project management to construction, leads the industry, as do the personnel who will assist customers once broadband is built. The same is true for the selected subcontractors and consultants.

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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:

Culpeper County began collecting data from our constituents in August 2021 regarding their experience with obtaining access to high-speed Internet. Virginia Broadband is reported to often be unavailable, expensive, or not meet minimum speed standards (See attachment 14).

An Internet search for Virginia Broadband (VABB) yields the following description of the company from their website: "Virginia Broadband is a local company that offers high-speed Internet with speeds up to 25 Mbps in the rural areas and towns of Central and Eastern Virginia that offers better service than cellular Internet. We specialize in getting deep into the rural areas where there is no Internet coverage."

The VABB services offered page https://vabb.com/services/ describes only the highest of the 4 tiers of service meeting the minimum speeds required and costing \$225 monthly. Further, the service requires a two-year contract and is not available in all areas. We have no reports from residents who have been able to achieve the 100/50 Mbps speeds offered in the top tier of service.

Virginia Broadband is a fixed-wireless provider who reports offering Internet service in various portions of the County. All Points, Comcast, Verizon, nor the County were able to field-verify that Virginia Broadband offers speeds of 25/3 in any of the areas to be served by the project. None of the locations in the proposed project area that completed the broadband survey used to confirm the proposed project area indicated the ability to subscribe to reliable service of 25/3 or greater from Virginia Broadband.

To the best of our collective knowledge, there are no existing providers in the proposed project area which meet the qualifications to render the area ineligible for a VATI award. Comcast provides service to areas adjacent to the proposed project and All Points Broadband has been awarded through previous VATI cycles additional areas not included in this application.

Verizon offers DSL services across parts of the County, but does not offer any service meeting the requirements for "broadband" at the locations covered by this application. The proposed project areas are a natural ?t with Verizon's existing infrastructure. As noted later in this application, Verizon's Fios broadband Internet access service, which is offered elsewhere in the Commonwealth of Virginia and which we propose to deploy here, offers speeds starting at 300/300 Mbps all the way up to its Gigabit Connection service, which supports downloads up to 940 Mbps and uploads up to 880 Mbps. These speeds are well in excess of VATI requirements.

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

Answer:

No areas within or immediately adjacent to the Culpeper County Project have received funding from federal grant programs such as the Connect America Fund, Alternative Connect America (ACAM), ReConnect, and Community Connect, as noted on the attached map. We identified 81 passings that overlap with the Rural Digital Opportunity Fund (RDOF) program as described on Attachment 5.

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:

Culpeper County and Verizon anticipate no service overlap within the project area as there are no current broadband providers. The project area is unserved based on data available through the State of Virginia's publicly available VA Open Portal data and from broadband providers.

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

a. Of the total number of VATI passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area.

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

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

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

e. Provide the number of passings in the project area that have 25/3 Mbps or less. Describe the methodology used for these projections. (up to 15 points)

Answer:

a. Of the total number of VATI passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area.

VATI Passings

Residential

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Business
Non-Residential
Community Anchors
314
138
0
1

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.

RDOF Passings
Residential
Business
Non-Residential
Community Anchors
37
44
0
0

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.

Passings requiring special construction costs

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Describe the methodology used for these projections.

At this time, Verizon does not anticipate application of special construction costs to any of the 453 passings. As noted elsewhere in this application, with respect to locations with long driveways or setbacks, or that are otherwise not able to be served directly from the public right of way, Verizon will follow its standard practice, as set forth in its Product Guide online. Typically, this results in no construction charges for residential Fios Home Internet customers for extension of drops to long setback structures. With respect to new residential subdivisions, multi-tenant dwelling units, commercial development, and mixed-used business and residential development within or outside of the project area, Verizon will follow its standard practices for delivery of service and network extensions, including recovery of costs, as set forth in its standard Product Guide.

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.

Passings with budgeted special construction costs

0

Describe the methodology used for determining which passings with special construction costs were budgeted in the application.

Not applicable. Please see the response to subsection C above.

e. Provide the number of passings in the project area that have 25/3 Mbps or less.

Passings with 25/3 Mbps or less

427

Describe the methodology used for these projections. (up to 15 points)

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Verizon leveraged the data available from the Virginia DHCD in their Open Data Portal. The data included Location IDs from version 2 of the FCC Broadband Availability Map Fabric of unserved and underserved locations. The Location IDs were validated against the FCC NBM and funding map to eliminate faulty locations (no address or latitude/longitude information, not postal verified, or low confidence according to the FCC) and locations that were served, awarded, Verizon open for sale and not reflected in the files from the Open Data Portal.

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:

There are RDOF award areas in the VATI application area in Culpeper County, specifically the Census Blocks listed below:

510479304001005, 510479304001016, 510479304001017, 510479304001019,

510479304001034, 510479304001045, 510479304001048, 510479304001049,

510479304002020, 510479304002021, 510479304002023, 510479304002060,

510479304002063, 510479304002065, 510479305011003, 510479305011018,

510479305011022, 510479305011028, 510479305021014, 510479305021040, and

510479305021044

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

Answer:

Not applicable.

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:

Verizon currently provides copper-based and/or fiber-based services in the project area from its Culpeper central office, which houses Verizon's equipment and is connected back across Verizon's network to the global Internet. The project will add network components including equipment in the central office used to provide fiber-based Internet services as well as fiber-optic cables extending from the central offices past each of the proposed unserved locations. Verizon also will provide fiber drops and customer-premise equipment required to deliver service in response to an order from a customer. Verizon will provide the fiber drops and equipment at its cost, so they are not included in the project or the application.

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The proposed network begins with the optical line terminal (OLT) in a local Verizon central office. Fiber-optic cables will run along main feeder routes from the OLT toward the unserved locations. The fiber-optic cables may be placed in underground conduit or attached to utility poles. Verizon's construction methods--aerial or underground--will vary by area and may depend on the availability of existing pole and conduit infrastructure and local requirements. The detailed budget provided by Verizon includes specific assumptions for the mix of aerial and underground placement methods for the proposed network. For underground spans of fiber, Verizon may place vaults, handholes, or ground-mounted cabinets to access the fiber at various points. For aerial routes, Verizon may place ground- or pole-mounted cabinets. Along and at the end of each feeder route, Verizon will place a passive optical splitter to connect each feeder fiber to up to 32 distribution fibers. Distribution fiber cables terminate at fiber terminals placed in the public right of way on poles, cabinets, vaults, or handholes.

When a customer orders service, a fiber drop is run from the nearest terminal in the public right of way to the customer's location where Verizon will install the equipment required to deliver the service, including an optical network terminal (ONT) and broadband home router (if the customer elects to obtain a Verizon-provided router). The router supports physical connections to devices in the home. Verizon Fios customers can rent or purchase a broadband router from Verizon, or provide their own. Routers obtained from Verizon, and most commercially available broadband routers, contain a Wi-Fi access point.

The network improvements just described would be used to deploy fiber to the premises (FTTP), which provides a 100% fiber optic connection from each customer's location back across Verizon's network to the public Internet. FTTP uses passive optical networking (PON) technology to provide the optical (laser) signal. The current generation of PON technology Verizon uses supports speeds up to 940 Mbps downstream and up to 880 Mbps upstream, far above the requirements of the VATI program. Verizon's FTTP network architecture will facilitate deployment of the next generation of PON technology, which will be capable of generating speeds ten times as fast.

Verizon's end-to-end control of all network segments from the customer's location to the Internet provides single-point accountability for service delivery and assurance, and simplifies and streamlines network management, trouble-shooting, and repair. Moreover, central offices are equipped with backup battery power and generators to help ensure the office equipment keeps running in a commercial power outage. Any powered equipment in the outside plant is equipped with back-up power to mitigate the impact of power outages. Verizon enables customers to have broadband service during commercial power outages by offering for sale standard battery back-up equipment for routers and other broadband equipment.

Verizon manages the shared capacity provided by the network to address peaks in utilization. Verizon employs the same network management practices used to monitor, maintain, upgrade, and enhance that network that it has used for more than 15 years for its Fios network in Virginia and several other states. These processes involve automated internal reporting on capacity utilization on individual circuits in our transport and backbone networks, with internal processes that are triggered to augment capacity when circuits reach predefined capacity utilization thresholds.

Verizon maintains an internal speed testing platform that tests broadband speeds on tens of thousands of Fios circuits monthly to confirm that customers are receiving the provisioned speeds. Verizon intends to utilize speed and performance testing arrangements implemented in compliance with the FCC's requirements for the Connect America Fund grant program. These are the same requirements that the Commerce Department adopted for the BEAD program and are substantially consistent with the methodology utilized by the FCC's Measuring Broadband America program, which Verizon has participated

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in since its inception over 10 years ago. These requirements generate speed test results that can be used to satisfy all existing FCC broadband regulations.

Verizon's broadband Internet access service provided over the FTTP network is called Fios. Fios has been recognized for excellence, and in J.D. Power's 2023 U.S. Residential Internet Service Provider Satisfaction Study, Verizon's Fios service ranked highest in the region. The expanded Fios broadband service in the County will provide reliable high-speed broadband internet access to homes, schools, libraries, and businesses, with pricing options to fit every budget and no data caps. Speed options for Fios customers in the County will range from 300/300 Mbps up to 940/880 Mbps.

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:

Verizon provides a wide range of Fios service offerings, which it continues to update and enhance. The most up-to-date information can always be found on Verizon's website. As noted in response to item 8, Fios is provided over a shared-bandwidth network, engineered, managed and maintained by Verizon. The technology to be deployed is GPON over FTTP, as noted elsewhere in this application. Backhaul circuits from the Verizon central office to the Internet are typically Ethernet or wavelength services, and are managed to ensure sufficient capacity during peak busy periods, as the same may change over time.

Fios Forward Discounted Plans (With ACP eligibility)

Verizon's Fios Forward discounted plans (with ACP eligibility) are described at

https://www.verizon.com/home/fios-forward/.

Verizon Fios Home Internet Plans

Verizon Fios Home Internet Plans are described in the marketing materials provided at https://www.verizon.com/home/internet/fios-fastest-internet/bundles/. Further information on those plans is provided below.

Tier

Download Speed

Upload Speed

Bandwidth Type

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Technology
Data Cap
Monthly Price
1 Gig
Up to 940 Mbps
Up to 880 Mbps
Dedicated
GPON
None
Residential: \$89.99 with autopay, or \$64.99 with autopay and a qualifying wireless plan.
Business: \$249
500 Mbps
500 Mbps
500 Mbps
Dedicated
GPON
None
Residential: \$69.99 with autopay, or \$44.99 with autopay and a qualifying wireless plan.
Business: \$129
300 Mbps
300 Mbps
300 Mbps
Dedicated

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Residential: \$49.99 with autopay, or \$24.99 with autopay and a qualifying wireless plan. \$0 for Fios Forward and ACP participants

200 Mbps
200 Mbps
200 Mbps
Dedicated
GPON
None
Business \$69

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

Answer:

Achieving universal broadband access has been a long-term objective of the County. In March 2016, Culpeper County was one of eight localities in Virginia to be awarded a \$75,000 Virginia Department of Housing and Community Development (DHCD) VATI grant to assess current and future broadband needs, evaluate current broadband service offerings, costs, and availability in the town and the county, identify public/private partnership opportunities with service providers, assess market demand, and recommend a comprehensive list of strategies to improve broadband connectivity. Through a competitive RFP, Culpeper County selected Design 9 as the consultant to draft the County's Broadband Plan. The process included six months of steering committee meetings comprised of a number of local ISPs, electric companies, interested citizens, planners, educators, and business owners.

In December 2021, Culpeper County, in partnership with All Points Broadband, was awarded an \$8,800,000 VATI grant award to serve all of the Census Blocks in Culpeper County that were at that time classified as "unserved" or "underserved."

While our currently underway fiber-to-the-home initiative reaches almost 4,300 unserved households in Culpeper County, it quickly became apparent to us that there was a large number of remaining unserved locations within FCC-served census blocks. If awarded, this project is planned to achieve functionally universal broadband coverage in Culpeper County. It would expand Verizon's existing service area to include those locations which do not currently have access to service.

11. Project Readiness

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

Answer:

Verizon is ready to begin this project. Verizon's preliminary review indicates that virtually all of the locations to

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be served in the project area are already serviceable from Verizon's existing copper network in the County, over which Verizon has provided voice and other services as an ILEC. This project will directly overlay those copper facilities with fiber in an FTTP architecture.

Verizon has extensive experience working with the Virginia Department of Transportation (VDOT). Knowledge of VDOT's permitting processes and solid working relationships with agency personnel, including the ability to escalate matters and brainstorm creatively to overcome obstacles, is an essential and highlydesirable asset for any broadband network construction project that occupies VDOT rights-of-way.

Verizon has the necessary arrangements in place with respect to equipment, supply chain, logistics, contract services, and regulatory compliance to complete the projects proposed in this application in the designated time frame. Verizon's fiber network expansion program adds on average more than 400,000 premises and over 5,000 route miles of new fiber to our network each year. It is these same time-tested and proven supply chain and related arrangements that will be leveraged to construct the network proposed in this application.

With respect to one of the key inputs--fiber optic cable and accessories--Verizon has a longstanding relationship with Corning, and is including a letter (Attachment 20) evidencing Corning's willingness and intent to meet the requirements under its existing supply agreements with Verizon.

Verizon's labor force is in place, is stable, and has high rates of retention - including the 6,000 Virginians already employed at Verizon. Verizon's large direct workforce of experienced, well-paid, represented

employees live and work in the communities of the County and surrounding areas. Where needed, the contractors that work with Verizon are an established and stable group whose members have a track record of long service prioritizing their work for Verizon and its customers.

The project management process that Verizon will use was developed as Verizon built tens of thousands of miles of FTTP network infrastructure around the U.S., beginning in 2004. The process is tested, proven, and transparent.

Representative Project Schedule

Attachment 7 – Timeline/Project Management Plan is an 18-month representative project schedule that gives a high level layout of the activities described. The following points highlight key elements of the proposed Project Schedule:

- An 18-month overall timeline. The project will proceed as provided in the attached Gantt chart.
- Different colors on the chart are used to denote each phase.
- The Fios Ordering/Installation Phase is not in the scope of this project--it is wholly dependent on customers actually placing orders for Fios service. But it is listed in the Gantt chart to demonstrate the point at which that will be possible. Completion of construction and availability of service ordering will

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be determined by a negotiated verification and acceptance process to be implemented between Verizon and the County.

- The 18-month timeline begins at the signing of an agreement between Verizon and the County.
- 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:

In March 2016, Culpeper County was one of eight localities in Virginia to be awarded a \$75,000 Virginia DHCD VATI grant to assess current and future broadband needs, evaluate current broadband service offerings, costs, and availability in the town and the county, identify public/private partnership opportunities with service providers, assess market demand, and recommend a comprehensive list of strategies to improve broadband connectivity. Through a competitive RFP, Culpeper County selected Design 9 as the consultant to draft the County's Broadband Plan. The process included six months of steering committee meetings with a number of local ISPs, electric companies, interested citizens, planners, educators, and business owners.

In March 2018, Culpeper County, in partnership with VABB, applied for and received a \$120,800 VATI grant. Culpeper County was one of four VATI awards in the state that year at a time when \$1,000,000 was available statewide. VABB had a change in leadership between proposal and award contract and VABB ultimately declined acceptance of the grant.

In December 2021, Culpeper County, in partnership with All Points Broadband, applied for and received an \$8,600,000 VATI grant. Culpeper County and DHCD have recently executed the grant agreement and the project is underway. In September 2022, Culpeper County, in partnership with Comcast, applied for, but did not receive, an \$8,828,198 VATI grant.

For Verizon's part, the company has successfully applied for and won two VATI contracts.

In 2022, Greensville County submitted a VATI application with Verizon as a co-applicant and was awarded a \$3 million grant in May 2023. The project included 1,347 unserved and underserved homes and businesses and approximately 54 miles of last-mile fiber infrastructure. The total estimated cost of the project was \$7.4 million and is progressing on schedule. Currently, detailed engineering design is in progress with construction scheduled to begin in the first quarter of 2024.

Also in 2022, Caroline County submitted a VATI application with Verizon as a co-applicant and was awarded a \$3.1 million grant in May 2023. The project included 854 unserved and underserved homes and businesses and approximately 72 miles of last-mile fiber infrastructure. The total estimated cost of the project was \$7.6 million and is progressing on schedule. Currently, detailed engineering design is in progress with construction scheduled to begin in the first quarter of 2024.

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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:

See attachment 9 and 10.

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:

Verizon is committed to begin the work upon a successful award of the grant and execution of a Broadband agreement based on Verizon's template for such projects. Upon execution of the agreement with the County and acceptance from DHCD for these projects, Verizon is immediately prepared to begin activities. Verizon is excited to extend its existing internal FTTP build program to connect the rest of the unserved with its leading infrastructure on the East Coast.

As noted earlier in this application, the Verizon Proposed Network design significantly leverages its embedded network plant in the County. Verizon also has existing relationships with the local electric utility and VDOT. Verizon has a 15+ year track record of successfully deploying its FTTP network solution and Fios service to millions of homes up and down the East Coast.

Verizon's Credo starts with the phrase--"We have work because our customers value our high-quality communications services." That dedication and commitment to our customers is reflected in everything we do. Verizon has been an incumbent telephone company in the County for decades and has long-standing relationships with customers throughout the County. We believe these relationships, our name recognition, and the strength of the Verizon brand will help accelerate adoption of our award-winning Fios Internet services for homes and businesses reached through this project.

Verizon's range of services and pricing plans--including plans for low-income customers that result in free broadband service after application of the FCC's Affordable Connectivity Program subsidy--provide an option for every budget.

The Verizon proposal also leverages Verizon's relationship with Verizon Wireless. Customers can save even more by bundling their Fios Internet service with certain Verizon Wireless 5G data plans--this is an attractive option for customers who already subscribe to Verizon Wireless mobile service.

For those residents who live in houses and multi-tenant buildings that are owned, built, or managed by major

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local, regional, and national companies, Verizon has a team with responsibility for working with those landlords or management companies. The Verizon Enhanced Communities (VEC) team is specifically tasked with establishing and maintaining relationships with building owners, developers/builders, and property management companies. Through the VEC Value Program, our team will help the building owner, developer/builder, or management company actively promote Fios as a key amenity to all the residents or homeowners and provide the dedicated, end-to-end support that will keep them happy for years to come. Verizon's marketing arrangements allow VEC personnel to work with the customer to develop marketing programs to drive residents to purchase our Internet services. VEC customers also have the option to enter into a bulk arrangement with Verizon as part of which VEC provides discounted prices off our Fios retail services for residents of the building or development. VEC has strong relationships with builders such as NVR/Ryan Homes, Lennar, Pulte Homes, and other large developed communities in Virginia and looks forward to the possibility of strengthening existing relationships and forging new ones through the proposed Fios network expansion project in the County.

Because Verizon is an established provider, Fios customers benefit from a whole host of advanced capabilities and features:

- Robust Firewall/Parental Controls. The Fios router is equipped with the latest Wi-Fi technology and has a robust firewall and parental control feature to give customers more control and security over their broadband experience.
- Convenience. Fios Home Internet includes many convenient features. Multiple users can use the service simultaneously without sacrificing speed or bandwidth, even during peak hours.
- Support. Verizon also provides professional installation services, and Fios service includes 24/7 technical support so customers can get answers when they need them.
- CyberSecurity. Verizon is a recognized leader in cybersecurity. Verizon's Data Breach Investigative Report is an annual must-read for corporate and government CISOs, CSOs, CTOs, and CIOs. Verizon's global network security team has sensors deployed across its network, across America and around the world, and is always on the alert for the latest zero-day exploits and malicious activities. Verizon has relationships across industry and government that enable it to obtain the latest in threat intelligence. The cybersecurity countermeasures that Verizon's deploy on its backbone network to protect its business and government customers from hackers and other bad actors can benefit Fios customers whose services are connected to that same backbone network.

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• Privacy and an Open Internet. Verizon is strongly committed to customer privacy and to an open Internet, as evidenced by its Privacy Policy (https://www.verizon.com/about/privacy/) and Broadband Commitment (https://www.verizon.com/broadbandcommitment).

All of this, and more, will be brought to bear to maximize leverage and the success of the 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:

(a.) Culpeper County publishes a quarterly newsletter in order to share information with residents. We will include project information in each issue printed during the project. Information will include how to pre-register and updates on the project progress (see https://web.culpepercounty.gov/AboutCulpeper/CulpeperQuarterly)

Culpeper and Verizon will hold a quarterly coordination meeting during which Verizon 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 meetings will be convened by Verizon and will include the County's project lead as well as representatives from Verizon. Culpeper County staff will also report on the project status monthly for the Board of supervisors.

Regarding Verizon's communications, before the project launch kickoff meeting, Verizon's Engineering and Construction Leadership will meet with the County's appointed project manager. Together they will review the proposed list of participants, a draft slide deck containing the agenda, schedule (phases, milestones, etc.), roles and responsibilities,, and dependencies by Verizon on approvals, permitting, etc. When those items have been reviewed and approved by the County's project manager, the date and time of the kickoff meeting will be set, and the participants notified of both a virtual and on-site meeting. The slide deck will be finalized based on the outcome of the initial meeting. Further project reporting will follow DHCD's requirements, as well as the reporting structure as dictated by the County's Board of Supervisors.

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(b.) A customer take rate of 40-50 percent is expected. Verizon has well-established communications and marketing practices to increase the take rate and ensure that County residents are well-informed and up to date regarding:

- The construction of broadband infrastructure in the project area;
- The new Verizon Fios service that will be available to them;
- How to obtain that Verizon Fios service, and;
- How to connect with Verizon to address their questions or customer service needs.

These efforts will include:

- Advance notice of construction letters, door hangers, or other notices for residents of areas where construction will be taking place.
- Web-based resources
- Verizon/Fios page general information about Fios service, plans and pricing and how to subscribe, including a "Check Availability" widget that will allow residents to enter their street address to determine whether Fios service has become available in their area.
- Verizon's Fios Forward program- this page provides information about pricing for low income households, including the Fios Forward program which can leverage the federal Affordable Connection Program (ACP) program to provide broadband internet service at no cost to qualifying households.
- Digital inclusion/tech inclusion resources
- General information and customer service resources
- Coordination with County staff, including County communications staff regarding major developments, general status, and other matters.
- Marketing communications with the community and individual residents regarding the service that will become available to them.
- Communications with existing customers about the availability of broadband.

(c.) The Culpeper County Library has established multiple remote public access Wi-Fi locations throughout the Coronavirus pandemic and has 22 cellular Wi-Fi units available for the public to check out. The units have circulated 1,434 times since the program began in 2016. The library currently provides assistance with resumes, online job applications, wireless internet services, wireless printing, and other internet services as the digital divide continues to widen. The library also offers continuing education classes and tests through many online databases including free classes through https://www.digitallearn.org/. This is a collection of self -directed tutorials for end-users to increase their digital literacy. Development courses include the most basic skills, such as using a computer, navigating a website, and searching. Modules are video-based with narration, written at the fourth-grade reading level, and help learners practice skills like using a mouse and setting up passwords. Nearly all modules are available in Spanish and English.

Verizon, for its part, is a leader in helping to address issues of digital literacy as part of its work to help bridge the digital divide. Verizon has established Citizen Verizon—its plan for economic, environmental, and social advancement. Through this program, Verizon is committing \$3 billion to build digital literacy by providing 10 million youths with digital access and skills training, 1 million small businesses with resources to help them thrive in the digital economy, and to prepare 500,000 individuals for future jobs by 2030. Small businesses and residents can access specific information around these programs at https://www.verizon.com/about/responsibility.

In addition to enhanced connectivity, Verizon provides resources to students, parents, and teachers to support virtual learning activities. More specifically, Verizon has increased the scale of its education work with

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the STEM Activity Center, an online toolkit that provides STEM resources. These resources offer hands-on activities that students, teachers, and parents can leverage for remote and in-classroom learning created in partnership with non-profit partner Project Lead The Way to help supplement at-home learning and to help with digital literacy.

Verizon has also built a credentialed teacher training program, focused on digital skills, and remote learning. Open to all educators across the country, the courses will help teachers become more efficient and effective with technology integrated instruction to help them navigate digital learning and provide a better virtual learning experience for students. Information on these programs is available at https://www.verizon.com/about/responsibility/digital-inclusion.

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

Answer:

PROJECT MANAGEMENT PERSONNEL

Key Individuals

Role and Responsibilities

County Program Manager

Responsibilities will include monitoring contractor progress, gathering data, preparing reports, communicating with stakeholders, and maximizing coverage of unserved locations. Knowledge and experience includes VATI, BEAD, and ARPA grant administration for construction of broadband networks.

Verizon Engineering Program Manager

Responsible for the overall project management of the FTTP builds, including management of tasks assigned to the engineering team to ensure that the project is delivered on time and to budget. Sets monthly targets to ensure program objectives are met. Experience includes FTTP network construction and compliance with VATI and ARPA funding requirements.

Verizon Planning Engineer

Develops the overall network plan for a given geographic area, to include the sizing, distribution points, end points, and total number of locations to be served. Experienced in FTTP network and construction planning.

Verizon Design Engineer

Creates detailed plans for a given geographic area, including exactly where network equipment will be placed, whether the network will be aerial or underground, and from where each specific address will be served. Meets with other utilities to determine space on poles. Prepares paperwork for permitting. Experienced in FTTP network design.

Verizon Operations Construction Manager

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Partners with the engineering program manager and coordinates with the Contract Services and in-house construction teams to align the construction material and workforce with the overall program objectives and timelines.

Contract Services Supervisor

Manage third-party vendors responsible for placing conduit in preparation of fiber cable placement, where needed. Partner closely with the operations project manager to ensure timely completion of conduit placement.

Line Construction Supervisor

Responsible for supervising the Verizon services technicians and partnering with the contract services supervisor and splicing construction supervisor to ensure timely completion of fiber construction.

Verizon Services Technicians

Managed by the line construction supervisors; responsible for placing aerial or underground feeder and distribution fiber cables.

Splicing Construction Supervisor

Responsible for supervising the splicing technicians and partnering with the contract services supervisor and line construction supervisors to ensure timely completion of fiber construction.

Verizon Splicing Technicians

Managed by the splicing construction supervisors; responsible for splicing fiber feeder and distribution cables.

Laura Loveday, AICP, Special Projects and Grants Administrator (Project Lead, Culpeper County) has served as Culpeper County Special Projects and Grants Administrator since 2017. Ms. Loveday has overseen Culpeper's broadband expansion efforts for many years and will serve as Culpeper County's lead for this project.

Prior to being named Special Projects and Grants Administrator, she served as Culpeper County Comprehensive Planner from 2004-2017. In her current role, Ms. Loveday has applied for, received, and managed many Federal, State, Local, and Foundation grants and coordinated high-level planning and construction initiatives in Culpeper County.

The Verizon project team has experience managing American Rescue Plan Act (ARPA)-funded broadband projects for: 1) the State of Delaware; 2) Bedford County, Virginia; 3) Onondaga County, New York; 4) Beaver County, Pennsylvania; 5) Westmoreland County, Pennsylvania; 6) Washington County, Pennsylvania; 7) Charles County, Maryland; 8) Garrett County, Maryland; 9) Howard County, Maryland; 10) St. Mary's County, Maryland; and 11) Washington County, Maryland.

The Verizon project team also has experience managing VATI projects awarded in the 2023 grant cycle for Caroline County and Greensville County, and additional experience with grants in multiple states as part of

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the FCC's Connect America Fund II program. Verizon experience with constructing broadband communication facilities includes ongoing construction of the Fios FTTP network since 2004 in nine states and the District of Columbia, as well as many more years constructing and managing copper-based DSL service.

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:

See attachments also.

The total construction costs are \$17,382,005. Verizon and Culpeper County are seeking a VATI grant of \$3,594,291, or 20.7% of the total costs, with Verizon providing funding of \$13,787, 714 (79.3%) for the remainder of the project. The funding received will not subsidize Verizon expenses or the monthly bills of its customers and will not contribute to Verizon operating costs.

The total construction cost includes Outside Plant (OSP) (Fiber, Material & Equipment) along with Inside Plant (Install, Contract, Labor) cost amounts. Verizon will own and operate the facilities as part of its telecommunications network. The construction costs are related to project planning, obtaining construction permits, construction of facilities, and installation and testing of the broadband service being constructed. For more information on the anticipated distribution of the project budget, including across the categories of Labor and Materials, please see Attachments 12 & 13.

This project will be able to leverage an existing Verizon central office within the project area. These existing resources will allow the project to be as economical as possible, and their existence offers Verizon greater budget flexibility in executing this project. On the issue of competitive procurement, Verizon consistently engages in competitive capital expenditure through RFPs for all major purchases.

 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. \$3,594,291 VATI funding request

b. 453 prems

19.

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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:

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a. One of Culpeper's main industries is farming. For many years the fees associated with paying for internet service long-drops have been cost-prohibitive for these vital businesses. Several locations in this application are working farms.

b. Both REC and Dominion Power have committed to working with Internet Service Providers in Culpeper County to achieve universal broadband. Verizon has existing working relationships with both which will allow for fast co-location along existing powerlines.

c. Verizon provides pricing for internet service that is available for documented, qualified low-income residents through its Fios Forward program. Verizon works with ACP eligibility to provide our 300/300 Mbps package for free to anyone who qualifies. Verizon's Fios Forward discounted plans (with ACP eligibility) are described at

https://www.verizon.com/home/fios-forward/. Verizon's sales teams are actively signing up new ACP customers across Virginia. Working with ongoing community engagement efforts along with nonprofits and local governments, teams are attending and hosting ACP signup events to reach potentially qualified customers where they can assist customers in registering for ACP and help them sign up for new Verizon service at the ACP discounted rate. Verizon's community engagement and sales teams can coordinate efforts with the local government to host new signup events and attend large gatherings and events in the County in order to promote ACP to new eligible customers.

d. Verizon has a letter addressing its practices pertaining to ensuring supply chain fidelity. This letter, as well as a supplementary letter from Corning stating that they are ready to fulfil any supply chain obligations regarding this project, can be seen in Attachments 18A and 20. Verizon has the necessary arrangements in place with respect to equipment, supply chain, logistics, contract services, and regulatory compliance to complete the projects in this application in the designated time frame. Verizon's fiber network expansion program adds on average more than 400,000 premises and over 5,000 route miles of new fiber to its network each year. It is these same time-tested and proven supply chain and related arrangements that will be leveraged to construct the network proposed in this application. Verizon's labor force is in place, stable, and has high rates of retention throughout the company–including the 6,000 Virginians already employees live and work in the communities of Culpeper and surrounding areas. Where needed, the contractors who work with Verizon are an established and stable group, whose members have a track record of long service prioritizing their work for Verizon and its customers. Finally, Verizon already has in place the regulatory expertise to achieve compliance and adapt to changed circumstances. To mitigate schedule risk due to labor shortages, Verizon has coordinated readiness with its labor partner, the Communications Workers of America (CWA).

Continued in Answer #20

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:

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e. Telehealth-UVAHealth announced in October 2018 that "A new telehealth partnership between Novant Health UVA Health System Culpeper Medical Center and UVA Health System would enable Culpeper-area patients to get easier access to UVA's heart and vascular experts." Rural residents benefit from the creation of these partnerships but can only access them through medical offices and hospitals when they lack internet access at home. A recent health needs assessment conducted by UVA noted that "access to healthcare" was a concern for Culpeper County. Many providers now offer telehealth options which make specialists and practitioners available to wider populations. Smart Farming

One of the CARES-funded broadband expansion areas in Culpeper County is the George Washington Carver Agriculture Research Center at the Carver Center. This location was noted to be of prime importance for Internet access because it promotes agricultural innovation and education. According to Senior Virginia Tech Cooperative Extension Agent Carl Stafford, "slow Internet capacity already requires farmers In Culpeper County to use a workaround to upload farm production data as part of their application of Smart Farming technology. The local producers are well aware that data collected in real time, on the go, with farm equipment like the planter, sprayer, fertilizer applicator and combine, would increase their productivity. Currently, data is downloaded from the equipment computer to an iPad, then streamed via cell phone signal to the cloud." Culpeper County remains primarily agricultural in character and our local producers are ready to adopt new practices as soon as internet services are made available to them.

E-entrepreneurship

The County funds the Central Virginia Small Business Development Center (SBDC) and hosts both virtual and inperson office hours for free one-on-one counseling for aspiring and established entrepreneurs. SBDC also offers guarterly seminars. The Community Investment Collaborative (CIC) also supports entrepreneurs in Culpeper County by offering small business financing.

Distance Learning

Germanna Community College provides guality, accessible, and affordable educational opportunities for the residents of Culpeper. GCC operates at five different campuses throughout the region. Each campus has a unique focus and many classes are not currently offered at multiple locations. Distance Learning provides access to opportunities that are not offered in person in Culpeper County.

Verizon Efforts

Verizon has established Citizen Verizon—its plan for economic, environmental, and social advancement. Through this program, it is committing \$3 billion to provide 10 million youths with digital access and skills training, 1 million small businesses with resources to help them thrive in the digital economy and to prepare 500,000 individuals for future jobs by 2030. Small businesses and residents can access specific information about these programs at https://www.verizon.com/about/responsibility.

Verizon provides resources to students, parents, and teachers to support virtual learning activities. Verizon has increased the scale of its education work with the STEM Activity Center, an online toolkit that provides STEM resources. These resources offer hands-on activities that students, teachers, and parents can leverage for remote and inclassroom learning created in partnership with non-profit partner Project Lead The Way to help supplement at-home learning.

Attachments:

Map(s) of project area, including proposed infrastructure

Attachment1ProjectAreaMapCulpeperCounty12192023123944.pdf

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

Attachment2DocumentationonFederalFundingAreaCulpeperRDOF12192023124038.pdf

Documentation that proposed project area is unserved based on VATI criteria

Attachment3DocumentationUnservedAreaVATICriteriaCulpeperCounty12192023124110.pdf

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Timeline/Project Management Plan

Attachment7TimelineProjectManagementPlan12192023124352.pdf

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

Attachment8MOUMOAbetweenApplicantCoApplicantCulpeper12192023124359.pdf

Documentation of Supporting Cost Estimates

Attachment13DocumentationofSupportingCostEstimates12192023124556.pdf

Letters of Support

Attachement14LettersofSupportCulpeperVerizonVATIProposal20241219202354445.pdf

Two most recent Form 477 submitted to the FCC or equivalent

Attachment15TwomostrecentForm477submittedtotheFCCorequivalent12192023124620.zip

Point and Polygon shapefiles, in.zip file form, showing proposed passings and project area Attachment16PointandPolygonShapefilesCulpeperCountyu12192023124632.zip

Optional

Attachment18OptionalAdditionalInformationCulpeperCounty12192023125048.zip

Optional

Attachment19OptionalVerizonAdditionalInformation12192023125104.pdf

Optional

Attachment20OptionalCorningSupportLetter12192023125117.pdf

Documentation of Match Funding

Attachment10DocumentationofMatchFundingCulpeper12192023124705.pdf

Derivation of Cost/Project Budget (Use template provided)

Attachment12DerivationofCostsCulpeper12192023124723.pdf

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Funding Sources Table (Use template provided)

Attachment9FundingSourcesTableCulpeper12192023124814.pdf

Passings Form (Use template provided)

Attachment4PassingsFormCulpeper12192023124259.pdf

Documentation of RDOF awarded area in VATI project Area (Use template provided) Attachment5RDOFAwardedAreasForminVATIApplicationCulpeper12192023124918.pdf

VATI 2024

Supplemental Application Question

Applicant: Culpeper County

Project Name: VATI 2024 Culpeper County

The question below is question e. from the Commonwealth Priorities section of the 2024 Virginia Telecommunication Initiative (VATI) Guidelines. Please answer the question using this form and email to VATI@dhcd.virginia.gov.

Verizon mitigates any cost overruns to Culpeper County and Commonwealth of Virginia by providing a fixed-price agreement rather than a cost-reimbursement agreement. This means that all project costs above the stated budget amount will be borne by Verizon, and that any contributions from the co-applicant and Commonwealth will be limited to the amounts stated in the agreement. Verizon limits its own internal costs and supply chain risks by using established agreements with primary materials suppliers such as Corning (see letter in Attachment 19) and its other unique relationships (see letters in Attachment 18). Verizon mitigates potential delays associated with make-ready and permitting requirements through the following means:

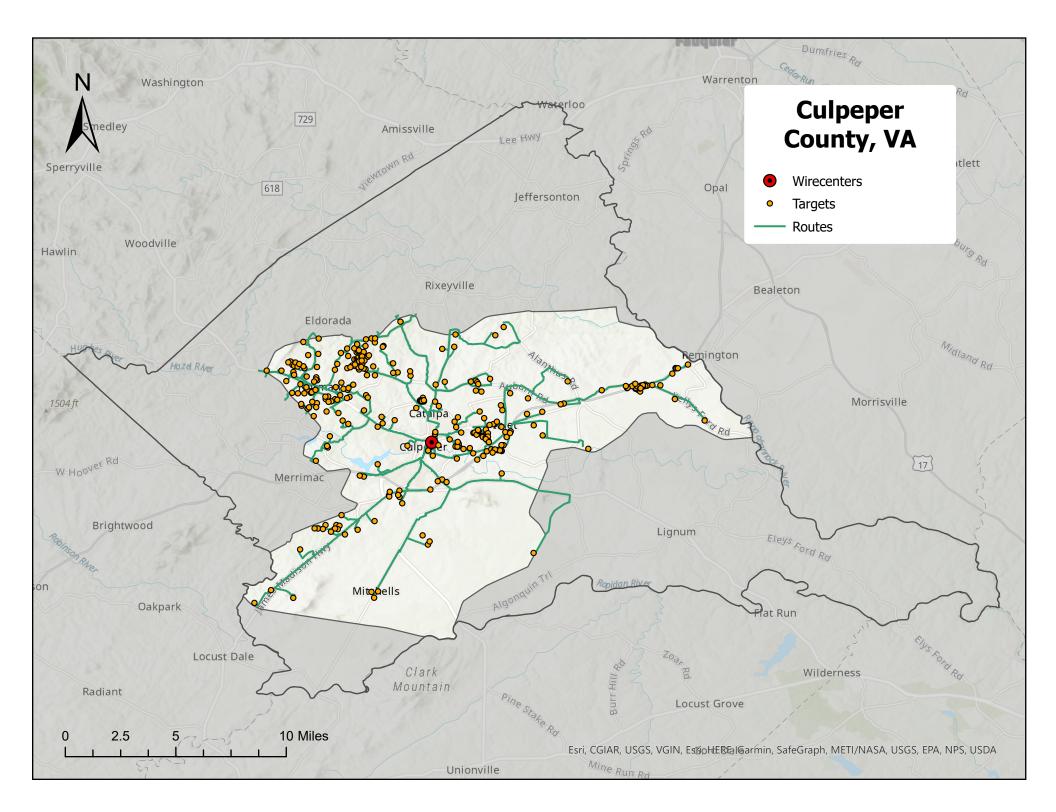
- Coordinating with counties and establishing in an agreement with each county a primary county point of contact that will assist Verizon in managing permitting activities with the county, VDOT, railroads, tribal governments, and other authorities having jurisdiction.
- Leveraging business relationships and established lines of communication developed through decades of experience as an Incumbent Local Exchange Carrier and 19 years of experience in developing the Verizon FTTP network.
- Planning an integrated project schedule that is refined with stakeholders upon grant award, then working the project according to that plan.
- Using proprietary multi-project, enterprise-level engineering project software that is aligned with Verizon's project methodology; supports ISO 9000 standards; and enables the Verizon engineering program manager to orchestrate project tasks, develop plans and schedules, and track planned, in-progress, and completed activities and tasks for multiple project teams.
- Reviewing permitting requirements and starting the application process for some required permits upon grant award, then applying for remaining permits and working with officials to obtain approvals in a timely manner. Since construction-related permits often impose temporal limits on authorized activities (as short as one or two weeks), the Verizon team monitors the permit flow and validity dates closely to ensure that permitting remains current as earlier permits expire, thus eliminating any rework.
- Working with private property owners (where necessary) to ensure timely access to any required rights-of-way.

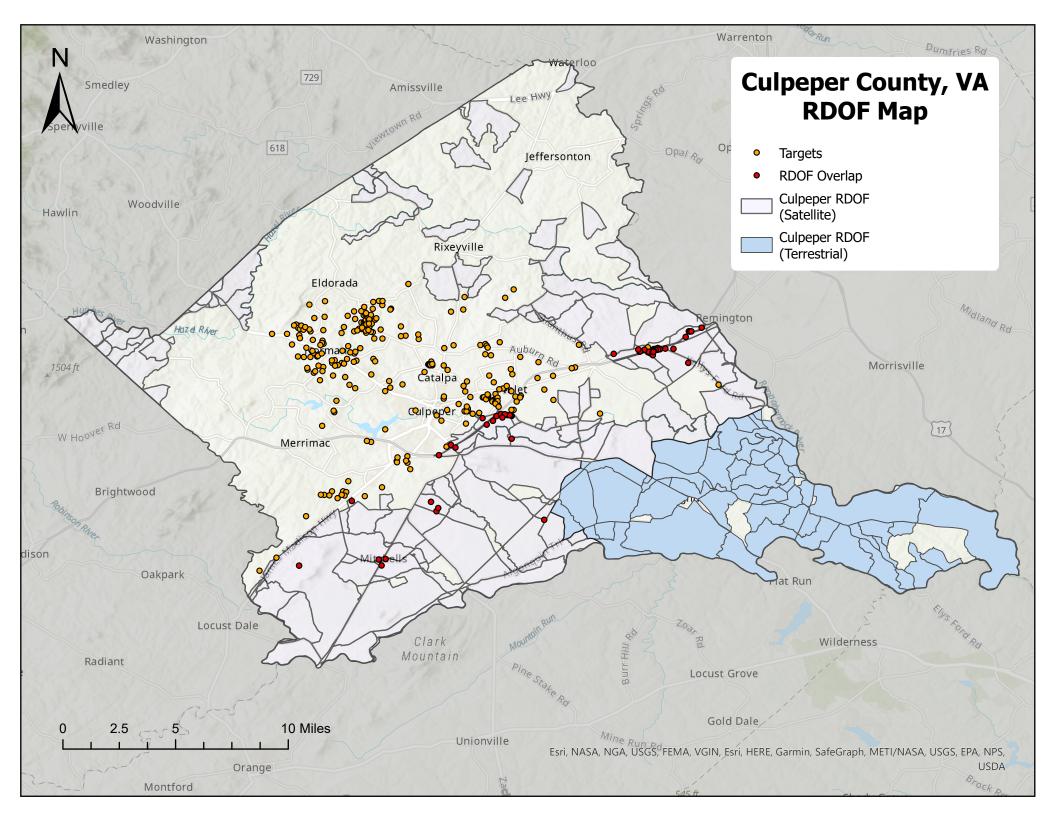
Proof that this Verizon methodology yields the desired outcome is demonstrated by the ARPAfunded Delaware Statewide Broadband Expansion project, where (in August 2023) Verizon completed the project on-budget and six months ahead of the projected 18-month schedule.

Commonwealth Priorities

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

e. The co-applicant's effort to mitigate costs and delays that may be associated with make-ready and other permitting requirements anticipated for network deployment.





ADDRESS	CITY	STATE	ZIP	LATITUDE	LONGITUDE	UNITS	ADDRESS TYPE	LOCATION IDS	NBM STATUS
11323 SCOTTS MILL RD	CULPEPER	VA	22701	38.54918683	-78.06704924	1	R	1001207836	unserved
10075 CEDAR SPRING LN	CULPEPER	VA	22701	38.41945662	-78.06177049	2	R	1001209343	unserved
10042 CEDAR SPRING LN	CULPEPER	VA	22701	38.41893557	-78.0390253	2	R	1001209349	unserved
13613 PARTLOW CT	CULPEPER	VA	22701	38.50324014	-77.99611009	1	R	1001208755	unserved
12115 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.53534032	-78.03756517	1	R	1001208043	unserved
16608 GREENS CORNER RD BLDG 2	CULPEPER	VA	22701	38.47046988	-77.94473175	2	R	1001216505	unserved
24200 CEDAR RIDGE RD	RAPIDAN	VA	22733	38.36576925	-78.10360373	1	R	1001220956	unserved
13657 BEVERLY FORD RD	ELKWOOD	VA	22718	38.51199631	-77.85338772	1	R	1001218742	unserved
13457 LOYDS LN	CULPEPER	VA	22701	38.49989973	-77.98589896	3	R	1001211747	unserved
14070 MCKINLEY LN	CULPEPER	VA	22701	38.55719168	-77.99777121	1	R	1001213804	unserved
12476 HUNT RD	CULPEPER	VA	22701	38.52623648	-78.08067548	1	R	1001209197	unserved
16382 COMPETITION DR	CULPEPER	VA	22701	38.49043025	-77.81195338	1	R	1412423284	unserved
18030 BEL PRE RD	CULPEPER	VA	22701	38.48069598	-77.91796506	2	В	1001214315	unserved
16618 GIBSON MILL RD	CULPEPER	VA	22701	38.48862753	-78.12933742	1	R	1001217295	unserved
22131 ELKWOOD DR	ELKWOOD	VA	22718	38.51324156	-77.84957024	1	В	1001218714	unserved
15511 GUINN LN	CULPEPER	VA	22701	38.50935977	-77.95805326	1	R	1001213305	unserved
14459 NORMAN RD	CULPEPER	VA	22701	38.46550532	-77.97410381	1	В	1412423090	underserved
14325 WOODLAND CHURCH RD	CULPEPER	VA	22701	38.52707957	-78.04079248	1	R	1001214117	unserved
15553 BRAGGS CORNER RD	CULPEPER	VA	22701	38.4808009	-77.95623803	1	R	1001216253	unserved
15513 BRAGGS CORNER RD	CULPEPER	VA	22701	38.48423033	-77.96024244	1	В	1408635617	unserved
12265 IRA HOFFMAN LN	CULPEPER	VA	22701	38.48859555	-78.02269263	1	В	1001205399	unserved
15025 GENERAL AP HILL AVE	CULPEPER	VA	22701	38.45582742	-77.94478172	1	R	1001210734	unserved
12250 SHADEROCK RD	CULPEPER	VA	22701	38.53924583	-78.02215374	1	R	1001211415	unserved
12210 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.53574936	-78.03870329	1	R	1001208059	unserved
791 GERMANNA HWY	CULPEPER	VA	22701	38.44527034	-77.99144252	1	В	1001208531	unserved
11323 ANNA CT	RACCOON FORD	VA	22701	38.52961974	-78.03458787	1	R	1408636143	unserved
380 JAMES MADISON HWY BLDG 30	CULPEPER	VA	22701	38.48155988	-77.98838727	1	В	1001204035	underserved
380 JAMES MADISON HWY BLDG 27	CULPEPER	VA	22701	38.48290502	-77.98823626	2	R	1001204126	underserved
11339 ALVIN LN	RACCOON FORD	VA	22701	38.52816668	-78.03810932	1	R	1001209481	unserved
11311 ANNA CT	RACCOON FORD	VA	22701	38.52552632	-78.03671008	1	R	1408636144	unserved
21455 ELKWOOD XING	ELKWOOD	VA	22718	38.5129404	-77.85950924	1	В	1001218738	unserved
10816 DUTCH HOLLOW RD	RIXEYVILLE	VA	22737	38.57350526	-78.00012557	2	R	1001222887	unserved
11124 CHERRY HILL RD	CULPEPER	VA	22701	38.45015085	-77.98085936	1	В	1001208467	unserved
16109 JONAS RD	CULPEPER	VA	22701	38.48290978	-77.94240915	1	В	1001213975	unserved

ADDRESS	CITY	STATE	ZIP	LATITUDE	LONGITUDE	UNITS	ADDRESS TYPE	LOCATION IDS	NBM STATUS
11510 JAMESONS MILL RD	CULPEPER	VA	22701	38.55671656	-77.98997543	1	R	1001206619	unserved
9445 STROTHER LN	CULPEPER	VA	22701	38.52977875	-78.0398254	1	R	1001208039	unserved
12520 HUNT RD	CULPEPER	VA	22701	38.52837059	-78.07972039	1	R	1001209198	unserved
12063 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.51578137	-77.98204869	1	В	1001208203	unserved
16174 JONAS RD	CULPEPER	VA	22701	38.46727963	-77.95679295	1	В	1001216488	unserved
14337 RIXEYVILLE RD	CULPEPER	VA	22701	38.50297601	-77.99611009	1	R	1001208760	unserved
15278 NALLES MILL RD	CULPEPER	VA	22701	38.4733401	-77.97332074	1	R	1001211108	unserved
13626 PARTLOW CT	CULPEPER	VA	22701	38.50532126	-77.99636011	1	R	1001208782	unserved
12552 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.51122594	-78.04834233	1	R	1001214122	unserved
12430 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.53265004	-78.04522104	1	R	1001208040	unserved
11435 MINGLEWOOD LN	RIXEYVILLE	VA	22737	38.56969995	-77.9675882	1	R	1001224343	unserved
13612 PARTLOW CT	CULPEPER	VA	22701	38.5037411	-77.99573795	1	R	1001208794	unserved
12517 ALUM SPRINGS RD	CULPEPER	VA	22701	38.52585135	-78.02884829	1	R	1001209303	unserved
16273 ALLIED WAY	CULPEPER	VA	22701	38.47963682	-77.94154844	1	R	1001216485	unserved
16334 POOR FARM RD	CULPEPER	VA	22701	38.47139276	-77.94951913	6	В	1001216520	unserved
13482 STILWELL LN	BRANDY STATION	VA	22714	38.511362	-77.862788	1	В	1001218728	unserved
13482 STILWELL LN BLDG 2	BRANDY STA	VA	22714	38.51162026	-77.86268755	2	В	1001218723	unserved
11221 MILL STONE LN	CULPEPER	VA	22701	38.53038481	-78.04121464	1	R	1001208041	unserved
10440 SPERRYVILLE PIKE	CULPEPER	VA	22701	38.47281697	-78.05857021	1	R	1001207758	unserved
11029 SPERRYVILLE PIKE	CULPEPER	VA	22701	38.53868067	-78.02260969	1	R	1408636265	unserved
11400 ALVIN LN	RACCOON FORD	VA	22701	38.532787	-78.03374	1	R	1414777029	unserved
17185 POOR FARM RD	CULPEPER	VA	22701	38.47915983	-77.95528792	1	R	1001216491	unserved
12279 SCOTTS MILL RD	CULPEPER	VA	22701	38.53752655	-78.04589902	1	R	1001209419	unserved
10388 CAROL ANNE AND ANDREWS LN	CULPEPER	VA	22701	38.52455621	-78.03829834	1	R	1001214076	unserved
12010 Hardy Ln	Mitchells	VA	22729	38.37860654	-78.02566479	1	R	1001220769	unserved
15172 BRANDY RD	CULPEPER	VA	22701	38.48037984	-77.95739915	1	R	1001216262	underserved
15215 CLEVELAND LN	CULPEPER	VA	22701	38.43549023	-78.04038645	2	R	1001215532	unserved
13657 BEVERLY FORD RD	ELKWOOD	VA	22718	38.51199631	-77.85338772	1	R	1001218742	unserved
14038 BERRY HILL RD	ELKWOOD	VA	22718	38.51104032	-77.85582087	1	R	1001218690	unserved
14006 LAUREL VALLEY PL	CULPEPER	VA	22701	38.52684045	-78.04010952	1	R	1001214073	unserved
13536 PARTLOW CT	CULPEPER	VA	22701	38.50362708	-77.99803728	1	R	1001208773	unserved
15490 MONTANUS DR	CULPEPER	VA	22701	38.47182571	-77.96981415	6	R	1001216256	unserved
14277 WOODLAND CHURCH RD	CULPEPER	VA	22701	38.51053165	-78.04565025	1	В	1001214085	unserved

ADDRESS	CITY	STATE	ZIP	LATITUDE	LONGITUDE	UNITS	ADDRESS TYPE	LOCATION IDS	NBM STATUS
10152 CEDAR SPRING LN	CULPEPER	VA	22701	38.42241892	-78.06861419	1	R	1001209348	unserved
13313 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.41975465	-78.06503693	1	R	1001209323	unserved
23245 HUBBARDS RD	REMINGTON	VA	22734	38.52467114	-77.82944916	2	R	1001222093	unserved
15510 MONTANUS DR	CULPEPER	VA	22701	38.47964977	-77.95715412	1	В	1001216268	unserved
13008 JAMES MADISON HWY	CULPEPER	VA	22701	38.4733361	-77.97467577	1	R	1001211107	unserved
11310 JAMES MONROE HWY	CULPEPER	VA	22701	38.49535922	-78.05162554	1	R	1001217222	unserved
14069 SCANTLIN MOUNTAIN RD	CULPEPER	VA	22701	38.52009868	-78.03294426	3	R	1001214087	unserved
13066 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.50701952	-78.03350374	1	R	1001214084	unserved
14071 RACCOON FORD RD	CULPEPER	VA	22701	38.46407019	-78.06638709	1	R	1001208034	unserved
12038 JAMESONS MILL RD	CULPEPER	VA	22701	38.53732558	-77.98370378	1	R	1001204672	unserved
13530 PARTLOW CT	CULPEPER	VA	22701	38.50367709	-77.99587096	1	R	1001208768	unserved
13526 PARTLOW CT	CULPEPER	VA	22701	38.50363008	-77.99785416	1	R	1001208763	unserved
13715 BERRY HILL RD	ELKWOOD	VA	22718	38.51136025	-77.85428781	1	R	1001218775	unserved
15400 NORMANS LN	CULPEPER	VA	22701	38.48219517	-77.94099239	1	R	1001213970	unserved
13452 RIXEYVILLE RD	CULPEPER	VA	22701	38.41978865	-78.0538257	1	R	1408634054	unserved
13439 MT ZION CHURCH RD	CULPEPER	VA	22701	38.5155094	-77.96080345	1	R	1001214715	unserved
21526 ELKWOOD XING	ELKWOOD	VA	22718	38.51158727	-77.85384867	1	R	1001218776	unserved
13466 HASH LN	CULPEPER	VA	22701	38.49721761	-78.11427324	2	R	1001212632	unserved
13577 PARTLOW CT	CULPEPER	VA	22701	38.50366908	-77.99702618	1	R	1001208785	unserved
11149 MILL STONE LN	CULPEPER	VA	22701	38.5261437	-78.04085726	2	В	1001214095	unserved
21435 ELKWOOD XING	ELKWOOD	VA	22718	38.51054517	-77.85563684	1	R	1001218686	unserved
13740 KELLYS FORD RD	ELKWOOD	VA	22718	38.51212643	-77.85492078	1	R	1001218715	unserved
12376 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.53506139	-78.03717123	1	R	1001208048	unserved
16356 COMPETITION DR	CULPEPER	VA	22701	38.47749875	-77.95364715	2	В	1001216484	unserved
21649 MT PONY RD BLDG 2	CULPEPER	VA	22701	38.404183	-77.924003	2	В	1001217117	unserved
16138 BRANDY RD	CULPEPER	VA	22701	38.43211899	-78.06819225	1	R	1001214632	unserved
14400 NORMAN RD	CULPEPER	VA	22701	38.50438113	-78.05388177	1	В	1001207748	unserved
9391 GOOD HOPE LN	CULPEPER	VA	22701	38.51726755	-78.06644914	1	R	1001211555	unserved
15650 NALLES MILL RD	CULPEPER	VA	22701	38.47526039	-77.9729426	1	В	1001211119	unserved
13229 PULLEN CT	CULPEPER	VA	22701	38.65161542	-77.93613731	1	R	1001201484	unserved
17277 POOR FARM RD	CULPEPER	VA	22701	38.47032775	-77.95454014	5	В	1001216501	unserved
10275 MOUNTAIN RUN LAKE RD	CULPEPER	VA	22701	38.47377906	-78.05903636	1	R	1001207768	unserved
12505 HUNT RD	CULPEPER	VA	22701	38.52031577	-78.08063147	1	R	1001209200	unserved

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16622 GREENS CORNER RD	CULPEPER	VA	22701	38.47991981	-77.95379868	3	В	1001216513	unserved
804 YOWELL DR	CULPEPER	VA	22701	38.47391709	-78.00646008	9	В	1001203797	underserved
19524 SWAMP POODLE LN	BRANDY STATION	VA	22714	38.5049514	-77.92758208	1	R	1001217903	unserved
13586 PARTLOW CT	CULPEPER	VA	22701	38.50347506	-77.99830331	1	R	1001208756	unserved
18221 BRANDY RD	CULPEPER	VA	22701	38.48753958	-77.95271459	1	В	1001214415	unserved
20575 ZACHARY TAYLOR HWY	CULPEPER	VA	22701	38.44844952	-78.10691507	1	R	1408635832	unserved
12360 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.53501639	-78.03832035	1	R	1001208052	unserved
13008 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.52383614	-78.03815332	1	R	1001214097	unserved
21409 CEDAR TREE LN	RAPIDAN	VA	22733	38.32750943	-78.047837	1	R	1001221403	unserved
11249 ANNA CT	CULPEPER	VA	22701	38.52919579	-78.03802032	1	R	1408636009	unserved
20480 SPRING CREEK DR	CULPEPER	VA	22701	38.41934861	-78.05202561	1	R	1001209366	unserved
13493 PARTLOW CT	CULPEPER	VA	22701	38.50362908	-77.99733721	1	R	1001208752	unserved
12190 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.53528941	-78.03510403	1	В	1001208060	unserved
13498 PARTLOW CT	CULPEPER	VA	22701	38.50343906	-77.99593697	2	R	1001208778	unserved
13540 PARTLOW CT	CULPEPER	VA	22701	38.50296001	-77.99653203	1	R	1001208780	unserved
9017 OLD TURNPIKE RD	CULPEPER	VA	22701	38.45117589	-78.10667604	1	R	1001209227	unserved
12219 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.5331702	-78.03772119	1	R	1001208044	unserved
16295 BRANDY RD	CULPEPER	VA	22701	38.48805673	-77.95032045	1	В	1001214014	unserved
20515 SPRING CREEK DR	CULPEPER	VA	22701	38.41587026	-78.04734313	3	R	1001209329	unserved
16372 POOR FARM RD	CULPEPER	VA	22701	38.47163899	-77.95160345	1	В	1001216508	unserved
20475 OLD ORANGE RD	CULPEPER	VA	22701	38.41934861	-78.05202561	1	R	1001209366	unserved
12465 HUNT RD	CULPEPER	VA	22701	38.52907076	-78.08305982	1	R	1001209190	unserved
15373 DETWILER LN	CULPEPER	VA	22701	38.4801458	-78.05722119	1	R	1001217254	unserved
15399 ST JAMESON RD	CULPEPER	VA	22701	38.48635033	-78.02593196	1	R	1001205426	unserved
14433 GERMANNA HWY	CULPEPER	VA	22701	38.4507088	-77.98661495	1	В	1001208485	unserved
14506 NORMAN RD	CULPEPER	VA	22701	38.49334002	-78.06778815	2	R	1001209680	unserved
13620 PARTLOW CT	CULPEPER	VA	22701	38.502867	-77.99703818	1	R	1001208754	unserved
13139 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.5583577	-78.00983743	1	R	1001214180	unserved
13585 PARTLOW CT	CULPEPER	VA	22701	38.50342606	-77.99636511	1	R	1001208762	unserved
21438 JAMES MADISON HWY	ELKWOOD	VA	22718	38.51364151	-77.846182	1	R	1001218734	unserved
16075 JONAS RD	CULPEPER	VA	22701	38.48227018	-77.93930932	1	R	1001214322	unserved
10256 CEDAR SPRING LN	CULPEPER	VA	22701	38.41985866	-78.06722615	1	R	1001209337	unserved
16281 ALLIED WAY	CULPEPER	VA	22701	38.48215013	-77.95379869	1	В	1001216504	unserved

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16169 BRAGGS CORNER RD	CULPEPER	VA	22701	38.47139276	-77.94951913	6	В	1001216520	unserved
11335 MINGLEWOOD LN	RIXEYVILLE	VA	22737	38.56808686	-77.97370982	1	R	1001223984	unserved
11086 MILL STONE LN	CULPEPER	VA	22701	38.52798656	-78.04007551	1	R	1001214091	unserved
16317 BRANDY RD	CULPEPER	VA	22701	38.50042889	-77.94530396	1	R	1001214030	unserved
16063 BRAGGS CORNER RD	CULPEPER	VA	22701	38.48250005	-77.96253157	10	В	1001216266	unserved
15437 NALLES MILL RD	CULPEPER	VA	22701	38.48257003	-77.97128655	1	В	1001216258	unserved
16163 BRAGGS CORNER RD	CULPEPER	VA	22701	38.46484728	-77.96077035	1	В	1001216494	unserved
13036 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.50547625	-78.03238672	1	R	1001214108	unserved
12402 HUNT RD	CULPEPER	VA	22701	38.52694969	-78.08177227	2	R	1001209195	unserved
10046 CEDAR SPRING LN	CULPEPER	VA	22701	38.42402018	-78.06666499	1	R	1001209341	unserved
14075 MCKINLEY LN	CULPEPER	VA	22701	38.51000093	-77.96168152	1	R	1001213330	unserved
11390 DROGHEDA MOUNTAIN RD	RIXEYVILLE	VA	22737	38.53164894	-78.03863628	1	В	1001208050	unserved
23271 HUBBARDS RD	REMINGTON	VA	22734	38.49004577	-78.13246473	1	R	1001222106	unserved
11347 ALVIN LN	CULPEPER	VA	22701	38.52766653	-78.03601011	1	R	1408636142	unserved
15304 KELLYS FORD RD	REMINGTON	VA	22734	38.49043025	-77.81195338	1	R	1412423284	unserved
12089 STONEHOUSE MOUNTAIN RD	CULPEPER	VA	22701	38.54315621	-78.07327585	1	R	1001209433	unserved
11284 ANNA CT	RACCOON FORD	VA	22701	38.52695646	-78.03870928	1	R	1001209483	unserved
14348 WINDY RDG TRL	CULPEPER	VA	22701	38.53732558	-77.98370378	1	R	1001204672	unserved
15314 NALLES MILL RD	CULPEPER	VA	22701	38.47367913	-77.97273658	1	R	1001211109	unserved
14151 LOYDS LN	CULPEPER	VA	22701	38.52595735	-78.07455986	1	R	1001212510	unserved
12450 JAMES MADISON HWY	CULPEPER	VA	22701	38.44040573	-78.01165346	3	R	1001210817	unserved
10561 CLARK LN	CULPEPER	VA	22701	38.52745551	-78.05240375	1	R	1001203097	unserved
11064 STREAM SIDE LN	CULPEPER	VA	22701	38.53038481	-78.04121464	1	R	1001208041	unserved
21512 ELKWOOD XING	ELKWOOD	VA	22718	38.51136025	-77.85428781	1	R	1001218775	unserved
12250 SHADEROCK RD	CULPEPER	VA	22701	38.53924583	-78.02215374	2	R	1001211415	unserved
751 OLD BRANDY RD BLDG 2	CULPEPER	VA	22701	38.47806766	-77.97878119	2	В	1001216460	unserved
9344 TROY WAY	CULPEPER	VA	22701	38.49908069	-78.07084847	1	R	1001209678	unserved
13552 PARTLOW CT	CULPEPER	VA	22701	38.50291265	-77.99735223	2	R	1001208765	unserved
12589 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.47213499	-78.11893628	1	R	1001209508	unserved
12088 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.53638543	-78.03820334	1	R	1001208063	unserved
13334 MAPLE SPRINGS LN	CULPEPER	VA	22701	38.49065563	-78.01482722	2	R	1001203647	unserved
13593 PARTLOW CT	CULPEPER	VA	22701	38.50369108	-77.99634911	2	R	1001208749	unserved
23227 HUBBARDS RD	REMINGTON	VA	22734	38.52458966	-77.83042545	1	В	1001222092	unserved

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16469 POOR FARM RD	CULPEPER	VA	22701	38.4768505	-77.95345374	1	В	1001216502	unserved
13023 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.525398	-78.03778	1	R	1414777028	unserved
21036 GREENWAY DR	CULPEPER	VA	22701	38.42203998	-78.06007542	1	R	1001209334	unserved
18077 ASHLAND FARM RD	CULPEPER	VA	22701	38.42462615	-78.02796508	1	R	1001210787	unserved
11438 ALVIN LN	RACCOON FORD	VA	22701	38.53239002	-78.03618813	1	R	1408636111	unserved
13596 PARTLOW CT	CULPEPER	VA	22701	38.50296001	-77.99582096	1	R	1001208784	unserved
12494 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.52411527	-78.03389279	1	R	1001214092	unserved
22035 ELKWOOD DR	ELKWOOD	VA	22718	38.51125734	-77.85607099	1	R	1001218695	unserved
10051 STONE HILL LN	CULPEPER	VA	22701	38.47423726	-77.98618204	1	В	1001207165	unserved
16560 GREENS CORNER RD	CULPEPER	VA	22701	38.47830065	-77.95518691	1	R	1001216517	unserved
12679 ALLIE FARM RD	REMINGTON	VA	22734	38.55810211	-77.86224873	1	В	1001222036	unserved
16079 JONAS RD	CULPEPER	VA	22701	38.49475537	-77.92819222	3	В	1001214347	unserved
13706 KELLYS FORD RD	ELKWOOD	VA	22718	38.51126633	-77.85678796	1	R	1001218722	unserved
22047 ELKWOOD DR	ELKWOOD	VA	22718	38.51400106	-77.85096614	3	В	1001218705	unserved
21500 ELKWOOD XING	ELKWOOD	VA	22718	38.5127694	-77.85229261	1	R	1001218727	unserved
15711 IRA HOFFMAN LN	CULPEPER	VA	22701	38.48113501	-77.96122553	1	R	1001216283	unserved
13487 PARTLOW CT	CULPEPER	VA	22701	38.50344007	-77.99566494	1	R	1001208764	unserved
20465 SPRING CREEK DR	CULPEPER	VA	22701	38.42155583	-78.0509424	1	R	1001209326	unserved
12308 STONEHOUSE MOUNTAIN RD	CULPEPER	VA	22701	38.54357015	-78.07638816	1	R	1001209408	unserved
13376 UPDIKE DR	CULPEPER	VA	22701	38.52222106	-78.08108161	1	R	1001209187	unserved
13501 PARTLOW CT	CULPEPER	VA	22701	38.50319013	-77.99729921	1	R	1001208753	unserved
9189 TROY WAY	CULPEPER	VA	22701	38.50128091	-78.07597098	1	R	1001209689	unserved
13447 SCANTLIN MOUNTAIN RD	CULPEPER	VA	22701	38.513889	-78.042135	1	R	1001214137	unserved
11277 GROVESPRING RD	CULPEPER	VA	22701	38.55162015	-77.94347586	1	В	1001217966	unserved
8259 SPERRYVILLE PIKE	CULPEPER	VA	22701	38.5246402	-78.10526503	1	R	1001207510	unserved
14400 INLET RD	CULPEPER	VA	22701	38.51226665	-78.05337025	3	В	1001214069	unserved
9441 GOOD HOPE LN	CULPEPER	VA	22701	38.49482616	-78.10099859	1	R	1001211618	unserved
13033 JAMES MADISON HWY	CULPEPER	VA	22701	38.51592743	-77.96485985	1	R	1001213073	unserved
12304 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.53217009	-78.03839836	1	R	1001208054	unserved
14312 JENKINS RIDGE RD	CULPEPER	VA	22701	38.50617642	-78.05834232	1	R	1001211497	unserved
10303 CEDAR SPRING LN	CULPEPER	VA	22701	38.48485117	-78.06457082	1	R	1408634137	unserved
13621 PARTLOW CT	CULPEPER	VA	22701	38.50346606	-77.9962321	1	R	1001208767	unserved
14079 RACCOON FORD RD	CULPEPER	VA	22701	38.41130984	-77.99193142	1	R	1001207970	unserved

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13223 ALUM SPRINGS RD	CULPEPER	VA	22701	38.52161992	-78.01579899	1	R	1001206118	unserved
11273 ROCK HILL LN	CULPEPER	VA	22701	38.54036584	-78.03937546	2	R	1001208065	unserved
10471 SPERRYVILLE PIKE	CULPEPER	VA	22701	38.52835158	-78.11764918	1	R	1408636564	unserved
23222 UMBERGER LN	ELKWOOD	VA	22718	38.65608997	-77.93743745	1	R	1001219130	unserved
12058 SCOTTS MILL RD	CULPEPER	VA	22701	38.53195697	-78.03657107	1	R	1001209479	unserved
12231 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.54355517	-78.03360379	1	R	1001208049	unserved
13177 HUNT RD	CULPEPER	VA	22701	38.50856056	-78.08192059	1	R	1001212501	unserved
21448 ELKWOOD XING	ELKWOOD	VA	22718	38.51162026	-77.86268755	1	В	1001218723	unserved
10092 CHURCHSIDE LN	CULPEPER	VA	22701	38.50971968	-78.0690864	2	R	1001211547	unserved
15175 MONTROSE LN	CULPEPER	VA	22701	38.48271708	-77.96008141	1	В	1001216252	unserved
16596 GREENS CORNER RD	CULPEPER	VA	22701	38.40376025	-77.92390951	1	В	1001217063	unserved
17736 AUBURN RD	BRANDY STATION	VA	22714	38.54624768	-77.9489483	1	R	1001217938	unserved
13485 PARTLOW CT	CULPEPER	VA	22701	38.50297101	-77.99568194	1	R	1001208774	unserved
24011 RAPIDAN RD	MITCHELLS	VA	22729	38.37108588	-78.10659903	1	R	1001220939	unserved
13359 WATERS BROTHERS LN	CULPEPER	VA	22701	38.51050077	-78.06663806	1	R	1001211590	unserved
13347 WATERS BROTHERS LN	CULPEPER	VA	22701	38.50900571	-78.0690424	1	R	1001211559	unserved
15329 NALLES MILL RD	CULPEPER	VA	22701	38.4734901	-77.97499891	1	R	1001211112	unserved
11298 ALVIN LN	RACCOON FORD	VA	22701	38.50512632	-78.04607609	1	R	1408636241	unserved
15057 SPRING RIDGE RD	CULPEPER	VA	22701	38.41529032	-77.99654289	1	R	1408635815	unserved
13543 PARTLOW CT	CULPEPER	VA	22701	38.50344606	-77.99608708	1	R	1001208771	unserved
13605 PARTLOW CT	CULPEPER	VA	22701	38.50320614	-77.99638711	1	R	1001208758	unserved
14063 STUART LN	BRANDY STATION	VA	22714	38.60676665	-78.07063156	2	R	1001218469	unserved
12255 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.54787961	-78.03652609	2	R	1001208061	unserved
16220 MANDE LN BLDG 2	CULPEPER	VA	22701	38.517998	-77.95208	2	R	1412423096	unserved
15345 DETWILER LN	CULPEPER	VA	22701	38.42357003	-78.10978735	1	R	1001209699	unserved
12401 STONEHOUSE MOUNTAIN RD	CULPEPER	VA	22701	38.44438711	-78.08854822	1	R	1001203133	unserved
608 CLAIRE PAIGE WAY BLDG 2	CULPEPER	VA	22701	38.47391709	-78.00646008	9	В	1001203797	underserved
13547 PARTLOW CT	CULPEPER	VA	22701	38.44890057	-78.06705415	1	R	1001208815	unserved
15085 JOHNSONS RD	CULPEPER	VA	22701	38.48821561	-78.04519298	1	R	1001217226	unserved
19093 CARPENTERS BRANCH RD	BRANDY STATION	VA	22714	38.50106516	-77.90620402	1	R	1001218046	unserved
400 JAMES MADISON HWY	CULPEPER	VA	22701	38.481621	-77.987815	1	В	1001204159	unserved
12541 SCOTTS MILL RD	CULPEPER	VA	22701	38.52365869	-78.05392926	3	R	1001203094	unserved
16373 GLEN ELLA RD	CULPEPER	VA	22701	38.48329628	-77.93887518	1	R	1001214317	unserved

ADDRESS	CITY	STATE	ZIP	LATITUDE	LONGITUDE	UNITS	ADDRESS TYPE	LOCATION IDS	NBM STATUS
12162 MITCHELL RD	MITCHELLS	VA	22729	38.37447012	-78.02825315	1	R	1001220782	unserved
15018 INLET RD BLDG 2	CULPEPER	VA	22701	38.49720167	-77.94433786	2	R	1001213995	underserved
10029 STONE HILL LN	CULPEPER	VA	22701	38.50449114	-78.05997038	1	R	1001211490	unserved
15173 REVIEW RD	CULPEPER	VA	22701	38.49618963	-77.91822522	1	R	1001214352	unserved
15495 BRAGGS CORNER RD	CULPEPER	VA	22701	38.49632144	-77.95917035	1	R	1408635673	unserved
13592 PARTLOW CT	CULPEPER	VA	22701	38.50282002	-77.9883533	1	R	1001208759	unserved
14266 RIXEYVILLE RD	CULPEPER	VA	22701	38.50321614	-77.99653203	2	R	1001208783	unserved
13490 PARTLOW CT	CULPEPER	VA	22701	38.50294501	-77.99639311	1	R	1001208748	unserved
9372 HACKLEY LN	CULPEPER	VA	22701	38.50604141	-78.0601485	1	R	1001211531	unserved
14095 LOVERS LN	CULPEPER	VA	22701	38.35792655	-77.96545373	1	R	1001208706	unserved
13533 PARTLOW CT	CULPEPER	VA	22701	38.50364608	-77.99768814	1	R	1001208750	unserved
13011 HUNT RD	CULPEPER	VA	22701	38.50823963	-78.07813631	1	R	1001212516	unserved
13446 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.51389711	-78.04193759	1	В	1001214104	unserved
13883 KELLYS FORD RD	ELKWOOD	VA	22718	38.5118093	-77.85533692	1	R	1001218725	unserved
11034 GREEN VALLEY DR	CULPEPER	VA	22701	38.43735042	-78.05714314	1	R	1001204396	unserved
12296 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.53040982	-78.03967538	1	R	1001208045	unserved
11140 MILL STONE LN	CULPEPER	VA	22701	38.51164166	-78.04504225	1	R	1001214129	unserved
21584 ELKWOOD XING	ELKWOOD	VA	22718	38.51205641	-77.8571321	1	В	1001218733	unserved
21505 ELKWOOD XING	ELKWOOD	VA	22718	38.51132625	-77.85546493	1	R	1001218718	unserved
16014 BRAGGS CORNER RD	CULPEPER	VA	22701	38.47806766	-77.97878119	1	В	1001216460	unserved
14015 BERRY HILL RD	ELKWOOD	VA	22718	38.51301653	-77.85077536	1	R	1001218719	unserved
14024 BERRY HILL RD	ELKWOOD	VA	22718	38.51291042	-77.85158644	1	R	1001218691	unserved
300 U S AVE	CULPEPER	VA	22701	38.46740046	-77.9898753	1	В	1001215819	unserved
12406 HUNT RD	CULPEPER	VA	22701	38.52575132	-78.07838134	1	R	1001212480	unserved
10266 LANES FARM LN	CULPEPER	VA	22701	38.49926671	-78.07656004	1	R	1001209682	unserved
12585 HUNT RD	CULPEPER	VA	22701	38.51419924	-78.07651505	1	R	1001212546	unserved
21608 ELKWOOD XING	ELKWOOD	VA	22718	38.51329155	-77.85374866	1	R	1001218693	unserved
12190 SPERRYVILLE PIKE	CULPEPER	VA	22701	38.52192495	-78.01283669	1	R	1001206106	unserved
14370 JENKINS RIDGE RD	CULPEPER	VA	22701	38.50859164	-78.06960525	2	R	1001211511	unserved
14088 HOWARD RD	CULPEPER	VA	22701	38.51922976	-78.07237574	1	R	1001212520	unserved
10099 CEDAR SPRING LN	CULPEPER	VA	22701	38.41764044	-78.05650997	1	R	1001209336	unserved
15351 IRA HOFFMAN LN BLDG 2	CULPEPER	VA	22701	38.48972474	-77.9756259	2	В	1001208274	unserved
14176 HOWARD RD	CULPEPER	VA	22701	38.51219703	-78.07263766	1	R	1001211707	unserved

ADDRESS	CITY	STATE	ZIP	LATITUDE	LONGITUDE	UNITS	ADDRESS TYPE	LOCATION IDS	NBM STATUS
12246 DROGHEDA MOUNTAIN RD	RIXEYVILLE	VA	22737	38.53924583	-78.02215374	1	R	1001211415	unserved
15535 NALLES MILL RD	CULPEPER	VA	22701	38.46899768	-77.96345973	1	R	1001211115	unserved
14601 GERMANNA HWY	CULPEPER	VA	22701	38.45185992	-77.98378765	1	В	1001208484	unserved
12408 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.53097687	-78.0388703	1	R	1001208046	unserved
14251 WILLOW SHADE LN	CULPEPER	VA	22701	38.49312009	-78.10689908	3	R	1001211888	unserved
13479 STILWELL LN	BRANDY STATION	VA	22714	38.50941006	-77.85417579	1	R	1001218749	unserved
16117 BRAGGS CORNER RD	CULPEPER	VA	22701	38.48613148	-77.97457078	1	В	1001216280	unserved
15763 AUBURN RD	CULPEPER	VA	22701	38.51427037	-77.96015348	1	R	1001214757	unserved
16299 ALLIED WAY	CULPEPER	VA	22701	38.52919579	-78.03802032	1	R	1408636009	unserved
13355 RIXEYVILLE RD	CULPEPER	VA	22701	38.48972474	-77.9756259	1	В	1001208274	unserved
12425 VILLAGE LOOP BLDG 2	CULPEPER	VA	22701	38.44379907	-78.01803621	2	В	1001216172	unserved
14060 HICKORY MOUNTAIN LN	CULPEPER	VA	22701	38.52530929	-78.04381479	1	R	1001214125	unserved
22077 ELKWOOD DR	ELKWOOD	VA	22718	38.51187528	-77.86239262	1	В	1001218747	unserved
12582 HUNT RD	CULPEPER	VA	22701	38.52470022	-78.07387579	1	R	1001212496	unserved
13481 PARTLOW CT BLDG 2	CULPEPER	VA	22701	38.50347506	-77.99830331	1	R	1001208756	unserved
10516 SPERRYVILLE PIKE	CULPEPER	VA	22701	38.50588629	-78.04440993	1	R	1001208450	unserved
16099 BRAGGS CORNER RD	CULPEPER	VA	22701	38.48227612	-77.96330975	6	В	1001216255	unserved
21256 FLEETWOOD HEIGHTS RD	ELKWOOD	VA	22718	38.50447661	-77.83144249	1	В	1001218874	unserved
13010 JAMES MADISON HWY	CULPEPER	VA	22701	38.4991797	-78.06618709	1	R	1412423088	unserved
13511 PARTLOW CT	CULPEPER	VA	22701	38.50340606	-77.99704318	2	R	1001208787	unserved
13122 PULLEN CT	CULPEPER	VA	22701	38.37077595	-77.91983103	1	В	1001207668	unserved
12179 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.53919983	-78.03392082	1	R	1001208064	unserved
14083 HOWARD RD	CULPEPER	VA	22701	38.50822963	-78.07392579	3	R	1001211696	unserved
9405 HACKLEY LN	CULPEPER	VA	22701	38.51591732	-78.06753815	1	R	1001211573	unserved
18244 GAINES RUN RD	CULPEPER	VA	22701	38.45439612	-78.03766509	1	В	1001217206	unserved
14358 JENKINS RIDGE RD	CULPEPER	VA	22701	38.50399509	-78.05239272	1	R	1001208443	unserved
13573 PARTLOW CT	CULPEPER	VA	22701	38.50338005	-77.99732121	1	R	1001208776	unserved
12462 JAMES MADISON HWY	CULPEPER	VA	22701	38.43628141	-78.00985927	2	R	1001210798	unserved
13450 ALANTHUS RD	BRANDY STATION	VA	22714	38.51025617	-77.87930933	1	В	1001218458	unserved
23148 JAMES MADISON HWY	REMINGTON	VA	22734	38.56254529	-77.9336038	1	R	1408638003	unserved
16105 BRAGGS CORNER RD	CULPEPER	VA	22701	38.47096693	-77.94733811	1	В	1001216516	unserved
17118 WILLOW CREEK LN	CULPEPER	VA	22701	38.55251017	-77.97384281	1	R	1001206586	unserved
15304 NALLES MILL RD	CULPEPER	VA	22701	38.46182687	-78.02593792	1	R	1001211305	unserved

ADDRESS	CITY	STATE	ZIP	LATITUDE	LONGITUDE	UNITS	ADDRESS TYPE	LOCATION IDS	NBM STATUS
13160 CEDAR RUN CHURCH RD	CULPEPER	VA	22701	38.44070576	-78.01838723	1	R	1001210799	unserved
16455 POOR FARM RD	CULPEPER	VA	22701	38.48360917	-77.9598253	1	В	1408635606	unserved
13841 KELLYS FORD RD	ELKWOOD	VA	22718	38.51162627	-77.85679897	1	R	1001218737	unserved
13183 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.52641641	-78.04265367	1	R	1001214093	unserved
12212 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.53291608	-78.03763218	1	R	1001208053	unserved
20235 KETTLE CLUB RD	CULPEPER	VA	22701	38.44133582	-78.01856415	1	R	1001210797	unserved
8467 SPERRYVILLE PIKE	CULPEPER	VA	22701	38.52826768	-78.08148166	1	R	1001209189	unserved
14029 SCANTLIN MOUNTAIN RD	CULPEPER	VA	22701	38.5244592	-78.03511502	1	R	1001214138	unserved
14389 NORMAN RD	CULPEPER	VA	22701	38.50267695	-78.06874826	1	R	1001207701	unserved
10076 CEDAR SPRING LN	CULPEPER	VA	22701	38.42204098	-78.05294861	1	R	1001209325	unserved
10284 SPERRYVILLE PIKE	CULPEPER	VA	22701	38.50266596	-78.0581093	1	R	1001211509	unserved
16011 AUBURN RD	CULPEPER	VA	22701	38.49258002	-77.97343178	1	R	1001214890	unserved
501 E CHANDLER ST	CULPEPER	VA	22701	38.44379907	-78.01803621	2	В	1001216172	unserved
16320 POOR FARM RD	CULPEPER	VA	22701	38.47148897	-77.94912529	1	В	1408635171	unserved
14010 BERRY HILL RD	ELKWOOD	VA	22718	38.51334946	-77.85332572	1	R	1001218703	unserved
16020 NORMANS LN	CULPEPER	VA	22701	38.49720167	-77.94433786	1	R	1001213995	underserved
10748 GRAVEL RD	BRANDY STATION	VA	22714	38.50157012	-77.9040878	1	R	1001218032	unserved
10273 MOUNTAIN RUN LAKE RD	CULPEPER	VA	22701	38.49891157	-78.08435992	1	R	1001207804	unserved
15190 MONTROSE LN	CULPEPER	VA	22701	38.4733671	-77.97373768	1	R	1001211121	unserved
15321 DRAGONFLY LN	CULPEPER	VA	22701	38.46095578	-78.06587594	1	R	1001213211	unserved
12564 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.51524935	-78.04969236	1	В	1001214075	unserved
9230 CLYDE LN	CULPEPER	VA	22701	38.53466025	-78.05000952	1	R	1001209406	unserved
8015 SPERRYVILLE PIKE	BOSTON	VA	22713	38.52307514	-78.0889143	1	R	1001207503	unserved
19036 CARPENTERS BRANCH RD	BRANDY STATION	VA	22714	38.51607071	-77.90160949	1	R	1001218307	unserved
720 ZEUSWYN DR	CULPEPER	VA	22701	38.54153996	-78.0277762	1	R	1001211406	unserved
901 NALLE PL	CULPEPER	VA	22701	38.52309614	-78.09855326	2	R	1001207494	unserved
14101 BERRY HILL RD	ELKWOOD	VA	22718	38.51268905	-77.85592714	3	В	1001218750	unserved
12336 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.53462925	-78.03813633	1	R	1001208055	unserved
8544 MAPLE LAWN LN	RAPIDAN	VA	22733	38.31843751	-78.04464866	1	R	1001221186	unserved
9241 TROY WAY	CULPEPER	VA	22701	38.49039072	-78.04885926	1	R	1001209698	unserved
9243 OLD TURNPIKE RD	CULPEPER	VA	22701	38.5274405	-78.07728824	1	R	1001212528	unserved
16101 BRAGGS CORNER RD	CULPEPER	VA	22701	38.47046988	-77.94473175	1	R	1001216505	unserved
11404 APPERSON LN	CULPEPER	VA	22701	38.52468622	-78.04582099	1	R	1001214088	unserved

ADDRESS	CITY	STATE	ZIP	LATITUDE	LONGITUDE	UNITS	ADDRESS TYPE	LOCATION IDS	NBM STATUS
16293 BRANDY RD	CULPEPER	VA	22701	38.4896708	-77.94793811	1	В	1001214026	unserved
15264 NALLES MILL RD	CULPEPER	VA	22701	38.47241103	-77.96563786	1	R	1001211114	unserved
8303 JAMES MADISON HWY	RAPIDAN	VA	22733	38.37437011	-78.08118754	1	R	1001221118	unserved
15108 SERVICE LN	CULPEPER	VA	22701	38.63442944	-78.17289281	1	R	1412423098	unserved
13599 PARTLOW CT	CULPEPER	VA	22701	38.50318713	-77.99754913	1	R	1001208781	unserved
13200 ALUM SPRINGS RD	CULPEPER	VA	22701	38.50831072	-77.93925336	1	R	1001206487	unserved
21548 ELKWOOD XING	ELKWOOD	VA	22718	38.51356948	-77.85239262	3	В	1001218743	unserved
16195 BRANDY RD	CULPEPER	VA	22701	38.48450027	-77.95515392	1	В	1001214446	unserved
14461 NORMAN RD	CULPEPER	VA	22701	38.49634032	-78.05939842	1	R	1001209681	unserved
12236 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.5351254	-78.03970339	1	R	1001208058	unserved
13080 EGGBORNSVILLE RD	CULPEPER	VA	22701	38.52006585	-78.02771017	1	R	1001214098	unserved
13506 PARTLOW CT	CULPEPER	VA	22701	38.50323614	-77.99698807	1	R	1001208789	unserved

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	314	0	0	308
Businesses (non-home based)	138	0	0	119
Businesses (home-based)	0	0	0	0
Community Anchors	1	0	0	1
Non-residential	0	0	0	0
Total	453	0	0	427

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 accounts 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.

2023 Virginia Telecommunication Initiative (VATI) RDOF Passings Form

Type of Passings	Total Number of Passings in the Project Area that lie within Preliminarily Awarded RDOF Areas ¹
Residential	37
Businesses (non-home based)	44
Businesses (home-based)	0
Community Anchors	0
Non-residential	0
Total Number of RDOF Passings	81

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

Definitions

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

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

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

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



Representative Project Schedule. Table 7-1 illustrates a notional work breakdown structure that Verizon will formalize with the County after grant award notification. It illustrates the various delivery timelines based on the overall time to deliver services to the identified locations. Within each schedule there are overlapping phases of implementation activities. The intervals identified in the schedule are based on the standard interval to design, engineer, permit, make-ready, construct, test, and validate one fiber route (one fiber route is a smaller subset of the total targeted lots and addresses). The Verizon process is to work multiple fiber routes and multiple areas concurrently, not sequentially. If awarded, the Verizon project management team will work with the County to establish a thorough program timeline that incorporates key metrics and priority milestones.

18-Month Build Schedule									
Implementation Activities	Responsible Party	Milestone/Deliverables	3		6	9	12	15	18
Engineering	Verizon	Complete Engineering Design							
Permitting, VDOT & County	County/Verizon	Permits Submitted & Approved		-					
Make Ready	Verizon/Multiple Utilities	Make-Ready Work Complete							
Construction	Verizon	Construction Complete & Testing							
Fios Ordering/Installation	County Resident/Verizon	Service Order Complete							

Table 7-2 illustrates the standard activities and their dependencies during the projected build period. It also identifies whether Verizon field engineering, the County, or a third party is affected. Verizon tracks dependencies as risks and enters them into the risk register for monitoring, reporting, and mitigation.

Activity/Milestone	Responsible Party	Task Dependency				
Contract signed	Verizon, County	Day "0"				
Fiber route planning completed	Verizon	Contract signing				
Resource planning completed	Verizon	Contract signing				
Fiber route engineering completed	Verizon	Fiber route planning				
Permit applications submitted	Verizon	Engineering completed				
Permit approvals received	County, VDOT, other state/municipal	Permit submitted				
Make-ready work completed	Verizon, third-party utility pole owners	Engineering completed				
Construction commences	Verizon	Engineering completed, permits received, make-ready completed				
Construction completed	Verizon	Permitting approvals and make-ready completed, inspections completed				
Testing completed	Verizon	Construction completed				
Fios ordering available/service delivery commences	Verizon	Testing completed; OLT installed and ready for service.				

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding ("MOU") entered into on this <u>15th</u> day of <u>December</u>, 2023, by and between Verizon Virginia LLC, located at 22001 Loudoun County Parkway, Ashburn, VA, 20147 hereinafter referred to as "Verizon", and the County of Culpeper, Virginia, a political subdivision of the Commonwealth of Virginia, with an office at 302 N. Main Street, Culpeper, Virginia 22701, hereinafter referred to as the "County" (Verizon and County are collectively referred to as the "Parties"), for the purpose of establishing and achieving various goals and objectives relating to the project contemplated by the Parties.

WHEREAS, the Parties are desirous to enter into this Memorandum to set forth the working arrangements that both Parties agree shall be necessary to pursue their efforts to bring the Project to fruition;

MISSION

The Project is intended to provide the areas of the County with access to broadband Internet service ("Broadband"), in order to meet the future needs of residents and businesses in those areas of the County.

PURPOSE AND SCOPE

The Parties intend for this Memorandum to outline the structure for any binding contracts which the Parties may enter into in the future related to the Project.

OBJECTIVES

The Parties agree to work together to attempt to secure funding and establish policies and procedures that will promote and sustain a market for Broadband availability and intend to work toward delivering a product and/or services that meet or exceed business and industry standards.

RESPONSIBILITIES AND OBLIGATIONS OF THE PARTIES

The Parties agree to work together in good faith and collaboratively in an effort to bring the Project to successful completion. This Memorandum does not create any legal or equitable obligations or rights on the part of either Party and no such obligations or rights shall exist unless and until such time as the Parties may enter into a written agreement signed by both Parties.

SERVICES COOPERATION

The goal of the Project is to provide the following services in the areas of the County contemplated in the Project, which services include, but are not necessarily limited to:

Broadband Internet access services

Phase 1 (beginning after MOU execution): The Parties will work together to apply for Virginia Telecommunication Initiative ("VATI") grant(s). The Parties anticipate that VATI

guidelines will require contributions by Verizon and by the County as matching funds to secure a FY2024 VATI Grant through the Virginia DHCD. DHCD funding shall not exceed 20.7% of Project costs. The total budget for the Project is expected to be approximately \$17,382,005. Verizon agrees to provide a minimum match of \$13,787,714 in funding for the Project. The total number of homes projected to be passed by the Project shall be at least 453.

Phase 2 (beginning after Phase 1): Verizon will work with the County to continue Project planning and the Parties will seek additional State and local funding to expand the availability of Broadband service in the County.

TIMELINE

The above outlined scope and objective shall be contingent on the Parties' ability to obtain the necessary funding required for the Project, as described in any applicable grant or business loan application. Responsibilities with regard to commencement and completion of the Project will be established in any future agreement between the Parties, and may coincide with the period specified in connection with any grants awarded in connection with the Project.

<u>TERM</u>

This MOU shall remain in effect, subject to the termination provisions in this MOU, up until the Parties mutually determine whether they are able to move forward with the Project.

If the Parties are successful in securing sufficient grant funding that they are both willing to move forward with the Project, then they agree to use good faith efforts to negotiate, execute and deliver a formal contract regarding the Project ("Project Agreement"). The Parties contemplate that a Project Agreement will contain terms and conditions, representations, warranties, covenants, and other provisions that are customary in service arrangements of the sort contemplated in this MOU. If the Parties are unable to agree on the terms and conditions of a Project Agreement within 60 days of receiving notice of the award of such grant funding, then either Party may give notice of the termination of this MOU. In that event, the Parties shall have no further obligations to each other under this MOU except for any obligations which are specifically provided to survive a termination of this MOU. This MOU does not create any legal or equitable obligations or legal rights.

AMENDMENT OR CANCELLATION OF THIS MEMORANDUM

This Memorandum may be amended or modified at any time in writing by mutual agreement of both Parties.

In addition, this MOU may be canceled by either Party without cause on sixty (60) days advance written notice. This MOU may be terminated for cause, where cause for

termination may include, but is not limited to, a material breach of any of the provisions contained herein, upon delivery of written notice of such termination to the other Party.

GENERAL PROVISIONS

The Parties acknowledge and understand that they must be able to fulfill their responsibilities under this MOU in accordance with the provisions of the law and regulations that govern their activities. Nothing in this Memorandum is intended to negate or otherwise render ineffective any such provisions or operating procedures. The Parties assume full responsibility for their performance under the terms of this Memorandum.

If at any time either Party is unable to perform its duties or responsibilities under this MOU consistent with such Party's statutory and regulatory mandates, the affected Party shall immediately provide written notice of such to the other Party and, if possible, establish a date for such performance.

LIMITATION OF LIABILITY

No rights or limitation of rights shall arise or be assumed between the Parties as a result of the terms of this MOU.

ARBITRATION/MEDIATION DISPUTE RESOLUTION

The Parties to this MOU agree that should any dispute arise regarding any aspect of their relationship or the Project, including, but not limited to, any matters, disputes or claims, the Parties shall confer in good faith to promptly resolve any such dispute. In the event that the Parties are unable to resolve the issue or dispute between them, then the matter shall be subject to non-binding mediation in an attempt to resolve any and all issues between the Parties.

The Parties agree that venue for any claim or dispute that arises from or through this MOU shall be in the state and Federal courts for Culpeper County, Virginia.

NOTICE

Any notice or communication required or permitted under this MOU shall be sufficiently given if delivered in person or by certified mail, return receipt requested, to the address set forth in the opening paragraph or to such address as one may have furnished to the other in writing.

GOVERNING LAW

This MOU shall be governed by and construed in accordance with the laws of the Commonwealth of Virginia, exclusive of its conflicts of laws rules.

SEVERABILITY CLAUSE

In the event that any provision of this Memorandum shall be deemed to be severable or

invalid, and if any term, condition, phrase or portion of this Memorandum shall be determined to be unlawful or otherwise unenforceable, the remainder of the Memorandum shall remain in full force and effect, so long as the clause severed does not affect the intent of the Parties. If a court should find that any provision of this Memorandum to be invalid or unenforceable, but that by limiting said provision it would become valid and enforceable, then said provision shall be deemed to be written, construed and enforced as so limited.

ASSIGNMENT

Neither Party may assign this Memorandum without the prior written consent of the non assigning Party, whose approval shall not be unreasonably withheld or conditioned. Notwithstanding the foregoing, Verizon shall have the right to assign this MOU without the County's consent to any parent, subsidiary, affiliate, or any person, firm, or corporation that shall control, be under the control of, or be under common control with Verizon, or to any entity into which Verizon may have merged or consolidated or which purchases all or substantially all of the assets of Verizon.

ENTIRE UNDERSTANDING

This MOU reflects the entire understanding and agreement of the Parties pertaining to all matters contemplated hereunder.

MOU SUMMARIZATION

The Parties to this MOU have mutually acknowledged and agreed to the following:

- The Parties to this MOU shall work together in a cooperative and coordinated effort, and in a manner and fashion intended to bring about the achievement and fulfillment of the goals and objectives of the Project.

- It is not the intent of this MOU to restrict the Parties from their involvement in or participation with any other public or private individuals, agencies or organizations or opportunities.

- The Parties to this MOU shall mutually contribute and take part in any and all phases of the planning and development of the Project, to the fullest extent possible.

- This MOU is not a binding contract, and it is not the intent or purpose of this MOU to create any rights, benefits, obligations and/or trust responsibilities by or between the Parties.

- This MOU shall in no way hold or obligate either Party to supply or transfer funds to maintain and/or sustain the Project or the effort to bring it to fruition.

- Should there be any need or cause for the reimbursement or the contribution of any funds to or in support of the Parties' efforts relating to the Project, then such shall then

be done in accordance with applicable Virginia laws, regulations and/or procedures, and any Project Agreement which the Parties may enter into in the future.

- In the event that it should become necessary to provide funding for the effort to develop the Project, then any such endeavor shall be addressed in a separate and mutually agreed upon written agreement signed by the Parties or their representatives, in accordance with applicable laws and regulations, and in no way does this MOU provide such right or authority or obligate any Party to provide any such funding.

- The Parties have the right to individually or jointly terminate their participation in this MOU provided that advanced written notice is delivered to the other Party as provided for herein.

AUTHORIZATION AND EXECUTION

The signing of this Memorandum of Understanding does not constitute a formal undertaking, and as such it simply reflects the intentions of the Parties to undertake preliminary efforts to achieve the goals and objectives stated in this MOU.

IN WITNESS WHEREOF, the Parties hereto have set their hands as of the day and year first above written.

Verizon

By:

Title:

CULPEPER COUNTY, VIRGINIA

By:

VATI FUNDING SOURCES TABLE

Please fill in the chart below with a description of the project funding source (local, federal, state, private, other), the amount from that source, the percentage of total project funding that source represents, and a description of the current status of the funds (pending, secured, etc.).

Source	Amount	%	Status
REQUESTED VATI	\$ 3,594,291	20.7	Pending
VERIZON	\$ 13,787,714	79.3	Secured
	\$		
	\$		
	\$		
	\$		
	\$		
Total	\$ 17,382,005	100 %	

verizon⁴

Dec 17, 2023

Laura Loveday Special Projects and Grants Administrator Culpeper County 803 South Main Street, Culpeper VA 22701

Dear Mrs. Loveday,

The purpose of this letter is to provide documentation regarding the matching cash funding contributions for the broadband project that Culpeper County will propose to the Virginia Telecommunication Initiative ("VATI") program in its grant application.

The proposed project represents a joint initiative between Verizon and Culpeper County. As indicated in our application, Verizon will provide 79.3% of the projected costs. Total projected costs are \$17,382,005, so the amount provided by Verizon will be approximately \$13,787,714 in cash.

Should you have any questions regarding the information listed above, please do not hesitate to contact me.

Best regards,

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Lori Fountain Director of Broadband Strategy



John C. Egertson, AICP County Administrator

302 N. Main Street, Culpeper, Virginia 22701 Phone: (540) 727-3427 E-mail: jegertson@culpepercounty.gov

December 12, 2023

Tamarah Holmes, Ph.D. Associate Director of Policy and Strategic Development Virginia Department of Housing and Community Development 600 East Main Street, Suite 300 Richmond, VA 23219

Re: Virginia Telecommunication Initiative (VATI) 2024- "Culpeper County Fiber Expansion FY24"

Dr. Holmes,

I am writing to express Culpeper County's commitment to pursue universal broadband through our application submitted to the FY24 VATI grant opportunity. Culpeper County has committed millions of dollars over the past decade in order to achieve internet access for our rural residents. Most recently, Culpeper County contributed \$6,600,000 in cash match to the FY22 VATI grant cycle. While our currently underway fiber to the home initiative reaches almost 4,300 unserved households in Culpeper County, it quickly became apparent to us that there were a large number of remaining unserved locations within Culpeper County. This discovery is largely attributed to improvements made to the FCC reporting process.

Our community has widely embraced the fiber to the home project currently underway, but those residents that are not included and remain unserved are left frustrated and confused. We are pleased that Verizon has agreed to partner with us to reach an additional 453 locations within Culpeper County. If awarded, this VATI grant will allow Culpeper County to be substantially closer to our goal of achieving Universal Broadband Coverage.

I urge you to support this project which will infill the final unserved areas of Culpeper County, and I appreciate all that DHCD has done to address rural broadband in the Commonwealth.

Sincerely,

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John Egertson, AICP, Culpeper County Administrator

Communications Workers of America AFL-CIO

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230 South Broad Street, 19th Floor Philadelphia, Pennsylvania 19102 (215) 546-5574 • Fax (215) 985-2102 Email: mdavis@cwa-union.org Michael P. Davis International Vice-President District 2-13



December 19, 2023

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

RE: Verizon Grant Application for 2024 VATI

Dear Dr. Holmes:

I am writing in support of the bid by Verizon, Inc. for funding in the 2024 Virginia Telecommunication Initiative (VATI) grant cycle.

Communications Workers of America District 2-13 represents workers in private and public sector employment who work in Telecommunications and Information Technology, News Media, Broadcast and Cable Television, Education, Health Care, Public Service, Airline, Manufacturing, and other fields. This includes more than 2,500 in telecommunications in Virginia with thousands more who are retirees living in the state. CWA members are highly trained, career technicians and service representatives who build and service our telecommunications networks. They are also consumers who rely on quality internet service. CWA is deeply committed to universal, affordable, high-speed, and high-quality broadband for all. It is with this goal in mind that we are pleased to offer our endorsement of Verizon's bid to work across the Commonwealth and build a state-of-the-art fiber-to-the-premises (FTTP) network to unserved and underserved locations in Virginia.

Verizon has unmatched experience in FTTP broadband and they directly employ a highly skilled and well-trained union workforce with a proven track record of delivering broadband which is unmatched in speed, reliability, and quality to all Virginians. Our CWA members at Verizon know the service needs of the area and are best positioned to deploy broadband successfully, safely, and efficiently in our most rural areas. Prioritizing a well-trained and qualified workforce, particularly with experience in the Commonwealth, is critical to safe deployment and sustainable, high-quality networks. All too often, low-road subcontractors cut corners by using an inadequately trained workforce endangering both the workers and the public and delaying deployment. Low-road subcontractors are not incentivized to perform high-quality work as they often do not live or work in the area and have a piecemeal payment structure. Our members live and work in these communities and will not only ensure that the work is done professionally and safely but also that the economic benefits of this public investment stay in the region.

Verizon has a long track record proving its capability to successfully build, operate, and maintain and service an essentially futureproof broadband network. Verizon's plan relies on state-of-theart fiber-to-the-premises design (FTTP), which is the superior technology for our broadband needs today and in the future. In comparison to DSL and cable, FTTP can deliver symmetrical speeds, has the highest download and upload speeds, and is scalable for future technological demands, Fiber is also the more resilient, sustainable, and efficient technology.

Specifically, Verizon's Fios is unmatched in speed, reliability, and quality. Verizon's all-fiber network will deliver speeds starting at 300/300 Mbps (downstream/upstream) and a 1 Gig tier with maximum speeds of up to 940/880 Mbps. We are proud to say that FIOS has been rated #1 in speed and reliability 12 years in a row.

I am pleased to support Verizon's plan to deploy broadband across Virginia as we believe it will best meet the broadband service needs of its residents and ensure the highest-quality, highest-speed service available. I appreciate your consideration of this important matter and am available to answer any questions or concerns you may have.

Sincerely,

Michael P. Davis International Vice President CWA District 2-13, AFL-CIO

MPD:mbb opeiu#2



December 17, 2023

Laura Loveday Special Projects and Grants Administrator Culpeper County 803 South Main Street, Culpeper VA 22701

Dear Mrs. Loveday,

This letter shall serve as confirmation that Verizon has the necessary arrangements in place with respect to equipment, supply chain, logistics, contract services, and regulatory compliance to complete the projects proposed in this application in the designated time frame. Verizon's fiber network expansion program adds on average more than 400k premises and over 5,000 route miles of new fiber to our network each year. It is these same time-tested and proven supply chain and related arrangements that will be leveraged to construct the network proposed in this application.

Verizon has deep relationships across the global supply chain with a wide range of equipment manufacturers, vendors, and suppliers. We leverage these relationships to drive lower costs and higher quality for our customers. The scale of our sourcing activity enables us to maximize our ability to obtain necessary equipment and services even when supplies run tight.

With respect to one of the key inputs--fiber optic cable and accessories--Verizon has a long-standing relationship with Corning, and is including a letter evidencing Corning's willingness and intent to meet our requirements for fiber under its existing supply agreements with Verizon.

Our labor force is in place, is stable, and has high rates of retention throughout Verizon including the 6,600 Virginians already employed at Verizon. Our large direct workforce of experienced, well-paid, represented employees live and work in the communities of the County and surrounding areas. Where needed, the contractors that work with Verizon are an established and stable group, whose members have a track record of long service prioritizing their work for Verizon and its customers.

Finally, Verizon already has in place the regulatory expertise to achieve compliance and adapt to changed circumstances.

Best regards,

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Lori Fountain Director of Broadband Strategy

verizon

December 17, 2023

Laura Loveday Special Projects and Grants Administrator Culpeper County 803 South Main Street, Culpeper VA 22701

Dear Mrs. Loveday,

I am writing to highlight some of the unique relationships that Verizon has with respect to the Commonwealth, key businesses in James City County, and County residents. We believe these relationships enhance Verizon's ability to execute on the proposed broadband network build and to successfully provide broadband service to the targeted locations.

Our Customers: Verizon's Credo starts with the phrase--"We have work because our customers value our high-quality communications services." That dedication and commitment to our customers is reflected in everything we do. Verizon has been the incumbent telephone company in James City County for decades and has long-standing relationships with customers throughout the County. We believe these relationships, our name recognition, and the strength of the Verizon brand, will help accelerate adoption of our award-winning Fios Internet services for homes and businesses reached through this project. Verizon's range of services and pricing plans--including plans for low-income customers that result in free broadband service after application of the FCC's Affordable Connectivity Program subsidy--provide an option for every budget. And customers can save even more by bundling their Fios Internet service with certain Verizon Wireless 5G data plans--this is an attractive option for customers who already subscribe to Verizon Wireless mobile service.

Our Infrastructure Arrangements: The predominant provider of electric utility service in James City County and across the proposed Verizon network is Dominion Power. Cost-effective, timely, and efficient access to existing aerial infrastructure greatly increases the likelihood of a broadband project being completed on time. Verizon has worked with Dominion to make joint use of each company's pole assets for years, and our existing joint use agreement has been in place for over ten years.

State Agencies: As an operator of communications networks that criss-cross the Commonwealth, Verizon has extensive experience working with the Virginia Department of Transportation (VDOT). Knowledge of VDOT's permitting processes and solid working relationships with agency personnel, including the ability to escalate matters and brainstorm creatively to overcome obstacles, is an essential and highly-desirable asset for any broadband network construction project that occupies VDOT right-of-way.

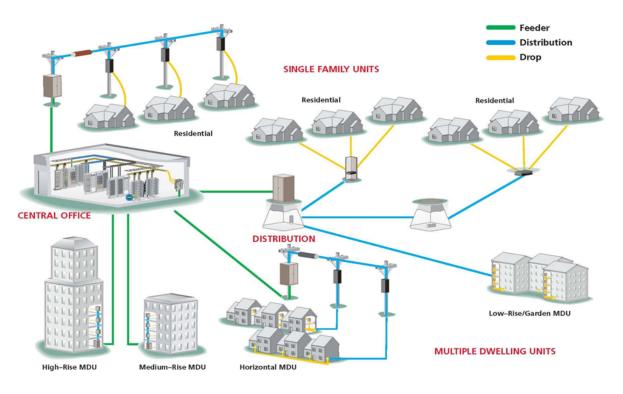
Local and National Builders, Developers and Property Managers: People live in houses and multi-tenant buildings, and many of those are owned, built, or managed by major local, regional, and national companies. The Verizon Enhanced Communities (VEC) team is specifically tasked with establishing and maintaining relationships with building owners, developers/builders, and property management companies. Through the VEC Value Program, our team will help the building owner, developer/builder, or management company actively promote Fios as a key amenity to all the residents or homeowners, and provide the dedicated, end-to-end support that will keep them happy for years to come. Verizon's marketing arrangements allow VEC personnel to work with the customer to develop marketing programs to drive residents to purchase our Internet services. VEC customers also have the option to enter into a bulk arrangement with Verizon as part of which VEC provides discounted prices off our Fios retail services for residents of the building or development. VEC has strong relationships with builders such as NVR/Ryan Homes, Lennar, Pulte Homes and other large developed communities in Virginia, and looks forward to the possibility of strengthening existing relationships and forging new ones through the proposed Fios network expansion project in James City County.

Best regards,

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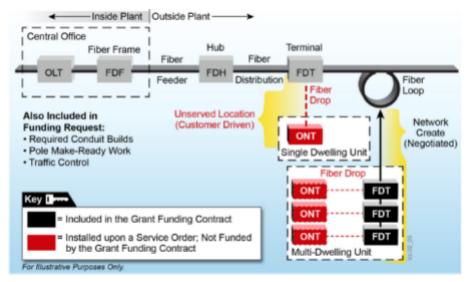
Lori Fountain Director of Broadband Strategy





Verizon Network Reference Architecture Diagrams

FTTP Distribution



ISP/OSP Funded Components

Other Benefits of Working with Verizon on a Broadband Expansion Project

Supply Chain:

Verizon has deep relationships across the global supply chain with a wide range of equipment manufacturers, vendors, and suppliers. We leverage these relationships to drive lower total deployment costs and higher quality for our customers. The scale of our sourcing activity enables us to maximize our ability to obtain necessary equipment and services even when supplies run tight.

Workforce:

Verizon's workforce will perform fiber placement, splicing and testing work on this project as well as Fios Home Internet installations. Verizon provides this workforce with excellent employee benefits like medical, dental, life insurance, disability, and access to a 401(k) with a company match. In addition, these employees have generous paid time off available to them as well as the ability to take advantage of several other benefits like tuition assistance, an employee assistance plan and robust training/development programs.

Cybersecurity:

Verizon is a recognized leader in cybersecurity. Verizon's Data Breach Investigative Report is an annual must-read for corporate and government CISOs, CSOs, CTOs, and CIOs. Verizon's global network security team has sensors deployed across our network, across America and around the world, and is always on the alert for the latest zero-day exploits and malicious activities. Verizon has relationships across industry and government that enable us to obtain the latest in threat intelligence. The cybersecurity countermeasures that we deploy on our backbone network to protect our business and government customers from hackers and other bad actors can benefit our Fios customers whose services are connected to that same backbone network.

Sustainability:

As reported in Verizon's Task Force on Climate-related Financial Disclosures (TCFD) report, Verizon's fiber-delivered broadband services are at least 100 times more efficient on a kilowatt hour (kWh) per gigabyte basis than copper delivered broadband services. For more information, see the ERM Certification Verification Services Independent Assurance Statement at: https://www.verizon.com/about/sites/default/files/Verizon-2021-Energy-Comparison-Analysis.pdf

Wireless Service Expansion:

Verizon is one of the largest licensed wireless service providers in the County. Deployment by Verizon of fiber infrastructure to locations throughout the County will also support the expansion of Verizon's mobile and fixed wireless services to these areas in the future.

Local Contractor Base:

Expansion of the Verizon FTTP network in Virginia helps the community and the Commonwealth, as Verizon spends more than \$700 million annually with Virginia suppliers and vendors.

Global Accessibility:

Fios Home Internet customers also benefit from the breadth and reach of Verizon's global network and relationships. Verizon is not just a Virginia company--Verizon provides communications services to customer locations in over 100 countries around the world, with a diverse workforce spanning over 40 countries. Our global reach and relationships benefit our customers in the County and elsewhere. Because Verizon is an established provider, Fios customers benefit from a whole host of advanced capabilities and features.

Robust Firewall/Parental Controls:

The Fios router is equipped with the latest Wi-Fi technology and has a robust firewall and parental control feature to give customers more control and security over their broadband experience.

Convenience:

Fios Home Internet includes many convenient features. Multiple users can use the service simultaneously without sacrificing speed or bandwidth, even during peak hours.

Support:

Verizon also provides professional installation services, and Fios service includes 24/7 technical support so customers can get answers when they need them.

Privacy and an Open Internet:

Verizon is strongly committed to customer privacy and to an open Internet, as evidenced by our Privacy Policy (https://www.verizon.com/about/privacy/) and Broadband Commitment (https://www.verizon.com/broadbandcommitment).

CORNING

July 26, 2022

To: Grant Review Committee Re: Verizon Grant Application

Corning Incorporated is pleased to support Verizon in their pursuit of closing the digital divide across the United States. Since our two companies launched the fiber-to-the-home revolution nearly two decades ago, and by embracing a collaborative partnership, more than 18 million American homes have been passed by Verizon's high-speed fiber broadband with many more to come.

In accordance with existing supply agreements, Corning is prepared to meet Verizon's project requirements for fiber optic cable and connectivity solutions necessary for the deployment of Verizon's fiber-to-the-premise broadband networks.

Corning invented the world's first low-loss optical fiber more than 50 years ago, ushering in the telecommunications revolution and expanding the bandwidth of human potential. Our existing capacity and record investments in new manufacturing facilities enable us to stand ready to support this historic era of connecting all Americans to high-speed fiber broadband.

Sincerely,

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Stephen Mitchell Senior Vice President, Carrier Networks Corning Optical Communications

We build connections so the world can make them.