

Application to DHCD Submitted through CAMS

West Piedmont PDC

2022 WPPDC Carroll & Patrick Universal Broadband Project

Application ID: 86509032021122334

Application Status: Pending

Program Name: Virginia Telecommunications Initiative 2022

Organization Name: West Piedmont PDC

Organization Address: 1100 Madison St.
Martinsville, VA 24112

Profile Manager Name: Jacob Bullins

Profile Manager Phone: (276) 638-3987

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Project Name: 2022 WPPDC Carroll & Patrick Universal Broadband Project

Project Contact Name: Michael Armbrister

Project Contact Phone: (276) 638-3987

Project Contact Email: marmbrister@wppdc.org

Project Location: 1100 Madison St
Martinsville, VA 24112-3145

Project Service Area: Carroll County, Patrick County

Total Requested Amount: \$4,182,370.00

Required Annual Audit Status: Accepted

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Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	\$4,182,370.00	\$3,894,384.00	\$8,076,754.00
Construction	\$4,032,370.00	\$3,894,384.00	\$7,926,754.00
Other: Administration	\$150,000.00	\$0.00	\$150,000.00
Total:	\$4,182,370.00	\$3,894,384.00	\$8,076,754.00

Budget Narrative:

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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:

Spectrum Southeast, LLC., by its manager Charter Communications, Inc., and the Counties of Carroll and Patrick through the West Piedmont Planning District Commission (“WPPDC”) see the need to provide broadband to all unserved residents of the Counties. This VATI application combined with Spectrum’s RDOF awarded areas will meet Applicants’ shared goal to reduce the number of unserved locations in the proposed project areas and help to meet the State’s goal of reaching ubiquitous coverage. Spectrum is the second largest broadband provider in the country and is well qualified to provide broadband service and more. Recently US News & World Report named Spectrum the “Best Internet Provider for Rural Areas” (Attachment 18) and was named the 2020 Operator of the Year by Multichannel News. Spectrum, in collaboration with the Counties, is committing to construct a broadband network to reach all of the identified locations in this Application via the utilization of all of their resources in an effort to maximize the use of State VATI funds.

Spectrum currently provides service in southern Carroll County. In the recent FCC Rural Digital Opportunity Fund (RDOF) auction, Spectrum received RDOF awards in the areas near our existing foot print in southern Carroll County and southwestern Patrick County. Spectrum’s RDOF locations consist of an estimated 1,441 FCC locations in Carroll County and 873 in Patrick County. These awards, along with this VATI application go to show Spectrum’s commitment to expand broadband service to unserved locations.

To identify the Spectrum proposed project areas included in this VATI application, Spectrum: 1) reviewed the FCC 477 reports to identify unserved locations in or near Spectrum’s current service areas and RDOF award areas; 2) overlaid Patrick County’s broadband study data to verify the identified homes in the proposed project area; 3) similarly, used addresses provided by Carroll County to verify the locations and 4) reviewed all data and proposed project areas with the WPPDC in collaboration with both Counties to assist in their efforts to achieve universal service in tandem with other providers. WPPDC’s review of Spectrum’s application has resulted in a high confidence that the application, when combined with the other WPPDC applications, would create near ubiquitous coverage throughout these two Counties.

The proposed project areas in this application are contiguous to Spectrum’s RDOF award areas and if a VATI grant is awarded, it could accelerate the RDOF construction buildout. Spectrum and the Counties are looking to expand broadband into the remaining unserved areas and it should be noted that Spectrum is not seeking supplemental funding in the RDOF areas, but is only seeking subsidies for expansion into unserved areas where there is no committed federal or state funding.

The proposed project areas included in this application are generally in the southern portion of Carroll County that includes the local areas known as Oakland, Fancy Gap and Gladesboro, and the southwestern portion of Patrick County including the local areas known as Ararat, Willis Gap and Raven Rock.

Attached (Attachment 1A) is a map showing the proposed project areas being applied for in this application. Also attached (Attachment 1B) shows the area applied for along with the contiguous RDOF award areas. On Attachment 1B the blue areas show the RDOF areas Spectrum won and the polygons show the proposed project areas of this application. We have included the RDOF areas on this map because it is important to understand the proximity to complete this section of both Counties for full coverage and that there is no overlap with RDOF awarded areas.

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

Answer:

Carroll County:

Below is a summary of providers and broadband speeds offered in the proposed project areas based on the most recent FCC Broadband Deployment Report (Form 477) as of June 2020.

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Wireline Speed Distribution in Build Area (FCC 477 Data, June 2020)

Wireline Competition

Based on the FCC Form 477 data, CenturyLink is the only Wireline provider in the proposed project area. FCC data shows that there are no locations served by CenturyLink that receive speeds at or above the 25/3 threshold. Because of the lag time between 477 reporting and when the FCC publishes such reports (June 2020), Spectrum spot checked addresses in the proposed project area on CenturyLink's serviceability website and found isolated instances where CenturyLink has reported upgraded speeds up to 40Mbps or 60Mbps, but the vast majority of the FCC data appears to be an accurate representation of CenturyLink's offerings in the area. Wireline competitors adjacent to the build area were also checked with serviceability checks on providers' websites and Spectrum verified that these adjacent providers do not, in fact, serve the proposed project areas (Spectrum's competitive review included Comcast, Citizens Telephone, and SkyBest).

Fixed Wireless Competitors

Based on FCC filings, there are three Fixed Wireless providers offering service in the proposed project area: Fastlink, Lingo, and US Cellular/TDS. The speeds offered by Lingo and TDS are well under the 25/3 threshold. Fastlink, claims in their FCC filings to offer speeds up to 30Mbps to 78% of the proposed project area. However, Fastlink has published tower coverage maps (http://www.fastlinkcommunications.com/index.php?page=tower_coverage_maps) that illustrate their coverage is incomplete and will vary based on serviceability factors (like line of sight). It remains uncertain as to how many locations Fastlink can offer 30Mbps service to; however, given the coverage map and technology, the applicants believe the data received by the FCC is over-stating Fastlink's coverage.

Fixed Wireless Speed Distribution in Build Area (FCC 477 Data, June 2020) =

Patrick County:

Below is a summary of providers in the proposed project area and speeds offered based on FCC 477 data at the census block level, as of June 2020. The FCC 477 filing data is the most comprehensive source for providers and speed distribution; however, it is lagged and can over-state coverage of a given speed in a given census block.

Wireline Speed Distribution in Build Area (FCC 477 Data, June 2020)

Wireline Competition

CenturyLink is the only Wireline provider in the proposed project area. FCC data indicates that the majority of blocks in the project area have a maximum speed of 60Mbps, however, actual availability of speeds >25Mbps within a block is believed to be much more limited. CenturyLink DSL speeds offered vary greatly from location to location based on a number of factors including distance from the ISP. CenturyLink states on their website, "Where you live will affect your DSL Internet speed. DSL upload and download speeds vary greatly depending on your ISP, your distance from your ISP, and your internet activity"

<https://ir.centurylink.com/news/news-details/2021/Lumen-to-sell-local-incumbent-carrier-operations-in-20-states-to-Apollo-Funds-for-7.5-billion/default.aspx>.

Spectrum performed serviceability checks on CenturyLink's website for the proposed project area and confirmed that actual CenturyLink offerings vary significantly from location to location within a block. CenturyLink's speed offerings based on the FCC data are believed to be greatly overstated and the majority of locations are believed to be served by less than 25Mbps.

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Fixed Wireless Competitors

Based on FCC filings, there are two Fixed Wireless providers offering service in the proposed project area: Fastlink and US Cellular/TDS. The speeds offered by TDS are well under the 25/3 threshold. Fastlink, claims in their FCC filings to offer speeds up to 30Mbps to 100% of the proposed project area. Fastlink has published tower coverage maps http://www.fastlinkcommunications.com/index.php?page=tower_coverage_maps that illustrate their coverage is not complete/consistent and will vary based on serviceability factors (like line of sight). It cannot be accurately determined how many locations Fastlink can offer 30Mbps service to, however, given the coverage map and technology Spectrum believes the FCC data is significantly over-stating Fastlink's coverage.

Fixed Wireless Speed Distribution in Build Area (FCC 477 Data, June 2020) =

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

Answer:

None of the proposed project areas include areas that are subject to funding from the federal grant programs specified. However, as illustrated in the Attachment 1B, the proposed projects create synergies that could accelerate the awarded RDOF build outs in contiguous areas.

In the latest FCC Rural Development Opportunity Fund (RDOF) grant process, Spectrum won several locations in Carroll and Patrick Counties. These awards consisted of 1,441 locations in Carroll County and 873 in Patrick County. These RDOF award locations are adjacent to Spectrum's VATI proposed project areas, but do not overlap and are not included in the VATI proposed project areas. Spectrum and the counties are seeking to enhance the RDOF investment by expanding further into these adjacent unserved areas using VATI funds to extend the same Fiber to the Premise Ethernet Passive Optical Network (FTTP EPON) architecture to the additional unserved locations in the proposed project areas that are not covered under any other grant program.

The other non-satellite RDOF locations were awarded to Wilkes Telephone Membership Corporation. The attached map (Attachment 2) identifies both Spectrum's and Wilkes' locations. None of these locations overlap with the requested VATI Proposed project areas.

Other than Spectrum's RDOF awards, the Counties and Spectrum have not received any other federal funding through broadband program grants.

4. Describe if any blocks awarded in Rural Digital Opportunity Fund (RDOF), excluding those awarded to satellite internet service providers, are included in the VATI application area. If RDOF areas awarded to terrestrial internet service providers are included in the VATI application, provide a map of these areas and include information on number of passings in RDOF awarded areas within the VATI application area, and Census Block Group ID number for each block group in the project area. Label Attachment: Attachment 3 – RDOF Awarded Areas Form in VATI Area

Answer:

There are no RDOF areas won by Spectrum or any other terrestrial provider included in this VATI proposed project application. The locations of the proposed project areas are adjacent to the RDOF areas, but not included in the VATI propose project areas. We are not seeking any further funding subsidy within the RDOF awarded areas.

Type of Passings

Total Number of Passings in the Project Area that lie within Preliminarily Awarded RDOF Areas¹

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Residential

0

Businesses (non-home based)

0

Businesses (home-based)

0

Community Anchors

0

Non-residential

0

Total Number of RDOF Passings

0

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5. Overlap: To be eligible for VATI, applicants must demonstrate that the proposed project area(s) is unserved. An unserved area is defined as an area with speeds below 25/3 mbps and with less than 25% service overlap within the project area for wireless projects and 10% for wireline projects. Describe any anticipated service overlap with current providers within the project area. Provide a detailed explanation as to how you determined the percentage overlap. Label Attachment: Attachment 4 – Documentation Unserved Area VATI Criteria.

Answer:

Carroll County:

As described in response to question #2, CenturyLink is the only known Wireline provider offering DSL speeds <25Mbps in portions of the proposed Carroll County project. The vast majority of what CenturyLink offers in this area is 10Mbps or less. Based on serviceability spot checks on CenturyLink's website, 40Mbps or 60Mbps may selectively be available, but it is estimated that would impact <1% of the proposed project build areas, based on the vast majority of checks returning 10Mbps or less.

FastLink is the only Fixed Wireless provider offering speeds above 25Mbps (speeds advertised up to 30Mbps). FCC filings over-state Fastlink's coverage and based on tower coverage maps, their actual coverage is believed to be much less. Overall, the project build area is believed to be unserved.

Patrick County:

As described in response to question #2, CenturyLink is the only known Wireline provider offering DSL in the proposed Patrick County project. DSL speeds offered vary significantly from location to location. Despite offering maximum speeds in a block of 40-80Mbps, serviceability checks on CenturyLink's website indicate actual speeds offered are generally lower. The majority of CenturyLink's actual offerings are believed to be below 25Mbps, and the area is believed to be unserved.

FastLink is the only Fixed Wireless provider offering speeds above 25Mbps (speeds advertised up to 30Mbps). FCC filings over-state Fastlink's coverage and based on tower coverage maps, their actual coverage is believed to be lower. Overall, the project build area is believed to be unserved.

6.

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

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

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

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

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

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

Answer:

a.

Anchors

Business

Residential

Total

Carroll

1

44

1,118

1,163

Patrick

17

26

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	647
	690
Total	
	18
	70
	1,765
	1,853

b.

Not Applicable

c.

In calculating project costs for the proposed project areas in this application, Spectrum utilized a combination of desktop analyses along with field walkout verifications to better determine any necessary special construction. Through this process, Spectrum looked at GIS maps, FCC data, census block data and information provided by the County to serve all of the unserved areas in the proposed project areas, per VATI guidelines. Spectrum is proposing a Fiber to the Premise (FTTP) – Ethernet Passive Optical Network (EPON) architecture. Locations within 1,500 feet of the proposed network in the adjacent rights-of-way will be serviceable without additional special connection fees outside of Spectrum’s standard installation fees that may apply. The Counties acknowledge that the objective of connecting the identified locations in this manner may be limited by constraints in individual cases, e.g., where property owners do not allow necessary access, or where Spectrum cannot obtain access to necessary private easements or rights-of-way. Accordingly, the final determination of unserved locations will be determined through field verification by Spectrum and the Counties if awarded this grant.

d.

While neither Spectrum nor the Counties have identified locations that would require special construction as part of this grant, final locations will be determined through field verification as discussed in 6(c) above.

e.

Carroll County:

Based on the FCC 477 filing data, 244 build locations are in a Census Block served by 10/1 or less. However, it is anticipated that a significant portion of the locations in the Census Blocks attributed to Fastlink in the FCC data (speeds up to 30Mbps) are likely not serviceable or not serviceable up to full advertised speeds.

[Max Speed Available in Project Build Area Census Blocks, based on FCC 477 Data](#)

Patrick County:

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Based on the FCC 477 filing data, the maximum speed offered in the census blocks in the build area exceeds 10/1, however, both Fastlink's and CenturyLink's coverage of speeds >25Mbps is believed to be significantly overstated for reasons stated in questions #2 and #5. In summary, the nature of the technology types (Fixed Wireless and DSL) indicates that actual coverage with higher speeds is limited and inconsistent.

Max Speed Available in Project Build Area Census Blocks, based on FCC 477 Data

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

Answer:

Upon completion, residents in the Proposed project area will have access to Spectrum's Spectrum Internet Gig service (up to 1000/500 Mbps). With Spectrum Internet, customers can simultaneously stream videos, download music and more without sacrificing performance. Spectrum provides free modems and the fastest, most powerful in-home WiFi to do more on more devices.

Spectrum employs a nationwide pricing structure (called Spectrum Pricing & Packaging), which offers standardized pricing for each tier of broadband internet service Spectrum offers new customers across its service territory. Spectrum's pricing strategy ensures that rural customers receive the same pricing as other highly competitive areas in the state. Spectrum's wireline broadband offerings currently include no data caps, usage-based pricing, early termination or modem fees.

Current prices for Spectrum's Spectrum Internet Assist, Spectrum Internet, and Spectrum Internet Ultra service tiers, and its planned pricing for the Spectrum Internet Gig service tier, are as follows:

Speed Tier; Downstream Mbps; Upstream Mbps; Standard Monthly Rate – without Promotional Pricing; Installation Fee

Spectrum Internet Assist; 30; 4; \$17.99; \$0.00

Spectrum Internet; 200; 10; \$74.99; \$49.99

Spectrum Internet Ultra; 400; 20; \$94.99; \$49.99

Spectrum Internet Gig; 1000; 500; \$134.99; \$199.99

In addition to the standard, non-promotional rates itemized above, Spectrum may also offer promotional pricing, including bundled discounts. Spectrum's current promotional offerings can be found at <https://www.spectrum.com/internet> Spectrum's terms of service will apply to all tiers of service.

To make broadband more accessible for low-income learners and seniors, we offer **Spectrum Internet Assist**, an industry-leading high-speed, low-cost broadband service for qualified customers. Introduced in 2016, Spectrum Internet Assist is available to households where one or more members of household are a recipient of: the National School Lunch Program, including through the Community Eligibility Provision, or Supplemental Security Income (for applicants age 65+). Throughout the duration of this program, Spectrum Internet Assist has met all benchmarks set by the FCC. This product includes a free internet modem, no current data caps, no contracts and high speed internet speeds at 30 Mbps. Eligible households can now apply for the product and provide eligibility documentation online, or by phone. A

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flyer further describing this program is attached as Attachment 19

Spectrum will provide broadband internet and voice services to the project area using fiber-to-the-premises (FTTP) via Ethernet Passive Optical Network (EPON) architecture, hereafter referred to as FTTP EPON architecture. This FTTP EPON architecture is a standardized model that is currently operated by Spectrum across the country, engineered and managed to meet 1 Gbps downstream speeds, 500 Mbps upstream speeds, and latency of less than 80 milliseconds, and with the ability to scale to higher performance specifications in the future.

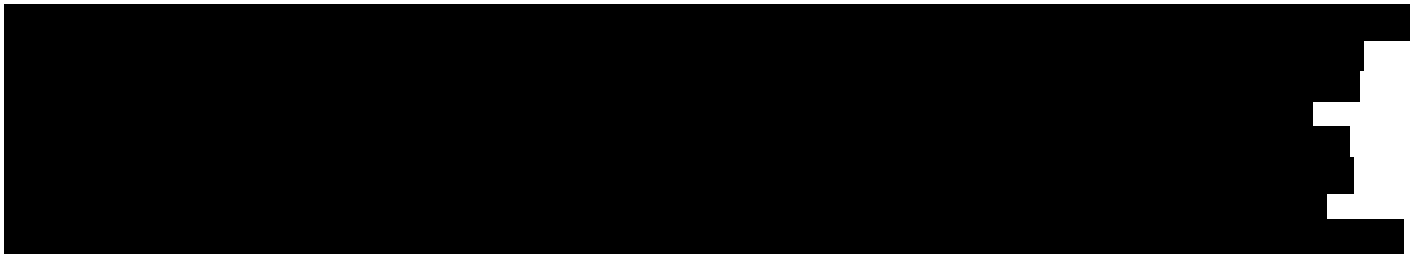
Spectrum's FTTP EPON network offers the highest customer quality in last-mile solutions. In addition to very low levels of signal loss of a propagating light signal, fiber networks are immune to ingress noise. Additionally, fiber networks have very few active (*i.e.*, powered) components in the network, lowering expected maintenance and increasing reliability.

This network design provides high speeds, long-term capacity, and increased network performance for the support of interactive services. FTTP offers very high bandwidth and low latency service attributes that accommodate numerous members of a household or small business simultaneously using bandwidth-intensive applications, such as video conferencing, telemedicine, video streaming, gaming, virtual or augmented reality sessions, and numerous other applications. As the market demands faster speeds, Spectrum expects to meet the needs of our customers by continuing to upgrade our network. Spectrum's national and uniform infrastructure scales to ensure consistency and quality throughout its network, whether in rural or urban areas. Spectrum's network designs and quality control have also enabled Spectrum to seamlessly meet the unprecedented bandwidth demands of the pandemic.

The FTTP EPON architecture will also enable Spectrum to meet, and substantially exceed, all latency requirements for the project area. The most recent Measuring Broadband America report released on January 4, 2021 tested latency over Spectrum's Hybrid Fiber Coax (HFC) network using DOCSIS technology confirmed Spectrum is achieving latency of 26 milliseconds. Spectrum anticipates the same or lower latency with the FTTP EPON architecture deployed in the project area due to fewer active components in the path used in this architecture.

The project will consist of deploying last-mile FTTP EPON facilities from existing Spectrum hub locations to the project area and within the project area. The pre-existing upstream Spectrum hub locations to which this last-mile network will connect, are, in turn, already connected to Spectrum's national backbone through a tiered network structure. Spectrum's ability to connect the proposed last-mile network to this pre-existing hub facility will both help simplify the scope of the proposed project and will result in efficiencies for both the Project budget and timeline.

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Attachment 17 [END CONFIDENTIAL INFORMATION]

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

Answer:

[BEGIN CONFIDENTIAL INFORMATION]

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[END CONFIDENTIAL INFORMATION]

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:

Spectrum has reviewed and identified all the unserved areas as defined by the FCC under the 477 reports. Further, Spectrum, Carroll and Patrick Counties have layered in local data from broadband surveys to ensure all unserved locations are identified. We have also factored the RDOF award areas into our proposed project area, so that we are clear on the areas of need.

The WPPDC has carefully reviewed our proposed service areas, as well as the second WPPDC application, and when combined with RDOF awards will provide universal coverage in Carroll and Patrick counties.

If this proposed project is awarded, Spectrum's final network design and walkout of the proposed project area may determine that additional locations not included in the application could also be served.

11. Project Readiness

Describe the current state of project development, including but not limited to: planning, preliminary engineering, identifying easements/permits, status of MOU or MOA, and final design. Prepare a detailed project timeline or construction schedule, identifying specific tasks, staff, contractor(s) responsible, collection of data, etc., and estimated start and completion dates. Applicants must include Memorandums of Understanding (MOUs) or Memorandums of Agreement (MOAs) between applicants (drafts are allowable). Label Attachments: Attachment 7 – Timeline/Project Management Plan; Attachment 8 – MOU/MOA between Applicant/Co-Applicant; (up to 20 points)

Answer:

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Project Plan and Major Project Activities and Timelines

This project was physically ridden out by our in-house construction staff. They are experienced in looking at such network expansions. They counted the number of existing passings, the mileage from the nearest network tie point and calculated the project cost. The cost is derived from years of company experience, internal (proprietary) template worksheets.

If the grant is awarded, this project would be designed, planned and overseen by our in-house Technical Operations team. The construction of the system would be completed by contractors, but managed by internal Spectrum employees.

To consistently expand its network to serve so many new homes and businesses each year, Spectrum uses a comprehensive proprietary construction project management system called PRISM—a proven tool for tracking and managing all construction activity on a project-by-project, passing-by-passing basis, with the ability to separate out various types of projects and passings by dwelling type and area. On an ongoing basis, PRISM manages thousands of construction jobs, encompassing millions of tasks across multiple Spectrum departments and third-party vendors. PRISM is able to accomplish this via a comprehensive real-time “Task Dashboard.” The Task Dashboard fosters visibility and drives accountability across each of PRISM’s five thousand users. This allows all groups involved (including those responsible for construction, permitting, design, and finance) to know the tasks for which they are responsible, and the timeframe allotted to each of these tasks.

Spectrum will likewise use PRISM to manage and meet its obligations in the project area. A centralized design team will separate Spectrum awards in each state into multiple projects in PRISM. Each project will proceed through the following project phases managed through PRISM.

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[END CONFIDENTIAL INFORMATION]

Because Spectrum has a well-established process for initiating and overseeing new construction projects, existing relationships with contractors to perform design, make-ready and construction work, and holds numerous regulatory authorizations and pole attachment agreements that can facilitate prompt access to rights-of-way and utility poles, it anticipates that it would be able to start work on the Project promptly upon approval.

However, Spectrum has a plan to begin work promptly and complete the Project on a defined timeline, subject to timing of grant awards, pole attachment make-ready work required to install facilities, permitting delays, ability to access relevant locations, or other delays outside Spectrum’s reasonable control, including pandemic-related or raw materials shortages. An estimated and planned schedule is outlined in Table 5 below.

Memorandum of Agreement

If this VATI grant application is awarded, Charter and West Piedmont Planning Development Council will negotiate Memorandum of Agreement which a draft is attached as Attachment 8.

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:

Neither West Piedmont Planning District Commission (WPPDC) nor Spectrum have received any prior VATI awards as co-applicants.

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13. Matching funds: Complete the funding sources table indicating the cash match and in-kind resources from the applicant, co-applicant, and any other partners investing in the proposed project (VATI funding cannot exceed 80 percent of total project cost). In-kind resources include, but are not limited to: grant management, acquisition of rights of way or easements, waiving permit fees, force account labor, etc. Please note that a minimum 20% match is required to be eligible for VATI, the private sector provider must provide 10% of the required match. If the private co-applicant cash match is below 10% of total project cost, applicants must provide financial details demonstrating appropriate private investment. Label Attachments: Attachment 9 - Funding Sources Table; Attachment 10 – Documentation of Match Funding

Answer:

See Attachment 9 – Funding Sources Table – **CONFIDENTIAL**

See Attachment 10 – Documentation of Match Funding - Charter

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:

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[END CONFIDENTIAL INFORMATION]

Spectrum has significant RDOF locations in Carroll and Patrick counties. After focused targeting, this award would provide universal coverage in the proposed project area. If this VATI award is granted, it could accelerate the build time-frame to the 2,314 locations in the RDOF award, which currently requires completion by 2028.

In addition to the financial leverage, the collaboration between the counties and Spectrum will allow the parties to identify and mitigate potential inhibitors and streamline permitting processes to ensure that construction of the network is done quickly. Additionally, upon completion of construction, Spectrum will work with the Counties to provide messaging when the services are available, including the low-income packages, to promote higher adoption rates and overall connectivity to the network.

This VATI award would afford Spectrum the ability continue to extend their network to reach additional unserved households, businesses, and other community anchor institutions across the Counties.

15. Marketing: Describe the broadband adoption plan.

a. Explain how you plan to promote customer take rate, including marketing activities, outreach plan, and other actions to reach the identified serviceable units within the project area. Provide the anticipated take rate and describe the basis for the estimate. (up to 10 points)

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

Answer:

a. Spectrum utilizes multifaceted marketing approach, especially when entering a new community, to ensure new customers are aware of available offerings. Residential marketing tactics include door-to-door direct sales representatives in your community, television and radio advertisements and mailers. Spectrum generally has a special promotional offers to entice residents in newly built areas to subscribe quickly.

Based on internal take rate data, in combination with competitive information determined by Charter, it is anticipated that the Counties will result in the following take rate percentages:

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Carroll

1,163

49%

570

Patrick

690

44%

303

Spectrum Enterprise will use similar marketing tactics to enroll small, medium and large businesses, nonprofit organizations and government entities in both standard and personalized solutions.

b.

No American should be kept from accessing the internet ecosystem because of an inability to afford service or equipment or due to fear or a lack of digital literacy. Spectrum has long been committed to helping to close these gaps.

- To make broadband more accessible for low-income learners and seniors, we offer **Spectrum Internet Assist**, an industry-leading high-speed, low-cost broadband service for qualified customers. Introduced in 2016, Spectrum Internet Assist is available to households where one or more members of household are a recipient of: the National School Lunch Program, including through the Community Eligibility Provision, or Supplemental Security Income (for applicants age 65+). Throughout the duration of this program, Spectrum Internet Assist has met all benchmarks set by the FCC. This product includes a free internet modem, no current data caps, no contracts and high speed internet speeds at 30 Mbps. Eligible households can now apply for the product and provide eligibility documentation online, or by phone.
- To increase adoption and access to technology, we offer philanthropic support to community organizations and have doubled our yearly commitment to the **Spectrum Digital Education Grant** program, which provides computers, digital education classes, and technology labs for thousands across the country.
- Spectrum is a participating provider in the **FCC Emergency Broadband Program**, which provides eligible households with a temporary credit towards broadband service of up to \$50 per month, or \$75 for households on Tribal lands.

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- Spectrum Enterprise introduced a turnkey solution, **Stay Connected K-12**, in 2020, which enables schools to offer high speed, cable broadband internet access direct to their students, educators and staff in their homes.
- Spectrum has deployed emergency services and offers during times of disaster. As the country has battled COVID-19, Spectrum connected nearly 450,000 students and teachers to reliable, high-speed broadband for free for two months, kept nearly 700,000 customers connected when they faced economic hardship, gave small businesses a month of free services, and forgave \$85 million in customers' overdue balances when they had a hard time paying bills due to COVID-related hardship. During the pandemic, and following natural disasters, Spectrum has historically opened wireless hotspots to ensure connectivity when it matters most.

By educating and partnering with nonprofits, government entities and other key community partners, Spectrum ensures information about low-cost products and services is readily available to vulnerable communities.

16. Project Management: Identify key individuals who will be responsible for the management of the project and provide a brief description of their role and responsibilities for the project. Present this information in table format. Provide a brief description of the applicant and co applicant's history and experience with managing grants and constructing broadband communication facilities. Please attach any letters of support from stakeholders. If the applicant is not a locality(s) in which the project will occur, please provide a letter of support from that locality. Attachment 11 – Letters of Support.

Answer:

Key Individuals – Project Leaders

Robert Church-Sr. Dir. Regional Construction

Charter Communications, Inc.

25 years HFC/Fiber Construction Experience

Mike French-Regional Construction Manager

Charter Communications, Inc.

22 years HFC/Fiber Construction Experience

Michael Jordan-Regional Construction Manager

GTS-Contractor

30 years HFC/Fiber Construction Experience

Jason Crawford-Project Manager

GTS-Contractor

28 years HFC/Fiber Construction Experience

Michael Armbrister

West Piedmont Planning Development Commission

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19 years of experience with grant administration and project management

Spectrum is currently the second largest broadband provider in the United States. The company has achieved growth through innovation and acquisitions of cable properties, most recently completing transactions with Time Warner Cable and Bright House Networks. U.S. News and World Report recently named Spectrum Internet as the “**Best Internet Service Provider for Rural Areas**,”^[1] (Attachment 18) and Spectrum’s commitment to service quality has resulted in Multichannel News naming Spectrum as **Operator of the Year for 2020**. Spectrum’s unparalleled commitment to service quality was especially evident in response to the pandemic. Spectrum’s network continued to perform well despite higher levels of peak bandwidth usage. And Spectrum accomplished all this while making adjustments to how and where we worked in response to COVID protocols.

Spectrum has worked with governments across the country on joint projects targeted at broadband expansion. Spectrum therefore has extensive experience with managing and completing projects of the sort contemplated by the application, and has been awarded projects exceeding \$50 million in grant support in recent years, many of which it has already completed. Recent joint projects undertaken by Spectrum with state and local governments include the following:

Examples of Previous Federal and State Broadband Grant Awards

State

Location

Type of Grant

Amount

Year

AL

State of Alabama

CARES Act Funding

\$12,405,391

2020

CA

Brookside Country Club

CA CASF Grants

\$848,063

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2020

CA

Country Meadows Mobile Home Park

CA CASF Grants

\$2,120,390

2020

CA

El Dorado Estates

CA CASF Grants

\$1,445,032

2020

CA

Foothill Terrace Mobile Home Village

CA CASF Grants

\$444,388

2020

CA

Los Alisos and Los Robles Mobile Estates

CA CASF Grants

\$1,021,655

2020

CA

Monterey Manor Mobile Home Village

CA CASF Grants

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\$784,322

2020

CA

Plaza Village Mobile Estates

CA CASF Grants

\$622,811

2020

CA

Soboba Springs Mobile Estates

CA CASF Grants

\$907,817

2020

CA

Villa Montclair Mobile Home Park

CA CASF Grants

\$543,530

2020

MA

New Marlborough

State Broadband Grant

\$3,105,000

2018

MA

New Braintree

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2022 WPPDC Carroll & Patrick Universal Broadband Project

State Broadband Grant

\$1,576,000

2020

MA

Tyringham

State Broadband Grant

\$680,000

2017

MA

Hancock

State Broadband Grant

\$530,000

2017

MA

West Stockbridge

State Broadband Grant

\$472,000

2016

MA

Hinsdale

State Broadband Grant

\$477,000

2016

MA

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West Piedmont PDC

2022 WPPDC Carroll & Patrick Universal Broadband Project

Lanesborough

State Broadband Grant

\$651,000

2016

MA

Peru

State Broadband Grant

\$1,115,000

2017

MA

Princeton

State Broadband Grant

\$910,000

2017

MA

Sandisfield

State Broadband Grant

\$2,607,800

2019

MD

Somerset

State Broadband Grant

\$1,208,159

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West Piedmont PDC

2022 WPPDC Carroll & Patrick Universal Broadband Project

2020

MN

Rosemount North

State Broadband Grant

\$499,072

2020

NC

Rockingham County

CARES Act Funding

\$1,346,539

2020

NC

Robeson County

State Broadband Grant

\$2,000,000

2020

OH

Clark County

CARES Act Funding

\$2,954,669

2020

WI

Menominee Reservation

CARES Act Funding

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2022 WPPDC Carroll & Patrick Universal Broadband Project

\$1,464,809

2020

Total:

\$48,712,487^[2]

[1] U.S. News and World Report, *Best Internet Providers for Rural Areas* (July 8, 2021), <https://www.usnews.com/360-reviews/internet-providers/best-rural>

[2] Grants less than \$400,000 are reflected in the total but have been omitted from the list of examples.

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:

[BEGIN CONFIDENTIAL INFORMATION]

REDACTED INFORMATION BEING SUBMITTED DIRECTLY TO DHCD

Please see

Attachments 12 (Derivation of Costs) CONFIDENTIAL

REDACTED INFORMATION BEING SUBMITTED DIRECTLY TO DHCD

Attachment 13 (Documentation of Supporting Cost Estimates) - CONFIDENTIAL

REDACTED INFORMATION BEING SUBMITTED DIRECTLY TO DHCD

[END CONFIDENTIAL INFORMATION].

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18. The cost benefit index is comprised of state cost per unit passed. Individual cost benefit scores are calculated and averaged together to create a point scale for a composite score. Provide the following:

a. Total VATI funding request

b. Number of serviceable units
(up to 125 points)

Answer:

a. Total VATI funding request

\$4,182,370

b. Number of serviceable units (up to 125 points)

1,853 Serviceable Units

19. **Commonwealth Priorities (Up to 40 points)**

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

a. Businesses, community anchors, or other passings in the proposed project area that will have a significant impact on the locality or region because of access to broadband.

b. Unique partnerships involved in the proposed project. Examples include electric utilities, universities, and federal/state agencies.

c. Digital equity efforts to ensure low to moderate income households in the proposed project area will have affordable access to speeds at or above 25/3 mbps.

Answer:

a. The project will result in 1,765 new residential passings, 70 new business passings and 18 new community anchor passings across the two-county project area. There are numerous significant impacts and benefits of this project, including the educational benefit of residential connections for public school and higher education students. The strong need for residential broadband access cannot be understated after the impacts of the Covid-19 pandemic on educational institutions.

The project will also address a serious need for health care access in parts of the project area, specifically Patrick County. With no hospital or urgent care facility, access to telehealth has become a critical need for residents in Patrick County. This need exists in other parts of the rural region as well.

Finally, by providing broadband access to community facilities, and churches, it is anticipated that information concerning public sector programs, job opportunities, and access to medical care, not readily available at the present time in many parts of the regional project area, may become available for low-income individuals and those with limited access to transportation who need services. Furthermore, broadband availability will enhance services and communications for public safety and emergency services personnel across the region.

b. This project represents a unique public-private partnership between two counties in southwest Virginia, an internet service provider, and one of Virginia's planning district commissions, West Piedmont. The creation of this project and grant application is a testament to the strong relationship that developed among these partners.

There are also many sub-partners in this project, including Carroll and Patrick County public school systems, public libraries, economic developers, and businesses and industries. The importance of this project is evident in the letters of support from the members of the communities that understand the critical need for broadband access in the regional project area.

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c. Spectrum is committed to continuing to expand connectivity and to bring more people online. We have long recognized the importance of the service we provide to families, small businesses, and America's future. By bringing high-speed broadband to more people, including through this project, we are empowering them to find the opportunities they need to thrive in the 21st Century and supporting Virginia's digital equity goals. We are proud of our work to meet these needs and while the digital divide has narrowed and our efforts and investments have played a role, we know our job is not done. Too many families remain without broadband internet service, and diverse and rural communities are often the hardest hit. Spectrum is committed to being a part of the comprehensive solution needed to close these gaps, including bringing broadband service to more people in more places, in partnership with the Commonwealth.

As the nation's second largest internet service providers, Spectrum is committed to supporting programs that promote digital literacy in the communities we serve. Spectrum deploys several initiatives geared towards digital literacy and digital equity across our 41-state footprint:

- Through our philanthropic effort, Spectrum Digital Education, Spectrum supports nonprofit organizations that educate community members on the benefits of broadband and how to use it to improve their lives. These grants are part of our 5-year, \$7 million commitment to support broadband technology
- Spectrum sponsors several philanthropic programs in addition to Spectrum Digital Education, including Spectrum Scholars, a scholarship for under-represented college juniors in financial need; Spectrum Employee Community Grants, which supports Spectrum employees' local volunteer activities; and the Spectrum Community Investment Loan Fund, which supports small and minority-owned businesses whose goods and services help meet core needs in financially underserved communities within the company's footprint.
- In addition to these programs, Spectrum regularly brings personalized programming and events to the communities we serve through partnerships with nonprofits and government entities. Examples of these programs include:
 - **STEM Activity Day:** Spectrum sponsored STEM activity day with a local partner for youth to enjoy kinesthetic activities to promote an interest in STEM.
 - **Resource Fair:** Spectrum joins an existing community resource fair, for example at a school or health organization, to share information about services like Spectrum Internet Assist with senior citizens and/ or families with K-12 students, provide giveaways and offer door prizes or raffle items.
 - **Digital Equity Roundtable:** Spectrum works with an area organization to host a roundtable event for a community to learn about the importance of digital equity.
 - **Digital Education Crash Course:** Spectrum works with an area partner to host an interactive, where community work to answer trivia about digital safety and compete in games to learn how to use the internet at home.
 - **My Future in a Digital World Roundtable:** Spectrum sponsors a discussion for middle and high school aged students on the importance of a strong digital education, how digital skills improve your ability to succeed and discussion of different career paths.
 - **Scholarship Contests:** Spectrum hosts a scholarship contest for high-school aged students to write an essay about topics including rural broadband deployment, digital equity, etc., provides small scholarships to winners and hosts an event for winning students to read their essays aloud.
- Past recipients of awards through Spectrum programs in Virginia include:
 - LGBT Technology Institute – Spectrum Digital Education Grant – Staunton, VA
- Example partner organizations for future efforts in your community may include:
 - Youth enrichment and senior citizen focused organizations, including museums, afterschool programs, education-focused nonprofits and groups focused on critical needs.
 - *Note: While Spectrum can partner directly with schools and libraries for community outreach, we are unable to provide financial donations to these groups.*

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2022 WPPDC Carroll & Patrick Universal Broadband Project

20. Additional Information

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

Label Additional Attachments as:

- a. Attachment 14 – Two most recent Form 477 submitted to the FCC or equivalent
- b. Attachment 15 - Point and Polygon shapefiles, in.zip file form, showing proposed passings and project area
- c. Attachment 16 - For wireless applicants: shapefiles, in .zip file form, indicating RSSI projections in the application area
- d. Attachment 17 – XXXXXXXX
- e. Attachment 18 – XXXXXXXX
- f. Attachment 19 – XXXXXXXX
- g. Attachment 20 – XXXXXXXX

Answer:

Attachment 17 - Charter Network Diagrams & System Design **CONFIDENTIAL** – Question 8

Attachment 18 – US News & World Report - “Best Internet Provider for Rural Areas” – Question 1 & 16

Attachment 19 – Spectrum Internet Assist Program Flyer – Question 8

Attachment 20 - Full Narrative with Graphics and FOIA Waiver

Attachments:

Map(s) of project area, including proposed infrastructure

Attachment1ProjectAreaMap913202131458.pdf

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

Attachment2DocumentationofFederalFundingArea913202131521.pdf

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

Attachment3RDOFAwardedAreasincludedinVATI913202131559.pdf

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Documentation that proposed project area is unserved based on VATI criteria

Attachment4DocumentationUnservedAreaVATICriteria913202131630.pdf

Passings Form (Use template provided)

Attachment5PassingsForm913202131716.pdf

Timeline/Project Management Plan

Attachment7CONFIDENTIALTimelineProjectMangementPlanREDACTED9142021120128.pdf

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

Attachment8MOAWPPDCCharter913202131800.pdf

Funding Sources Table (Use template provided)

Attachment9FundingSourcesTable914202121239.pdf

Documentation of Match Funding

Attachment10DocumentationofMatchFundingCharter914202121256.pdf

Letters of Support

VATICharterLoS914202122554.pdf

Derivation of Cost/Project Budget (Use template provided)

Attachment12CONFIDENTIALDerivationofCostREDACTED9142021120209.pdf

Documentation of Supporting Cost Estimates

Attachment13CONFIDENTIALDocumentationtoSupportCostEstimatesREDACTED9142021120259.pdf

Two most recent Form 477 submitted to the FCC or equivalent

Attachment14CharterFCC477913202131840.pdf

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

Attachment15CONFIDENTIALPolygonShapeZipFilesKMZMapREDACTED9142021120309.pdf

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Optional

Attachment17CONFIDENTIALNetworkDiagramsSystemDesignsREDACTED9142021120319.pdf

Optional

Attachment18BestInternetProvderforRuralAreas913202132017.pdf

Optional

Attachment19SpectrumInternetAssitProgram913202132029.pdf

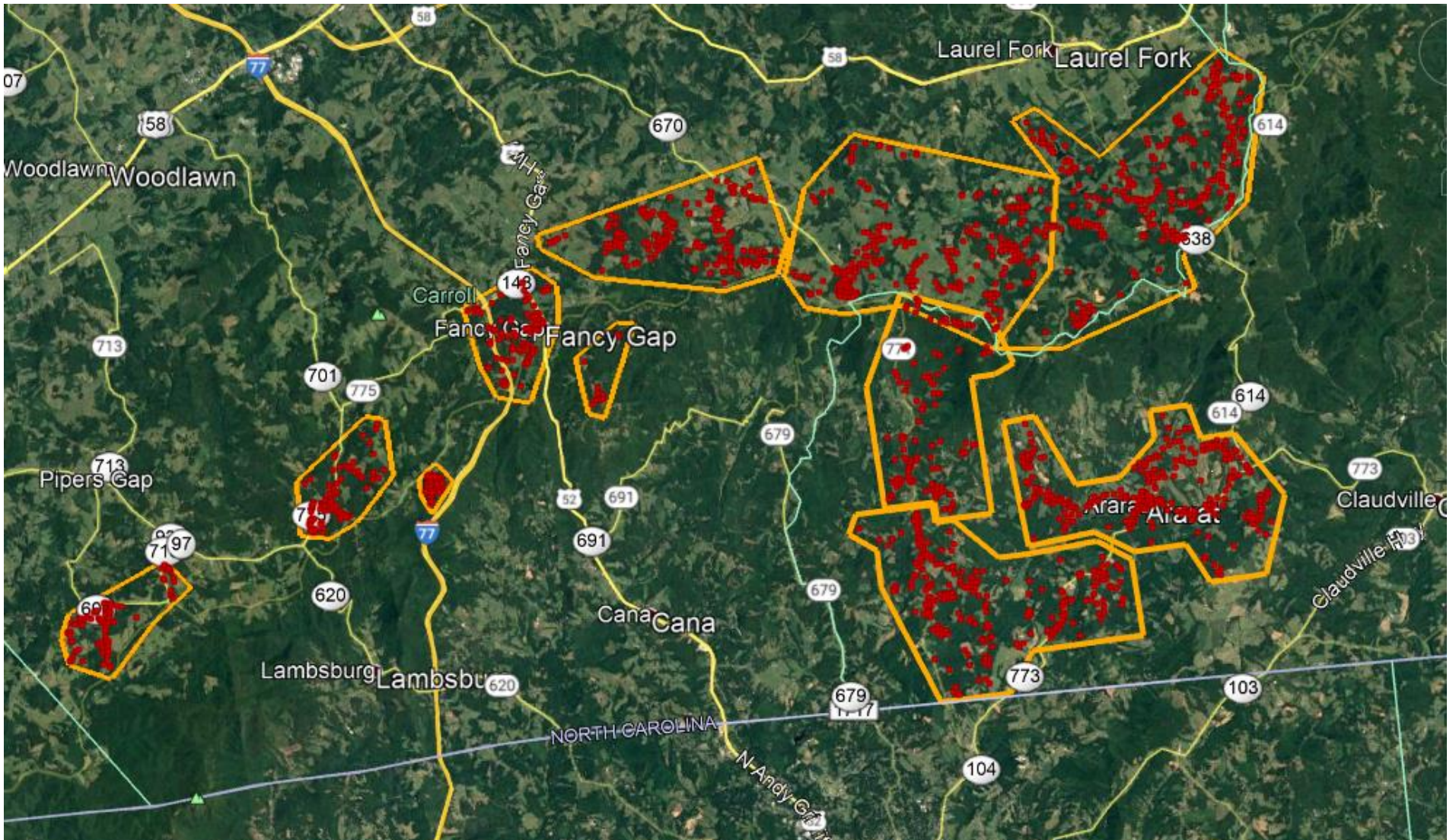
Optional

NarrativeandFOIAWaiver914202122514.pdf

ATTACHMENT 1

West Piedmont Planning Development Commission / Charter Communications

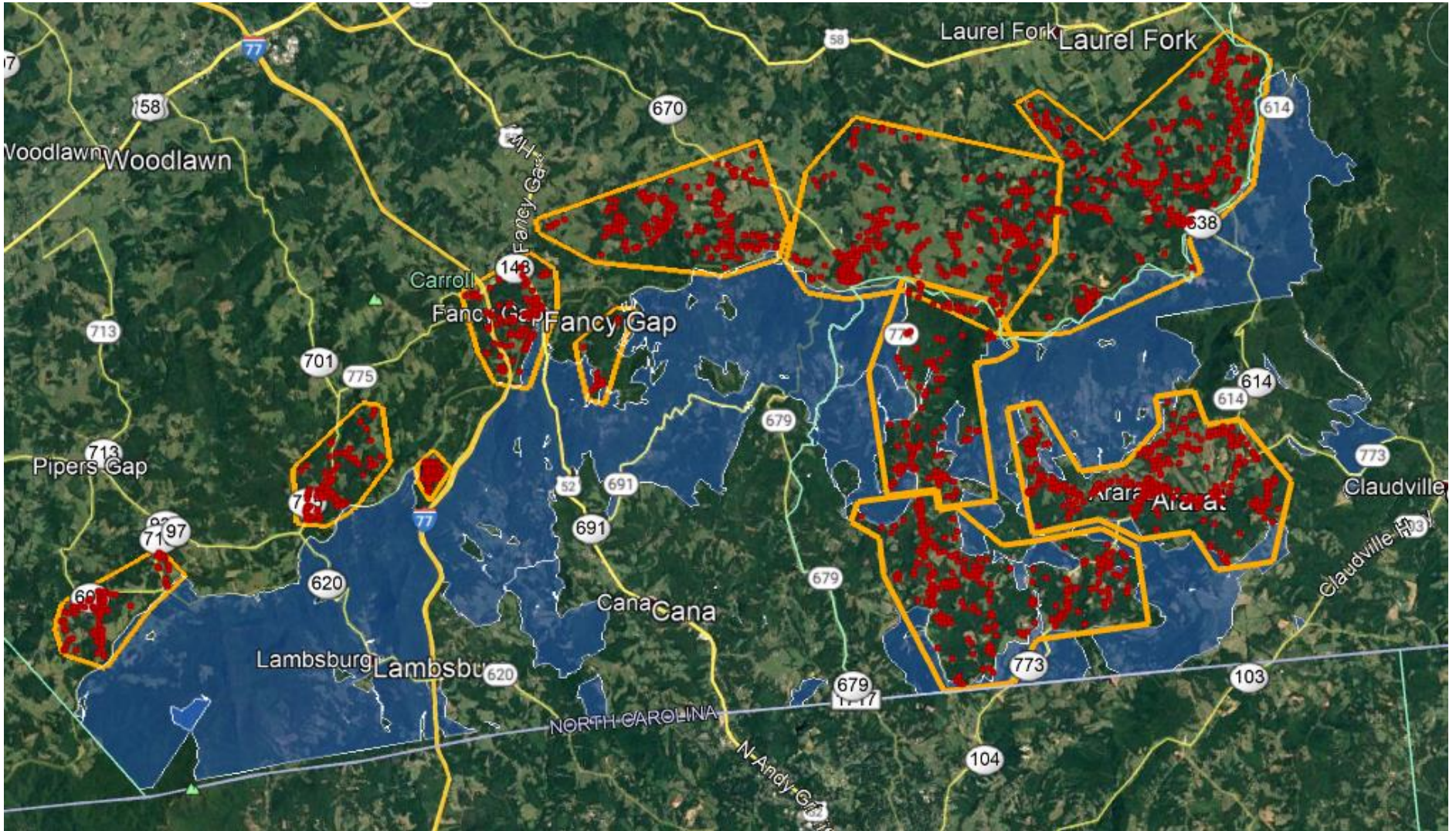
VATI Application Area - Carroll & Patrick Counties, VA



ATTACHMENT 1 B

West Piedmont Planning Development Commission / Charter Communications

VATI Application Area w/ Adjacent (non-VATI) RDOF Areas - Carroll & Patrick Counties, VA



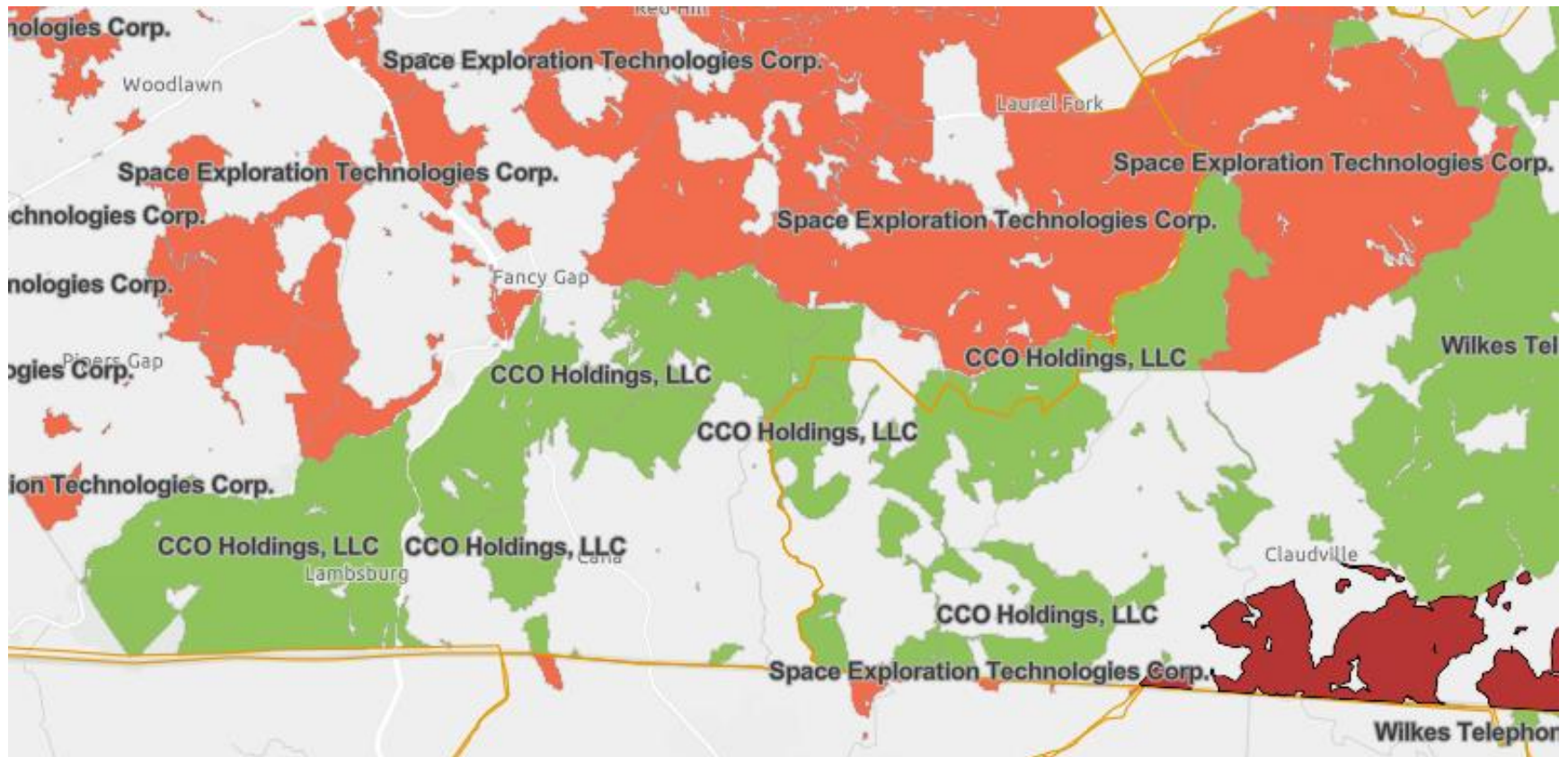
Attachment 2

RDOF Awards in Carroll & Patrick Counties

(No terrestrial awards are included in VATI application)

CCO Holdings, LLC = Charter Communications

Wilkes Telephone = RiverStreet



Attachment 3

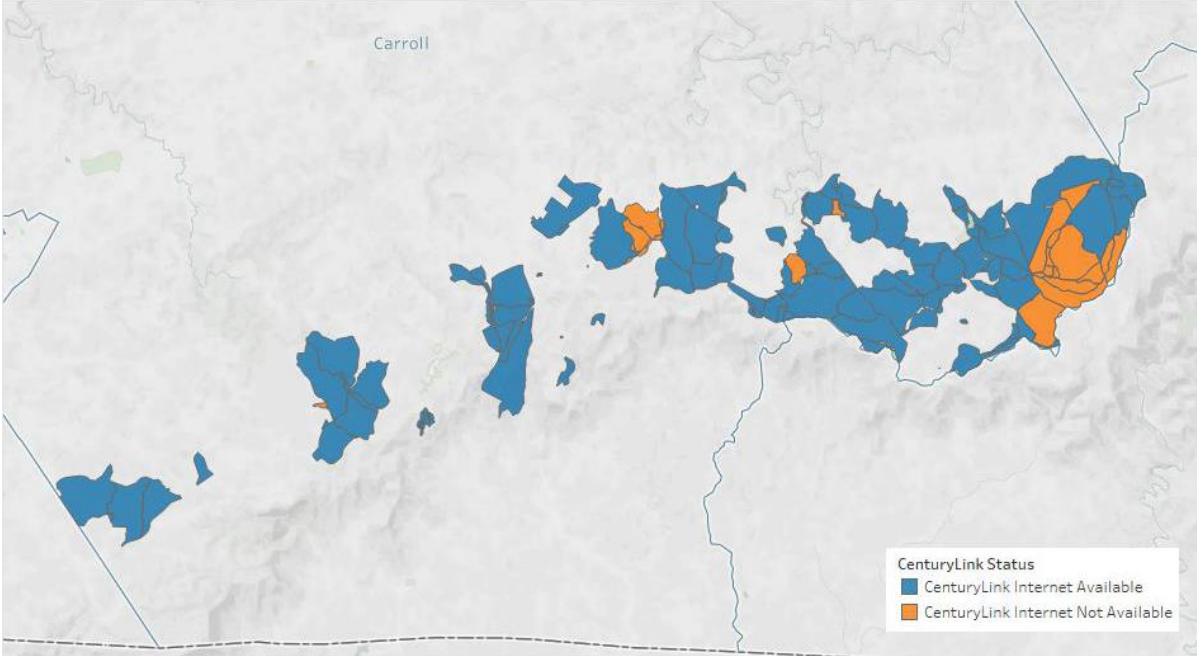
RDOF Awarded Areas in VATI

There are no RDOF awarded areas in this VATI application.

Attachment 4

Carroll County

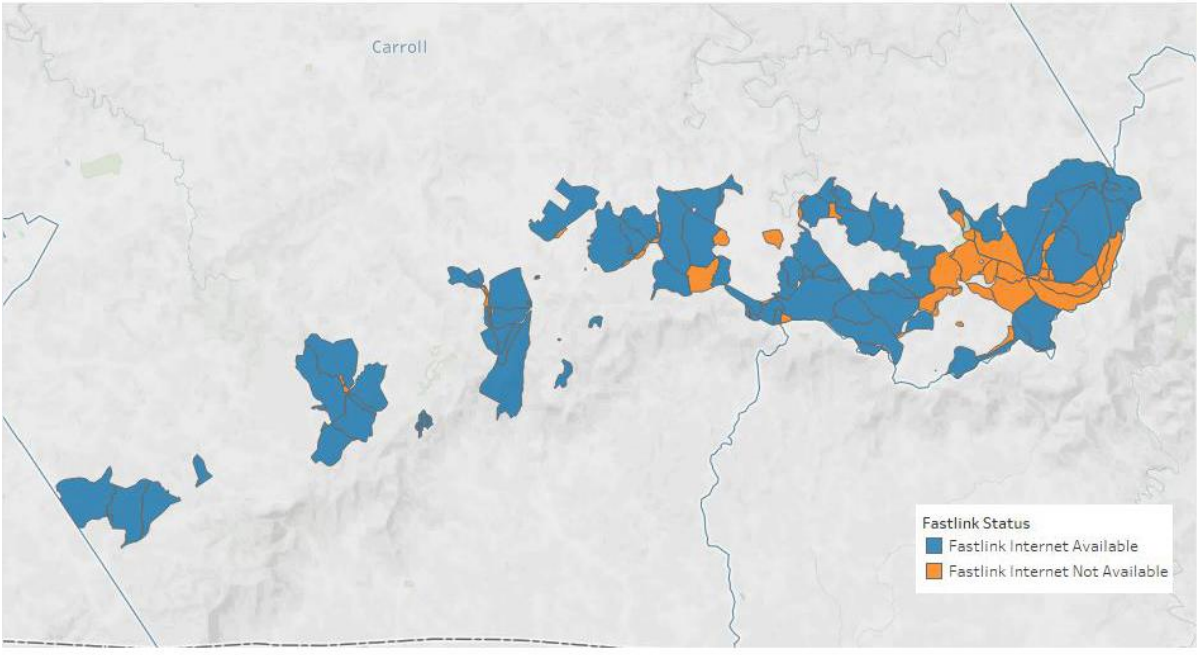
CenturyLink Service Area (Based on FCC 477 Data) in Proposed Charter Build Area



Source: FCC 477 data, June 2020 (Census Block data)
Footnote: CenturyLink offers DSL speeds <25Mbps throughout the proposed build area. Isolated instances were found of CenturyLink speeds >25Mbps but these instances are very limited.

Carroll County

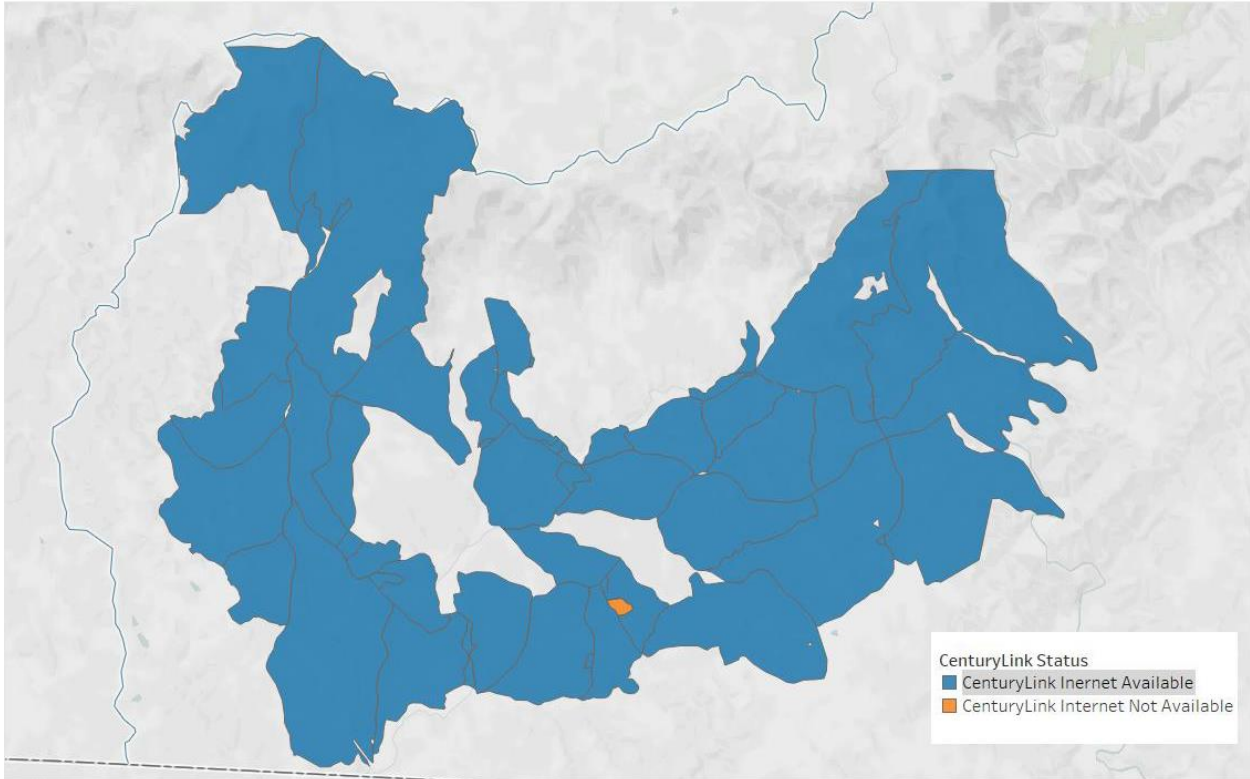
FastLink Fixed Wireless Service Area (Based on FCC 477 Data) in Proposed Charter Build Area



Source: FCC 477 data, June 2020 (Census Block data)
Footnote: Fastlink Fixed Wireless is available in Carroll County, however, FCC filing data is believed to over-state actual coverage. Fastlink coverage maps indicate less consistent coverage and serviceability cannot be determined without a site survey.

Patrick County

CenturyLink Service Area (Based on FCC 477 Data) in Proposed Charter Build Area

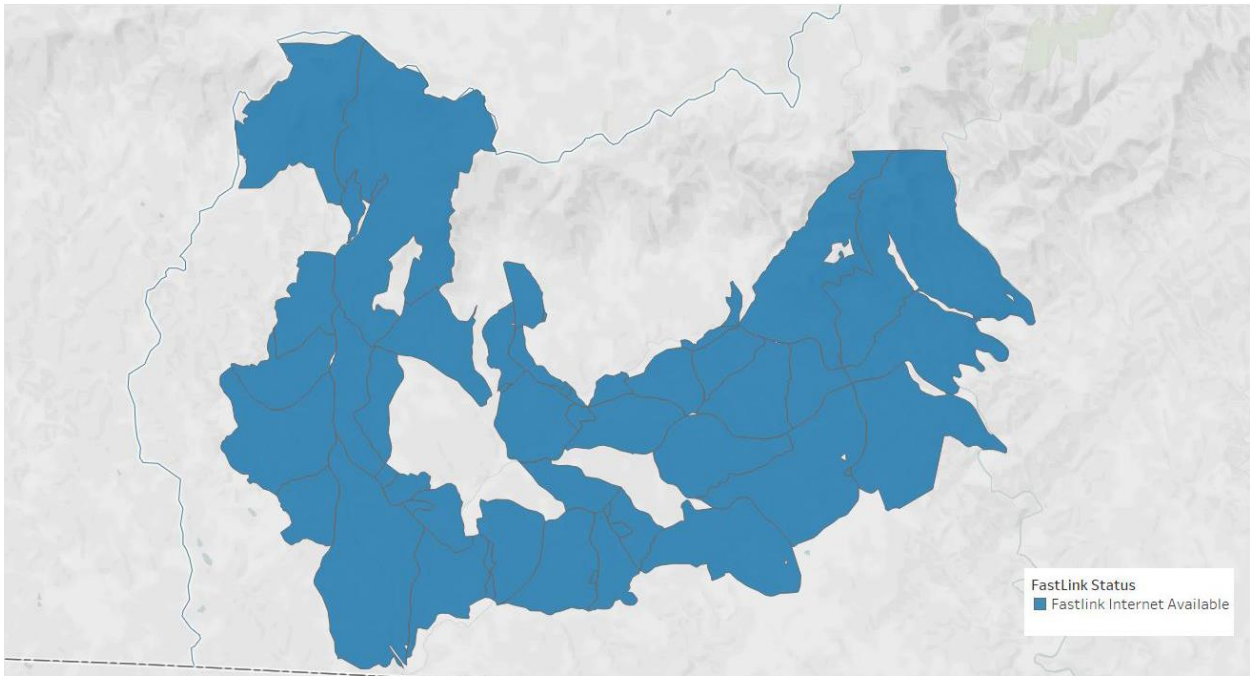


Source: FCC 477 data, June 2020 (Census Block data)

Footnote: CenturyLink offers DSL speeds throughout the proposed build area. Based on FCC data, some blocks have max speeds >25Mbps, however, DSL speeds vary significantly from location to location and CenturyLink's predominant speeds offered appear to be <25Mbps.

Patrick County

FastLink Fixed Wireless Service Area (Based on FCC 477 Data) in Proposed Charter Build Area



Source: FCC 477 data, June 2020 (Census Block data)

Footnote: Fastlink Fixed Wireless is available in Patrick County, however, FCC filing data is believed to over-state actual coverage. Fastlink coverage maps indicate less consistent coverage and serviceability cannot be determined without a site survey.

2022 Virginia Telecommunication Initiative (VATI) Passing Form

Type of Passings	Total Number of Passings in the Project Area ¹	Passings in the Project Area, without Special Construction Costs Required ²	Passings with Special Construction Costs budgeted in the Application ³	Number of Passings with Speeds at 10/1 or below in Project Area ⁴
Residential	1,765	1,765	0	232
Businesses (non-home based)	70	70	0	9
Businesses (home-based)	0	0	0	0
Community Anchors	18	18	0	2
Non-residential	0	0	0	0
Total	1,853	1,853	0	244

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

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

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

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

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

⁴ The number of structures in the project area that do not have access to internet at speeds of at least 10 mbps download and 1mbps upload.

Definitions

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

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

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

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

Memorandum of Agreement
West Piedmont Planning District Commission
And
Charter Communications

WPPDC WEST UNIVERSAL BROADBAND PROJECT

This agreement is made on _____, between the West Piedmont Planning District Commission (WPPDC), P.O. Box 5268, Martinsville VA 24115, and Charter Communications (Charter), 12405 Powerscourt Drive, St. Louis, MO 63131.

RECITALS:

- A. Whereas, the Department of Housing and Community Development (DHCD) will be implementing the Virginia Telecommunications Initiative (VATI) grant program; and
- B. Whereas, the primary objective of the VATI is to provide financial assistance to supplement construction costs by private sector broadband service providers, in partnership with local units of government to extend service to areas that presently are unserved by any broadband provider; and
- C. Whereas, applications must be submitted by a unit of government with a private sector provider as a co-applicant; and
- D. Whereas, Carroll, Patrick, Henry, and Franklin Counties have requested that the WPPDC be the applicant on their behalf; and
- E. Whereas, Carroll, Patrick, Henry, and Franklin Counties have designated Charter as the co-applicant, and
- F. Whereas, the WPPDC and Charter will partner for a grant application for the VATI grant program to serve areas in Carroll, Patrick, Henry, and Franklin Counties.

NOW, therefore, the parties agree as follows:

THE WPPDC on behalf of Carroll, Patrick, Henry, and Franklin Counties:

- 1. The WPPDC will act as fiscal agent for the project and maintain accurate records of the financial expenditures of the VATI monies, including, but not limited to financial reports, monthly funding draws; approval of Charter expenditures and invoices, documentation of matching funds, etc.; and
- 2. The WPPDC will provide overall grant management of the VATI project and provide coordination and administration of the project by working as a liaison between the localities, Charter, and DHCD, and
- 3. The WPPDC will assist the Counties and Charter with educating the public about the project and services to be available in their areas.

Charter:

1. Charter will provide the WPPDC required information for the management of the VATI grant, including, but not limited to progress reports and monthly invoices; and
2. Charter will provide the required documents to the counties for zoning and permit applications; and
3. Charter will design, engineer, construct, and implement broadband services as designated in the VATI application in compliance with the grant program requirements, and
4. Charter will guarantee that the minimum bandwidth offerings for the project will be no less than the Federal Communications Commission's definition of broadband as of the date of project commencement; and
5. Charter will own all assets to be funded by VATI grant monies.

This agreement will terminate when DHCD notifies the WPPDC that all grant requirements have been satisfied.

Witness the following authorized signatures on behalf of the parties:

By:

Date

By: _____
Michael R. Armbrister
Executive Director, WPPDC

Date

By: _____
NAME
TITLE, Charter Communications

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	\$ 4,182,370	51.8%	Pending
CHARTER COMMUNICATIONS	\$ 3,706,000	45.9%	APPROVED
CARROLL COUNTY	\$ 118,239	1.5%	APPROVED
PATRICK COUNTY	\$ 70,145	0.9%	APPROVED
	\$		
	\$		
	\$		
TOTAL	\$ 8,076,754	100 %	



September 10, 2021

Mr. Erik Johnston, Director
Department of Housing and Community Development
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Letter of Commitment to Collaborate with Carroll and Patrick Counties thru the West Piedmont Planning Development Commission in the State of Virginia in Applying for Grants under the Virginia Telecommunication Initiative's Broadband Infrastructure Program

Dear Mr. Johnston,

I am writing on behalf of Spectrum Southeast, LLC by its manager Charter Communications, Inc. (hereinafter "Spectrum") to express Spectrum's commitment to work with Carroll and Patrick Counties in the State of Virginia (collectively "Counties") thru the West Piedmont Planning Development Commission in connection with the Virginia Telecommunication Initiative's ("VATI") Broadband Infrastructure Program ("Program"). In its application, Spectrum will be seeking grant funds that will be used to bring Charter's high-speed broadband internet access services to areas identified as in need of such services as set forth in the application. I am authorized to offer this commitment on the company's behalf.

As set forth in greater detail in the application, Spectrum would assume responsibility for managing all aspects of the construction effort, including project design, data collection, securing permits, completing a construction plan, and overseeing the construction and eventual operation of the proposed broadband network. Additionally, Spectrum would provide an estimated contribution of \$3,706,000; and personnel to the project as described in the application, and would also oversee maintenance of the system, customer intake, and service delivery once the project is completed. Spectrum would work with the Counties and DHCD, as needed, to coordinate the verification of addresses served by the project and elimination of any regulatory barriers.

More details can be found in the accompanying application. As requested by the Counties, Spectrum hereby provides this Letter of Commitment for this Project. We look forward to working with you on this endeavor, and would be happy to further discuss if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Shannon O'Hara".

Regional Vice President, Field Operations
Charter Communications, Inc.

Michael Watson
County Administrator



Crystal Adams

Michelle Dalton

Office of the Administrator

605-1 Pine St.
Hillsville, VA 24343

September 10, 2021

Michael Tanck
3140 West Arrowood Rd
Charlotte, NC 28273

Dear Mr. Tanck,

On behalf of Carroll County, I am happy to relay that Carroll County has appropriated \$118,239 to serve as a local match toward the VITA application Broadband Project. We are excited about this project and look forward to working with you in the near future to provide fiber to our underserved area.

If you have any questions, please feel free to contact my office directly at 276-730-3001.

Respectfully,

Michael Watson
Carroll County Administrator



COUNTY OF PATRICK

Board of Supervisors

September 14, 2021

Dear Virginia Telecommunication Initiative Representative,

Our County has experienced a lack of internet service for many years. The current carrier has been unresponsive in solving our citizens' service issues and causing grief and anguish among our population. During these unprecedented times, many people are working remotely and depending on internet which is unreliable, at best.

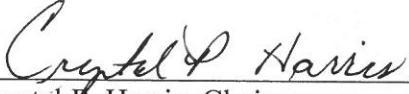
On September 13, 2021 at a regular meeting of the Patrick County Board of Supervisors, a motion was made by Denise Stirewalt to authorize a \$70,145.00 commitment to Charter Communications for the development and promotion of the VATI grant application for broadband services seconded by Clyde DeLoach and carried unanimously.

Voting Aye: Stirewalt, Kendrick, DeLoach, Fulk, Harris

Voting Nay: None

Thank you for your consideration.

Cordially,



Crystal P. Harris, Chairperson

The County of Patrick will not discriminate on the basis of race, religion, color, sex, national origin, age, marital or veteran status, medical condition or handicap, or any other status protected by law. We are an Equal Opportunity Employer.

SENATE OF VIRGINIA

WILLIAM M. STANLEY
20TH SENATORIAL DISTRICT
ALL OF HENRY AND PATRICK COUNTIES; ALL OF
THE CITIES OF GALAX AND MARTINSVILLE; PART
OF CARROLL, FRANKLIN, HALIFAX, AND
PITTSYLVANIA COUNTIES; AND PART OF THE
CITY OF DANVILLE
P. O. BOX 96
GLADE HILL, VA 24092



COMMITTEE ASSIGNMENTS:
AGRICULTURE, CONSERVATION AND
NATURAL RESOURCES
JUDICIARY
LOCAL GOVERNMENT

Virginia Department of Housing and Community Development
600 Easy Main Street, Suite 300
Richmond, Virginia 23219

RE: Charter VATI Support

Virginia Department of Housing and Community Development:

The purpose of this letter is to strongly support a VATI grant application that will greatly improve the quality of life for those in Patrick and Carroll County. As we have seen during the Coronavirus Pandemic, more people have had an increased need for broadband services, especially those in rural areas. This grant would strongly impact these areas and provide citizens accessibility to a much-needed utility.

As you are aware, broadband is a much-needed utility that will greatly impact the quality of life for those who have access. Additionally, there are numerous benefits for those with broadband services. One of these benefits is the access to telemedicine in rural locations. Many of those which this grant would impact have to drive over twenty miles in order to access high quality health care options. With expanded broadband services, more people would be able to receive proper medical care without having to travel so far to access it.

An additional benefit of broadband expansion is the opportunity to connect with the rest of the world. With this connection, individuals would now have the opportunity to pursue business endeavors and to support local economies. Within the impacted areas, farmers will be able to sell their crop in an online market and local businesses will be able to expand to online market bases.

Charter has displayed interest in rural broadband deployment in Patrick and Carroll County. Currently, Charter serves approximately 2314 locations within these counties and wishes to expand rural broadband services. With the acceptance of this grant, I know Charter will continue to serve Southside Virginia and put this much needed utility in more homes and businesses.

If I can be of further assistance, please do not hesitate to contact me at the telephone number or mailing address listed above.

Until then, I remain;

Very truly yours,

A handwritten signature in blue ink, appearing to read "W. Stanley". The signature is fluid and cursive, with a prominent initial "W" and a trailing flourish.

William M. Stanley, Senator

BLUERIDGECROSSROADS
economic development authority

Carroll – Galax – Grayson VIRGINIA

September 7, 2021

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

RE: Letter of Support for Carroll County 2021 VATI Application

Dear Dr. Holmes:

We are writing in support of Carroll County's VATI application and their joint grant application with Charter Communications for building improved internet in rural areas of Carroll County, Virginia.

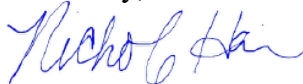
The citizens of Carroll County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when teleworking became more prominent, and students were trying to continue their classwork virtually rather than be in a classroom.

Carroll County is home to Wildwood Commerce Park, a Tier 4 site business ready industrial park managed by BRCEDA. One area of needing focus to attract business to the park, is the availability of reliable internet throughout Carroll County, especially for residential use. While Wildwood Commerce Park is served by internet, adequate broadband is needed throughout Carroll County for potential new residents.

We recognize the importance of broadband to existing citizens and future citizens in Carroll County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The citizens of Carroll County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider their application and know we will stand in support of their efforts.

Sincerely,



Nichole Hair
Executive Director

The Blue Ridge Crossroads Region is Virginia's "Entrepreneurial Region."



Carroll County Public Schools

605-9 Pine Street
Hillsville, Virginia 24343

Telephone: (276) 730-3200
(276) 236-8145
Fax: (276) 730-3210

Office of the Superintendent

9/07/21

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

Letter of Support for 2021 VATI Application

Dear Dr. Holmes:

We are writing in support of Carroll County's VATI application and their joint grant application with Charter Communications and Carroll County for building improved internet in rural areas of Carroll County, Virginia.

The citizens of Carroll County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom.

During school closures it was determined through contact with families, surveys and participation in online learning activities approximately 30% of our students and their families either had no affordable internet options, no access to internet services in their community, or slow dial up service. For us to be effective as a school system in the 21st century reliable internet service is a requirement not a luxury.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Carroll County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider this application and know we will stand in support of their efforts.

Sincerely,

Mark A. Burnette, Ed.D.

"Education for All... Success for Everyone"

Donald Bryant
Executive Director

Marty Hall

Kaye Carter

Greg Hawks

Terry Russell



Larry Edwards
Chairman

Martin Slate

Mandi McCraw

Richard Sowers

Carroll County Economic Development Authority

605-1 Pine St.
Hillsville, VA 24343

August 27, 2021

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

Letter of Support for 2021 VATI Application

Dear Dr. Holmes:

We are writing in support of Carroll County's VATI application and their joint grant application with Charter Communications and Carroll County for building improved internet in rural areas of Carroll County, Virginia.

The citizens of Carroll County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Carroll County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider their application and know we will stand in support of their efforts.

Respectfully,

A handwritten signature in black ink that reads "Larry Edwards".

Larry Edwards
EDA Chairman

September 11, 2021

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

Dear Dr. Holmes,

I am writing in support of any and all Patrick County VATI applications and any and all joint grant application with any internet service provider, especially where there is coordination and cooperation with West Piedmont Planning District Commission for building improved internet in rural areas of Patrick County, Virginia.

My wife and I are senior “senior citizens” and have lived half of our adult lives at her homeplace in Patrick County. Our son is 51 years old and a 1988 graduate of our county high school. He went on to graduate from VCU (Richmond) in communication arts. For his graduation *he bought me* a state of the arts computer. I quickly mastered Microsoft Office applications (word, spreadsheets, etc.) and used them in my business as a real estate broker in Hillsville.

About that time the Wide World Web came into being and locally we were able to obtain a dial-up connection at home and at the office. Email communication changed our lives and business.

Paul’s career in web design began in Richmond. He is employed in that discipline with Capital One and works interstate and globally from his Richmond home a with high speed connection.

We immediately connected to DSL when offered but only got 1.5 Mbps, which is our current contracted speed offered. It seemed like an improvement at the time because it was 3X dial-up.

The years passed and the WWW grew. I asked Paul “why is the industry designing simple web pages with so much graphic content that are almost impossible to load”. His response was “probably 98% of connections in the USA are way faster than yours and the pages are designed for that audience”. We haven’t even considered video streaming beyond dummed-down Youtube. There is no way that I can participate in Zoom meetings from home. We battle each other for bandwidth, but remain married after 54 years.

We have our health issues and difficulties with tele-medicine, appointments and preregistration with each visit. Paul has been able to spend some time with us but can’t work from our home. There is no cell coverage at our location. In order to keep his job, he had to “go mobile” and park miles away to pick up a tower and use a company-provided “hot spot” connection.

I see how modern communications are changing our country and world – for the better. I consider “amazing” what is available to citizens that have high speed internet. I see their growth and progress in business, education, the hospitality industry, etc. However, I see Patrick County being left behind and less desirable for any relocation. Here they can film “*Survivor*”.

Charles Vivier, 2831 Pilot View Road, Hillsville VA 276-952-2691

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

My husband and I are 76 years old, but we use the internet and depend on it. We live at the edge of Patrick County near Bellspur, off Squirrel spur road Rt 614. Our service is almost non existencewe are suppose to get 1.5mps.....most of the time the dsl isn't fast enough to even get a speed test!!! Think of trying to use the internet with a speed of .25mps!!!...and we are paying for this! We have been left behind on every proposal. PLEASE, PLEASE....HELP US TO GET BETTER INTERNET! We struggle with the century link service for phone and internet, with NO hope from them for a better service.

The phone and internet are very very important for use for sickness, virtual Dr. appoints ,etc....since we have no cell service at our house. PLEASE, PLEASE, INCLUDE US AND OUR AREA IN THIS PROPOSAL.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Hilda and Charles Vivier (Patrick County residents)
Hilda@vivier.net. Vivier@swva.net
276 9522691
2831 pilot view rd
Hillsville, VA. 24343

9/13/21

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

I operate a Real Estate firm in the Meadows of Dan community in Patrick County. The poor speed and intermittent service I am tolerating from CenturyLink can make conducting business very difficult at times. If and when the service goes out totally the quoted repair times are unbearable. Any improvement would be greatly appreciated.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Best Regards,
Jim Wagoner (Broker/Owner)
Country Road Realty

646B JEB Stuart Hwy.
Meadows of Dan, VA 24120
Licensed in VA

Office: (276) 952-6582
Mobile: (276) 952-5698
Home: (276) 952-1234

Margaret Hubbard
1394 Cherry Creek Road
Meadows of Dan, VA 24120

September 8, 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

The CenturyLink phone and internet service at my home has frequent outages and is unreliable. Calls to their repair service force one to stay on the phone up to an hour, and repairs are delayed and often require multiple service calls before the problems are fixed. The slow internet means many things either cannot be accomplished online, or they take excessive time. My son who is in high school has difficulty using the internet to complete assignments. The opportunity to obtain quality phone and broadband services would greatly assist my family in many ways such as capabilities for telehealth, high school virtual classes and other assignments, continuing education, and many other uses.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we strongly support these projects.

Sincerely,

Margaret and Lane Hubbard

Subject: Proposed Broadband Grant for Patrick County - Ltr of Support

From: Lillian Puckett <lillianpuckett@outlook.com>

Date: 9/9/2021, 8:30 PM

To: "awalker@co.patrick.va.us" <awalker@co.patrick.va.us>

— Attachments: —

Ltr to Dr T Holmes VA Dept housing & Comm.docx

14.1 KB

Roger Terry
5920 Jeb Stuart Hwy
Meadows of Dan, VA 24120
September 8, 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

The CenturyLink phone and internet service at my home experiences frequent outages and is unreliable. Calls to their repair service force one to stay on the phone up to an hour, and repairs are delayed and often require multiple service calls before the problems are fixed. The slow internet means many things either cannot be accomplished online, or they take excessive time. The opportunity to obtain quality phone and broadband services would greatly assist my family in many ways such as capabilities for telehealth, continuing education, virtual classes for grandchildren when we are caring for them and many other uses.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we strongly support these projects.

Sincerely,

Roger and Libby Terry

9/13/2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

My name is Jana Bush and I am a teacher for Floyd County Public schools. When we went virtual, my internet service was not great. Most teachers and people in Floyd County have good internet service. It was hard for me as a virtual teacher to complete my work at home in Patrick County because of my internet service. Also, my sister-in-law lives in the Bell Spur area and she couldn't do any of her work from home. Also, she can't even watch Netflix or any streaming tv. I can't believe she can't stream any tv shows. We need a better internet for our homes and our work! Please help us!

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Jana Bush

864-398-9292

September 7, 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

I regularly work from home and need a stable internet connection to reliably conduct business. It impacts my performance if I lose connection. Especially with the impacts of Covid, there are more video conferences where bandwidth is critical. The current situation is routinely slow and lacking in business reliability.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,

David Thomason

September 7, 2021

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

Dear Dr. Holmes:

I am writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

In my own experience, I am currently looking for full-time work, and everything from unemployment claims to job interviews are done online, both for convenience and to protect folks from COVID-19. With unreliable internet, these tasks take an unreasonable amount of time, and only 1 device can typically be used at a time per household. Even then, internet is unreliable, making video calls for interviews nearly impossible. This doesn't make a good first impression on potential employers. I'm also applying for board certification in my profession, and most communication is done by email or, again, video calls. Even simply checking and responding to emails can be frustrating and time-consuming given the current state of internet service here. It makes Patrick County and the surrounding area look backward and unappealing even though we have much to offer.

I recognize the importance of broadband to citizens in this county. Such improvements will increase educational opportunities and economic growth in the area. The proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know I will stand in support of their efforts.

Sincerely,

Wes Isley
157 Dogwood Trail
Hillsville VA 24343

7 September 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

I have a financial services business that I am able to work from home and with the data rich programs I use having a faster and stable internet is critical for business. With the recent shift from meeting face to face to meeting a larger percentage of my clients virtually, the current internet solution will lag and garble with virtual meetings which is not an acceptable experience for my clients. I use a voice over IP phone vs my cell phone yet still have trouble often with call quality.

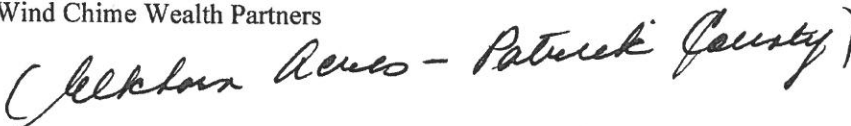
We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,



Brenda L Dobrick
Private Wealth Advisor
Wind Chime Wealth Partners



7 September 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

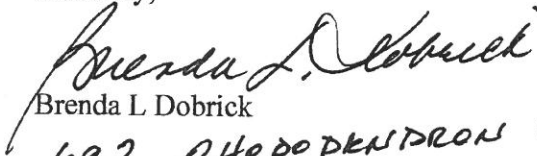
The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

We have had several 'solutions' that have not been effective so would appreciate having a stable and faster internet. We are planning to retire to our mountain home in Elkhorn Acres and as we age, it will also be critical to have a reliable internet/phone/cell service.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,



Brenda L Dobrick

692 RHODODENDRON RD
HILLSVILLE VA 24343
PATRICK COUNTY GROUND HOG MNTNS

9/7/2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

My husband is required to work from home because of his offices being shut down during the pandemic. The internet service is weak and intermittent and greatly effects his ability to stay connected. Even though this is our vacation home, the internet service affects how much time we can spend there. This will also become our permanent home when we retire in the very near future. Staying connected is critical to us, as it has become to everyone nowadays.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Valli Caballero
163 Buck Hollar Road
Hillsville, VA 24343

687 Groundhog Hills Road
Hillsville, VA 24343
September 7, 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

So much of our communications and transactions with businesses we utilize depends on having a reliable and efficient internet link. Without it, we are often forced to drive miles from home to be able to send and receive critical information.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,

William D. Monday, Jr.

12 Laurel Lane : Hillsville, Virginia 24343

September 7, 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

As a resident in Doe Run, broadband internet would enhance property value as well as bringing us into the modern era! There is currently one provider choice for the neighborhood which has marginal service at best. We have made several service calls to the provider over just 2 years of living here full time. The first repair took a technician coming to the house 3 times to fix, the next, twice. Our speed is barely able to handle streaming without buffering, and we have the highest speed package they offer. We also have no cell service, making being in touch with the modern world very difficult.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Leigh E. Meredith

9/5/2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

We have spent many years using substandard internet from Centurylink. As they are the only real game in town we rely on a 50 year old copper wire system using old DSL technology that is not sufficient for internet transmission. As time has gone by the service has gotten less reliable and sometimes to the point of not functioning for any tasks from home. The best hoped for speed right now for us is around 6MB which is substandard for any user on the internet.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Dale Carroll

150 Dogwood Trail Hillsville, VA 24343 276-398-2165

Gene Byrd
900 Groundhog Hills Road
Hillsville, NC 24343

September 5, 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

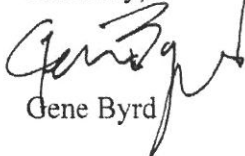
The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

Though our address is Hillsville, we live on Groundhog Mountain, in the western part of Patrick County. We have tried every cell carrier there is, and no cell phone works dependably here, unless you can use in it WiFi mode. Currently, our only internet and telephone option is CenturyLink, whose service is spotty, at best. We have serious concerns about a medical or other kind of emergency with no way to reach first responders.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,


Gene Byrd

Leza Wainwright
800 Groundhog Hills Road
Hillsville, NC 24343

September 5, 2021

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Director, Office of Broadband
Virginia Department of Housing & Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

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The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

During the COVID-19 pandemic, I have been forced to work from home. I cannot tell you how many times in the past 18 months that the CenturyLink internet has crashed, forcing me to travel to Hillsville or Mt. Airy, NC to sit in the Lowe's Hardware parking lot, or go to the library, if I had no calls that day, to work. In the 21st century, in the wealthiest country on Earth, this should be considered unacceptable.

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Please consider these applications and know we will stand in support of their efforts.

Sincerely,


Leza Wainwright

September 4, 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

We have lived in Meadows of Dan for the past 16 years. During 2020, we watched our grandchildren struggle to stay connected for virtual school sessions...many times the connection just dropped. This is a huge reason to be very frustrated not have decent connectivity in today's world- and I'm sure we are all in agreement that education is key to improving the lives of our citizenry.

In addition to the school issues, we own a small business- my wife is an architect and I am a Property Manager. We work remotely most of the time in Meadows of Dan and constantly struggle to connect with numerous banks, tenants, contractors and clients. There is no place in today's world where poor internet can be allowed- it should be a utility like water and power. It's that important to our lives and businesses- our basic livelihoods.

Through our current service provider, CenturyLink, we have been paying a premium for service that does not even come close to the 3mb we are supposed to be getting...we obtain a real time speed of 1.5 mb service that is barely higher than the old dial-in speeds from decades ago. Their equipment is antiquated and NOT maintained. It requires constant tweaking to keep it running at these very low speeds. Additionally, we suffer from a lack of alternative providers from which to obtain service. This is a mockery of the notion that the free market will provide competition at competitive prices.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in full support of their efforts.

Sincerely,



Alan Jurkowski
Property Manager



Mary Lou Jurkowski
Architect

25 Laurel Highlands Circle
Meadows of Dan, VA 24120

GEORGE & REBECCA EDMUNDS

1902 GREENWOOD RD SW
ROANOKE, VA 24015
336-202-4013
Plat: 4314-143, Patrick County

September 4, 2021

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

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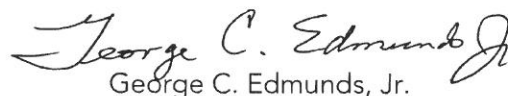
As the owner of a small business—two-hundred- to two-hundred-fifty-thousand dollars of income annually—with clients across the country, the poor quality/slow internet access available will limit my family's time at the home we are building in rural Patrick County. In turn, the amount of dollars we spend in the community will be decreased; we'd rather the opposite occur for the betterment of the entire Patrick County community. We recognize the importance of broadband to other citizens in our County. Such improvements will increase educational opportunities and economic growth in the area.

The proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas. Please consider these applications and know we will stand in support of their efforts.

Sincerely,



Rebecca W. E. Edmunds
President & CEO, r4 llc



George C. Edmunds, Jr.

September 3, 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

As citizens of Patrick County for the last 29 years we have experienced the decline of our phone and Internet service to the point that it has been virtually unusable. There is no question that good Internet service is as necessary today for communication as it ever has been. There have been times when we were out of both phone and Internet service for a week at a time. Since we are elderly we need to be able to keep in touch with doctors as well as family for health and security. In this area cell phone service is not dependable and sometimes none existing due to the mountain terrain. The future of our County depends on good reliable communication. We are hopeful that something will be done in the very near future to correct this situation.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Henry and Marie Mathieu

September 3, 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

We reside in Carroll County, Virginia at the border of Patrick County.

We recognize the importance of broadband to citizens in Patrick County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring the community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Robert Spencer and Jewel Spencer

424 Park Bridge Road

Meadows of Dan, VA. 24120

Sept 3, 2021

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Director, Office of Broadband
Virginia Department of Housing & Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

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Our personal experience with this issue is very frustrating to say the least. Internet capabilities play a very important role in running a successful company and is required to comply with regulations set forth by the state or federal government. Our internet is somewhat okay most of the time even though it is slow.... sometimes it is really, really slow, intermittent, or even nonexistent for days at a time. We need serious updates but our internet provider doesn't seem to really care. The state and federal government requires that businesses efile payroll forms and make payroll deposits.

When your internet is down or not working up to par this is a little hard to get done. Software has to be updated via internet...you most cases you can no longer buy a disc but have to use downloads. Our payroll software is on a desk top computer so therefore it is not portable. The software lets you know when there are new tax updates that need to be installed and you must do that before going to the next step in the payroll process. Needless to say when a 10 minute process takes 3-4 days to complete is not very productive and is very costly when you have not efiled the proper documents in the correct time frame.

I could go on and on.....

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Sincerely,



Susan Cockram, CEO
Strikeforce Pest Prevention / Elimination LLC
23 Clint Lane
Meadows of Dan, VA 24120

09/03/2021

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Director, Office of Broadband
Virginia Department of Housing & Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

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My father, has a second home at 408 Crooked White Oak Trail, Hillsville, VA (Patrick County) that I use and manage as an AirBnB. The lack of broadband and cable TV has caused me to loose several clients to other counties where this service is available. Also, my profession allows me to work from home. However, without high-speed internet service I am unable to do so at this location. So, I am unable to reside here during the work week. Being able to obtain highspeed internet would be a boon to me both personally and professional for my day job and my rental property.

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Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Mark C Park

408 Crooked White Oak Trail

Hillsville, VA 24343

September 3, 2021

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Director, Office of Broadband
Virginia Department of Housing & Community Development
VATI Program
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Richmond, Virginia 23219

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While we are semi-retired residents of Patrick County, our need for true broadband internet service is high. I continue to work as a consultant and all my work is distant. I require broadband for uploading and downloading materials and yet the best I have is 6 Mbps. And that is on a good day and at a good time! I am often unable to download critical files for my work, forcing me to be creative with how I eventually access them. Add to this that outages are frequent and you can see our problem. Additionally, as we are both in our late 60s, 95% of our shopping, even for groceries, is online. Reliable and true broadband today are basic necessities for life in 2021 and yet we have neither here.

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Sincerely,

Diane Edwards

Cynthia Johnson

September 3, 2021

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Director, Office of Broadband
Virginia Department of Housing & Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

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Sincerely,

Scott & Sandy Halstead

Sept 3, 2021

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Director, Office of Broadband
Virginia Department of Housing & Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

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Without improved broadband, I will be unable to continue working from Patrick County and will need to look at relocation. This is not my preference as both my wife and I have ageing parents here that need our support. These parents also need reliable phone service to ensure that they can call for help when they need it. Century Link is not providing that reliable service.

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Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Ernest and Sonita Harris
736 Dairy Road
Meadows of Dan, VA 24120
276-952-5885

09 September, 2021

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

Dear Dr. Holmes:

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The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

The limitations imposed by the slow and sometimes unreliable service through this area make conducting personal business unnecessarily difficult and high volume business communication nearly impossible. It has been necessary to resort to very expensive satellite or special lines communications to conduct business here where rapid order, order tracking and financial information transfer is required. This limits the ability to expand business of that nature locally.

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Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Melvin C. Stanley

Retired President, CEO and board Chairman of Roto-Die Company, Inc which has worldwide operations including manufacturing in Meadows of Dan, Patrick County, Va.

September 2, 2021
Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing & Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

Dear Dr. Holmes:

We are writing in support of the Patrick County VATI application and their joint grant application with RiverStreet Networks and West Piedmont Planning District Commission for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom.

As senior citizens of Patrick County, it is very difficult for my husband and I to interact with our medical team without internet service. We are unable to respond to communications or view our prescriptions and test results. As an instructor at Forsyth Tech Community College, lack of broadband severely limits my ability to communicate with my students and the college.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider their application and know we will stand in support of their efforts.

Sincerely,
Virginia A. Conaway
219 Wayside Rd. Stuart, VA 24171

09-02-21

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

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I work from home and testify in court as an electrical expert throughout the U.S. Having an internet speed that is slower than dial-up from 1995 is stupid. Unfortunately, Century Link is not able / interested in providing land line service for phones that work most of the time either.

Please consider their application and know we will stand in support of their efforts.

Sincerely,

Walter Dragus

Sept 3, 2021

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

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We have four school aged students and at the peak of virtual learning our current internet quit working and it took three weeks and 10 phone calls to get internet reinstated, plus both of us working full time (both are essential workers; a funeral director and producer warehouse floor manager), helping with the kid's school work and having to go to grandparents house for internet was maddening. I have had to sit in a school parking lot to gain access to internet.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

With regards,

Bradly and Terri Wood
1667 Cloudbreak Road
Meadows of Dan, VA 24120
276-692-5416 Brad cell
276-692-7587 Terri Cell

September 3, 2021

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing & Community Development
VATI Program
600 East Main Street, Suite 300
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Diane Edwards

Cynthia Johnson

09/03/2021

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Virginia Department of Housing & Community Development
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Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Mark C Park

408 Crooked White Oak Trail

Hillsville, VA 24343

Sept 3, 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with River Street Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia. The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

Our personal experience with this issue is very frustrating to say the least. Internet capabilities play a very important role in running a successful company and is required to comply with regulations set forth by the state or federal government. Our internet is somewhat okay most of the time even though it is slow.... sometimes it is really, really slow, intermittent, or even nonexistent for days at a time. We need serious updates but our internet provider doesn't seem to really care. The state and federal government requires that businesses efile payroll forms and make payroll deposits.

When your internet is down or not working up to par this is a little hard to get done. Software has to be updated via internet...you most cases you can no longer buy a disc but have to use downloads. Our payroll software is on a desk top computer so therefore it is not portable. The software lets you know when there are new tax updates that need to be installed and you must do that before going to the next step in the payroll process. Needless to say when a 10 minute process takes 3-4 days to complete is not very productive and is very costly when you have not efiled the proper documents in the correct time frame.

I could go on and on.....

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,



Susan Cockram, CEO
Strikeforce Pest Prevention / Elimination LLC
23 Clint Lane
Meadows of Dan, VA 24120

September 3, 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

We reside in Carroll County, Virginia at the border of Patrick County.

We recognize the importance of broadband to citizens in Patrick County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring the community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Robert Spencer and Jewel Spencer

424 Park Bridge Road

Meadows of Dan, VA. 24120

September 3, 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

As citizens of Patrick County for the last 29 years we have experienced the decline of our phone and Internet service to the point that it has been virtually unusable. There is no question that good Internet service is as necessary today for communication as it ever has been. There have been times when we were out of both phone and Internet service for a week at a time. Since we are elderly we need to be able to keep in touch with doctors as well as family for health and security. In this area cell phone service is not dependable and sometimes none existing due to the mountain terrain. The future of our County depends on good reliable communication. We are hopeful that something will be done in the very near future to correct this situation.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Henry and Marie Mathieu

All of the citizens of this county would benefit from access to Internet for a myriad of reasons, some even life-sustaining. I'd like to add my personal reasons for supporting a Broadband project.

Having dependable Internet access would greatly improve my life here in Patrick County. I have two children who rarely get to visit because they have very demanding jobs in Washington, D. C. They both would love to come and stay for extended periods if we had adequate Internet access for them to work from home. Sadly, that limits my time with them and my granddaughter. My daughter recently purchased 22 acres here in the county. She hopes to build a home there but cannot proceed until we have dependable Internet access. I would love having here nearby and am saddened every time I drive by her land.

I truly love living in this beautiful area. It has been home to my ancestors since the 1800's. Let's keep it protected by allowing the people who truly love it and want to protect its beauty to live and work here. Broadband is necessary to the future of Patrick County.

Jennifer Frisch
232 Stella Lane
Meadows of Dan 24120

Subject: Broadband

From: Patricia Wilson <bookwilson@yahoo.com>

Date: 9/4/2021, 11:02 AM

To: <awalker@co.patrick.va.us>

Retired but use the internet to keep in contact with family (spread all over) and friends. I also do work on Ancestry and many days do not have the connecting strength to use it. It is really frustrating the way it goes in and out all the time with what seems to be no rhyme or reason.

Sent from Yahoo Mail for iPhone

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

Our internet has been in the hands of CenturyLink which made no secret of the fact that it was unwilling to provide the dependable service which we needed and was much more interested in serving it's stockholders than it's customers. It is now selling our broadband to another company which appears to be likely to do the same. My family has needed to depend on the internet for contact with relatives and friends, for needed information and for medical appointments while the pandemic rages around us and limits our ordinary avenues of association. The pandemic continues and we need help to strengthen our only available safe links to physical and mental health: dependable phone and internet service.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their effort. We have written letters before. We have made financial contributions for studies and surveys. Please help us see light at the end of this long, dark tunnel.

Sincerely,

Phil and Sara Dalton

GEORGE & REBECCA EDMUNDS

1902 GREENWOOD RD SW
ROANOKE, VA 24015
336-202-4013
Plat: 4314-143, Patrick County

September 4, 2021

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

Dear Dr. Holmes:

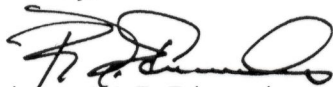
We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.


As the owner of a small business—two-hundred- to two-hundred-fifty-thousand dollars of income annually—with clients across the country, the poor quality/slow internet access available will limit my family's time at the home we are building in rural Patrick County. In turn, the amount of dollars we spend in the community will be decreased; we'd rather the opposite occur for the betterment of the entire Patrick County community. We recognize the importance of broadband to other citizens in our County. Such improvements will increase educational opportunities and economic growth in the area.

The proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas. Please consider these applications and know we will stand in support of their efforts.

Sincerely,



Rebecca W. E. Edmunds
President & CEO, r4 llc



George C. Edmunds, Jr.

September 4, 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

We have lived in Meadows of Dan for the past 16 years. During 2020, we watched our grandchildren struggle to stay connected for virtual school sessions...many times the connection just dropped. This is a huge reason to be very frustrated not have decent connectivity in today's world- and I'm sure we are all in agreement that education is key to improving the lives of our citizenry.

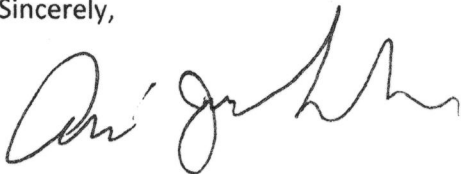
In addition to the school issues, we own a small business- my wife is an architect and I am a Property Manager. We work remotely most of the time in Meadows of Dan and constantly struggle to connect with numerous banks, tenants, contractors and clients. There is no place in today's world where poor internet can be allowed- it should be a utility like water and power. It's that important to our lives and businesses- our basic livelihoods.

Through our current service provider, CenturyLink, we have been paying a premium for service that does not even come close to the 3mb we are supposed to be getting...we obtain a real time speed of 1.5 mb service that is barely higher than the old dial-in speeds from decades ago. Their equipment is antiquated and NOT maintained. It requires constant tweaking to keep it running at these very low speeds. Additionally, we suffer from a lack of alternative providers from which to obtain service. This is a mockery of the notion that the free market will provide competition at competitive prices.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in full support of their efforts.

Sincerely,



Alan Jurkowski
Property Manager



Mary Lou Jurkowski
Architect

25 Laurel Highlands Circle
Meadows of Dan, VA 24120

Subject: Broadband Grant Application Endorsement
From: "Sullivan, Michael" <MSullivan@marshall.edu>
Date: 9/4/2021, 4:43 PM
To: "awalker@co.patrick.va.us" <awalker@co.patrick.va.us>

Please consider this note the strongest possible endorsement for the proposed broadband project to serve Patrick County. Like many retired seniors, access to quality online services is essential to our health and well-being. In our area, where no cable-based internet is available, and where the only internet service is DSL via CenturyLink (a service which is abysmal) is available, broadband access could literally be a lifesaver. Additional benefits would include expanded access to libraries, links to emergency preparedness agencies, to say nothing about a fast and reliable means to assist neighbors who may not have either computers or handheld mobile devices. We would be delighted to see the broadband application be successful. It's time to join this century, as have many other areas of the country with similar demographics.

Sent from my iPhone

Subject: Broadband

From: james wilson <create2002@yahoo.com>

Date: 9/4/2021, 10:04 PM

To: "awalker@co.patrick.va.us" <awalker@co.patrick.va.us>

Dear Sir. Please understand that broadband infrastructure would greatly improve my ability to work from my home.

Sent from Yahoo Mail on Android

Gene Byrd
900 Groundhog Hills Road
Hillsville, NC 24343

September 5, 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

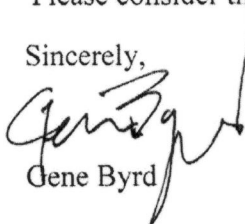
The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

Though our address is Hillsville, we live on Groundhog Mountain, in the western part of Patrick County. We have tried every cell carrier there is, and no cell phone works dependably here, unless you can use in it WiFi mode. Currently, our only internet and telephone option is CenturyLink, whose service is spotty, at best. We have serious concerns about a medical or other kind of emergency with no way to reach first responders.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,


Gene Byrd

Leza Wainwright
800 Groundhog Hills Road
Hillsville, NC 24343

September 5, 2021

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

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We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

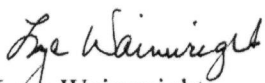
The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

During the COVID-19 pandemic, I have been forced to work from home. I cannot tell you how many times in the past 18 months that the CenturyLink internet has crashed, forcing me to travel to Hillsville or Mt. Airy, NC to sit in the Lowe's Hardware parking lot, or go to the library, if I had no calls that day, to work. In the 21st century, in the wealthiest country on Earth, this should be considered unacceptable.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,


Leza Wainwright

9/5/2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

We have spent many years using substandard internet from Centurylink. As they are the only real game in town we rely on a 50 year old copper wire system using old DSL technology that is not sufficient for internet transmission. As time has gone by the service has gotten less reliable and sometimes to the point of not functioning for any tasks from home. The best hoped for speed right now for us is around 6MB which is substandard for any user on the internet.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Dale Carroll

150 Dogwood Trail Hillsville, VA 24343 276-398-2165

Steve Terry
8043 Squirrel Spur Road
Meadows of Dan, VA 24120
September 3, 2021

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

Dear Dr. Holmes:

I am writing in support of both of the Patrick County VATI grant applications, one a joint application with Charter Communications and West Piedmont Planning District Commission and one a joint application with RiverStreet Networks and West Piedmont Planning District Commission, for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. The critical need for broadband was exacerbated during the ongoing COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and perform other tasks from home.

I have served for almost three years as chairman of the Patrick County Broadband Committee as one of eight members appointed by the Board of Supervisors to assist the county with broadband improvements. I live in an area on top of the mountain where service from CenturyLink, both internet and home phone service is unreliable and frequent outages occur. People in much of our county have totally inadequate service, but in this area in particular those fortunate enough to have any internet service can only receive a maximum of 1.5 Mbps. Actual speeds constantly vary and at times we cannot even sign on, with speeds typically running half of the contracted speed or lower. The system has for several years according to CenturyLink been in exhaust and they will not sign anyone else up for service. Next year CenturyLink expects to complete the sale of their residential phone and internet services to Apollo Funds, a company that specializes in acquisitions of companies in distress and expectations for improvements are not high.

Both Charter and RiverStreet propose to augment the areas they won in the RDOF auction with service in adjacent unserved locations using funds from VATI grants for their respective projects, and both will provide FTTH systems which will include phone service. Both projects

Sept 6, 2021

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

Dear Dr. Holmes:

We are writing in support of both Patrick County VATI applications, joint applications for one project with RiverStreet Networks and West Piedmont Planning District Commission and the other with Charter Communications and WPPDC for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

<We are part time residents of the Doe Run Subdivision in Patrick County. We are 10 miles South of Meadows of Dan off the Blue Ridge Parkway. Under our current internet provider, there is not enough power to even run our security cameras properly. The current service with CenturyLink is very slow and very unreliable. Please consider allowing broadband into our neighborhood.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Greg and Brenda Whitehouse

774 Buck Hollar Rd – Hillsvilles Va 24343

will serve not just areas of Patrick County, but Charter will include adjacent areas in Carroll County and the RiverStreet project will include portions of four counties meeting regional project preferences of the VATI program. These VATI grants will enable the providers for both projects to expedite completion of their RDOF locations by several years, aligning with the commitment of Governor Northam to expedite excellent service to every Virginian.

As Patrick County Broadband Committee Chairman, I hear frequently from county residents with small businesses, families with school children, people who bought or built expensive homes here who expected and need to work from home. I hear from elderly people including my closest neighbor, a wonderful vibrant lady in her 90's who frequently loses phone service and without cellular coverage has no way to contact anyone if she has a medical emergency. I like others, have experienced the need to utilize telehealth, to participate in volunteer groups through Zoom, and to maintain my engineering education through various teleconferences; things I have been unable to do using CenturyLink services at my home. It has been exceedingly difficult for me personally to work on broadband improvements for the county without access to acceptable broadband. A fellow committee member and I have at times actually conducted Zoom committee meetings sitting in a hay field by the side of the road under coverage of a cell tower!

We could give many examples of why broadband is essential but suffice it to say we recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Charter, RiverStreet and our county will utilize the proposed investments in broadband infrastructure to provide excellent phone and broadband to citizens who have been deprived of these services which have been available for some time to people in most of our country and the civilized world. The Citizens of Patrick County in the covered areas will have access to broadband equal to that available to citizens in larger cities and more populated areas, utilizing state-of-the-art systems which can be easily maintained for many decades.

Please consider these two applications and help us achieve these critical services for our citizens and taxpayers who, without your help will continue to struggle for the foreseeable future.

Sincerely,

Steve Terry

Chairman, Patrick County Broadband Committee

I have had so much trouble over the years having consistent service and everything we try is very poor. In this day and age, to have service is necessary to be safe in the area and reach emergency service as well as working. We so need this new hope to bring better service for internet, phone, tv, and feeling like we do have good connection to the world outside of our low-tech neighborhood. I ask you to help us be considered for any grants, or help in this process. I am grateful for your helping.

Blessings, Hugh and Lesa Elder

Doe Run neighborhood

We own a home there

Much thanks for your help

David N. Pleasants
118 Lily Cove Lane
Stuart, VA 24171
davidpleasants@gmail.com

September 6, 2021

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

Dear Dr. Holmes:

We are writing in support of the Patrick County VATI application and their joint grant application with RiverStreet Networks and West Piedmont Planning District Commission for building improved internet in rural areas of Patrick County, Virginia.

The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom.

After spending weekends in Patrick County for 40 years, we moved here permanently 7 years ago to enjoy the beauty of the area and for a better quality of life. At the time, our internet service was sufficient for our needs. However, in the past few years, it has become increasingly unreliable. Due to COVID, my wife now works from home and we own 3 vacation rental properties. We depend on the internet to keep up with the rental bookings and for Debbie's job. Unfortunately, our unreliable, poor internet and phone service has caused us to miss bookings and my wife has had to take days off or miss important Webex meetings due to no internet service. It is very stressful to wake up every morning wondering if the internet is going to be working. In a world where reliable internet service is essential for one's quality of life, residents of Patrick County do not deserve to endure the stress of unreliable internet.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider their application and know we will stand in support of their efforts.

Sincerely,

David and Debbie Pleasants

9/6/2021

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

Dear Dr. Holmes:

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The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom.

We live in an area near Critz, below Patrick Spring in Patrick County, VA and we do not have internet access or ability to add internet with the current providers. It's available just down the road appx. 1mile at neighboring homes, but we are outside of the general range. Others on our road have limited access, but most days it's either out/not working, or too slow to complete any school work at neighboring homes. We are on Tatum Lane,

in Patrick County and century link is supposed to service the area, but is unable to resolve line and quality issues needed to service our homes. Our children while trying to work remotely had to travel back and forth as best we could to get assignments and deliver. We tried the county's offering of a Verizon Hotspot, but it did not work at our home, as we are outside of their service area too (they are supposedly working on a tower, but that may be a few years). Anyway, we have a difficult time working in the connected world when we are unable to "get" the connection. We appreciate anything that can be done to either get fiber or coax pulled down out specific road (Tatum Lane).

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider their application and know we will stand in support of their efforts.

Sincerely,

TC and Stacey Tatum
843 Tatum Lane
Stuart, VA 24171
tctatum@live.com

910-599-0228

My wife and I own a house and property about 6 miles south of Meadows of Dan, VA, address 891 Pinnacle Lane, MoD VA.

We have no internet service there, which means that we have no meaningful computer access. We are there every week, Tuesday through Thursday, and have to save all of the computer work we need to do for when we return to our NC home. Internet service would clearly help us a great deal, making our VA visits much more productive. Also, since we are away from the house part of each week and the location is rather remote, we very much want to install a security system with professional monitoring. However, all of these systems require an internet connection. We certainly would profit from the availability of a good internet service, and we strongly support what can be done to achieve that goal. Work of those involved in this effort is greatly appreciated by both of us.

Most sincerely,

James C. Barborak
Shirley A. Barborak

September 3, 2021

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

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The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom and people were forced to work and do other things from home.

We reside in the Meadows of Dan community of Patrick County. Our internet has been unstable since we first signed on, approximately 20 years, maybe more. Sometimes we have been without service for days. I have recently begun a small sales business from my home and place customer orders online. I really need improved broadband in my community to be able to place orders in a timely fashion.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider these applications and know we will stand in support of their efforts.

Sincerely,

Janice e. Pendleton

Charles K. Pendleton, Sr.

September 2, 2021

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

Dear Dr. Holmes:

We are writing in support of the Patrick County VATI application and their joint grant application with RiverStreet Networks and West Piedmont Planning District Commission for building improved internet in rural areas of Patrick County, Virginia.

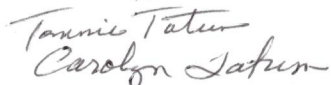
The citizens of Patrick County have long suffered with little to no internet service in many of our rural areas. This especially came to light during the recent COVID-19 pandemic when students were trying to continue their classwork virtually rather than be in a classroom.

We have struggled with very slow internet speed of 1.5mb/s or less and most of the time it averages .5 to 1.0. We have two grandchildren that struggled during the school closure to do their work virtually and had to purchase additional data through US Cellular in order to complete their assignments. Also, working from home is almost impossible to do with our slow internet, only one person can be using our internet at a time or it will freeze. We desperately need better internet speed in our area to assist both parents and children trying to keep up with work and school.

We recognize the importance of broadband to citizens in our County. Such improvements will increase educational opportunities and economic growth in the area. Their proposed investment in broadband infrastructure utilizing a VATI Grant would bring our community into the 21st century. The Citizens of Patrick County in the covered region will have access to broadband equal to citizens in larger cities and more populated areas.

Please consider their application and know we will stand in support of their efforts.

Sincerely,



Tommie and Carolyn Tatum

1091 Tatum Ln

Stuart VA 24171



Funded in part through a cooperative agreement with U.S. Small Business Administration.

September 7, 2021

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

RE: Letter of Support for Carroll County 2021 VATI Application

Dear Dr. Holmes,

I am writing in support of Carroll County's VATI joint grant application with Charter Communications for building improved internet in rural areas of Carroll County, Virginia.

The Blue Ridge Crossroads Small Business Development Center provides free and confidential counseling to new and existing businesses in our region. We provide those counseling services in person, telephone, or web meeting. The COVID-19 pandemic forced our office to counsel clients via telephone or web meeting only. While we have returned to in-person meetings, the efficiency that online meetings provide helps our office service more clients in a quicker timeframe.

Small businesses previously advertised their business through traditional media outlets and waited for the customer to come see them. This is no longer the case. Small businesses must have an online presence so they can be found and close the sale. If a business owner has access to reliable internet at their place of business, they may not have it at their home. It is important for business owners to have access to reliable internet wherever they are to continue communications with customers, close sales, update their online presence, and advertise using mobile and online resources.

The Small Business Development Center recognizes the importance of broadband availability to existing and future citizens of Carroll County. Home based businesses make up 50% of small businesses nationwide. The improved access to broadband will increase educational opportunities and economic growth in the area. Please consider their application and know we support equal access to broadband for all citizens, students, and business owners.

Sincerely,

Mandy Archer
Director, SBDC

The Blue Ridge Crossroads Region is Virginia's "Entrepreneurial Region."



(RETAIN FOR YOUR RECORDS)
Form 477 Filing Summary

FRN: 0025646373 | Data as of: Jun 30, 2020 | Operations: Non-ILEC | Submission Status: Original - Submitted | Last Updated: Aug 27, 2020 15:44:03

Filer Identification

Section	Question	Response
Filer Information	Company Name	Charter Communications, Inc.
	Holding Company Name	Charter Communications
	SAC ID	
	499 ID	
Data Contact Information	Data Contact Name	Denise Williams
	Data Contact Phone Number	(214) 526-8397
	Data Contact E-mail	denise.williams3@charter.com
Emergency Operations Contact Information	Emergency Operations Name	Charter Network Operations Center
	Emergency Operations Phone Number	(866) 248-7662
	Emergency Operations E-mail	dlnoc@charter.com
Certifying Official Contact Information	Certifying Official Name	Suzanne Curtis
	Certifying Official Phone Number	(203) 905-7819
	Certifying Official E-mail	suzanne.curtis@charter.com

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	CH_477_DEPLOYMENT_08_11_2020_DELIVERY.csv	Aug 13, 2020 12:03:03	2301838
Fixed Broadband Subscription	202006_TotalCompany477Internet.txt	Aug 10, 2020 19:31:48	395869

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Alabama	Charter Communications Inc	Cable Modem – DOCSIS 3.1	83893
		Optical Carrier/Fiber to the End User	694
Arizona	Charter Communications Inc	Cable Modem – DOCSIS 3.1	5275

State	DBA Name	Technology	Blocks
		Optical Carrier/Fiber to the End User	65
California	Charter Communications Inc	Cable Modem – DOCSIS 3.1	228283
		Optical Carrier/Fiber to the End User	6109
Colorado	Charter Communications Inc	Cable Modem – DOCSIS 3.1	15809
		Optical Carrier/Fiber to the End User	76
Connecticut	Charter Communications Inc	Cable Modem – DOCSIS 3.1	8825
		Optical Carrier/Fiber to the End User	103
Florida	Charter Communications Inc	Cable Modem – DOCSIS 3.1	145357
		Optical Carrier/Fiber to the End User	2491
Georgia	Charter Communications Inc	Cable Modem – DOCSIS 3.1	38470
		Optical Carrier/Fiber to the End User	633
Hawaii	Charter Communications Inc	Cable Modem – DOCSIS 3.1	14197
		Optical Carrier/Fiber to the End User	330
Idaho	Charter Communications Inc	Cable Modem – DOCSIS 3.1	4098
		Optical Carrier/Fiber to the End User	75
Illinois	Charter Communications Inc	Cable Modem – DOCSIS 3.1	22514
		Optical Carrier/Fiber to the End User	371
Indiana	Charter Communications Inc	Cable Modem – DOCSIS 3.1	32918
		Optical Carrier/Fiber to the End User	405
Kansas	Charter Communications Inc	Cable Modem – DOCSIS 3.1	11230
		Optical Carrier/Fiber to the End User	288
Kentucky	Charter Communications Inc	Cable Modem – DOCSIS 3.1	61126
		Optical Carrier/Fiber to the End User	1541
Louisiana	Charter Communications Inc	Cable Modem – DOCSIS 3.1	18885
		Optical Carrier/Fiber to the End User	243
Maine	Charter Communications Inc	Cable Modem – DOCSIS 3.1	36549
		Optical Carrier/Fiber to the End User	606
Maryland	Charter Communications Inc	Cable Modem – DOCSIS 3.1	423
Massachusetts	Charter Communications Inc	Cable Modem – DOCSIS 3.1	22652
		Optical Carrier/Fiber to the End User	583
Michigan	Charter Communications Inc	Cable Modem – DOCSIS 3.1	80978
		Optical Carrier/Fiber to the End User	1109
Minnesota	Charter Communications Inc	Cable Modem – DOCSIS 3.1	29985
		Optical Carrier/Fiber to the End User	410

State	DBA Name	Technology	Blocks
Mississippi	Charter Communications Inc	Cable Modem – DOCSIS 3.1	1059
		Optical Carrier/Fiber to the End User	5
Missouri	Charter Communications Inc	Cable Modem – DOCSIS 3.1	82569
		Optical Carrier/Fiber to the End User	1944
Montana	Charter Communications Inc	Cable Modem – DOCSIS 3.1	22558
		Optical Carrier/Fiber to the End User	259
Nebraska	Charter Communications Inc	Cable Modem – DOCSIS 3.1	32314
		Optical Carrier/Fiber to the End User	235
Nevada	Charter Communications Inc	Cable Modem – DOCSIS 3.1	12640
		Optical Carrier/Fiber to the End User	344
New Hampshire	Charter Communications Inc	Cable Modem – DOCSIS 3.1	9207
		Optical Carrier/Fiber to the End User	102
New Jersey	Charter Communications Inc	Cable Modem – DOCSIS 3.1	2168
		Optical Carrier/Fiber to the End User	64
New Mexico	Charter Communications Inc	Cable Modem – DOCSIS 3.1	758
		Optical Carrier/Fiber to the End User	7
New York	Charter Communications Inc	Cable Modem – DOCSIS 3.1	196673
		Optical Carrier/Fiber to the End User	5706
North Carolina	Charter Communications Inc	Cable Modem – DOCSIS 3.1	190792
		Optical Carrier/Fiber to the End User	5093
Ohio	Charter Communications Inc	Cable Modem – DOCSIS 3.1	237719
		Optical Carrier/Fiber to the End User	5859
Oklahoma	Charter Communications Inc	Optical Carrier/Fiber to the End User	1
Oregon	Charter Communications Inc	Cable Modem – DOCSIS 3.1	29190
		Optical Carrier/Fiber to the End User	215
Pennsylvania	Charter Communications Inc	Cable Modem – DOCSIS 3.1	10683
		Optical Carrier/Fiber to the End User	211
Rhode Island	Charter Communications Inc	Cable Modem – DOCSIS 3.1	5
South Carolina	Charter Communications Inc	Cable Modem – DOCSIS 3.1	77144
		Optical Carrier/Fiber to the End User	1832
Tennessee	Charter Communications Inc	Cable Modem – DOCSIS 3.1	65266
		Optical Carrier/Fiber to the End User	836
Texas	Charter Communications Inc	Cable Modem – DOCSIS 3.1	251120
		Optical Carrier/Fiber to the End User	7754

State	DBA Name	Technology	Blocks
Vermont	Charter Communications Inc	Cable Modem – DOCSIS 3.1	2286
		Optical Carrier/Fiber to the End User	16
Virginia	Charter Communications Inc	Cable Modem – DOCSIS 3.1	11193
		Optical Carrier/Fiber to the End User	126
Washington	Charter Communications Inc	Cable Modem – DOCSIS 3.1	16961
		Optical Carrier/Fiber to the End User	257
West Virginia	Charter Communications Inc	Cable Modem – DOCSIS 3.1	4023
		Optical Carrier/Fiber to the End User	12
Wisconsin	Charter Communications Inc	Cable Modem – DOCSIS 3.1	118760
		Optical Carrier/Fiber to the End User	3746
Wyoming	Charter Communications Inc	Cable Modem – DOCSIS 3.1	14391
		Optical Carrier/Fiber to the End User	136
Total			2301838

Fixed Broadband Subscription

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

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Alabama	Cable Modem	7191	504977	40794	545771
	Optical Carrier/Fiber to the End User	611	890	894	1784
Arizona	Cable Modem	659	50091	2291	52382
	Optical Carrier/Fiber to the End User	64	0	75	75
California	Cable Modem	55756	4422726	268575	4691301
	Optical Carrier/Fiber to the End User	6303	1829	15720	17549
Colorado	Cable Modem	906	103836	8245	112081
	Optical Carrier/Fiber to the End User	65	337	85	422
Connecticut	Cable Modem	981	104772	6846	111618
	Optical Carrier/Fiber to the End User	102	50	132	182
Florida	Cable Modem	29439	2331878	189819	2521697
	Optical Carrier/Fiber to the End User	2809	32211	4524	36735
Georgia	Cable Modem	4346	353691	31908	385599
	Optical Carrier/Fiber to the End User	522	1300	881	2181
Hawaii	Cable Modem	4566	380236	30360	410596
	Optical Carrier/Fiber to the End User	396	4439	549	4988

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Idaho	Cable Modem	441	52393	3143	55536
	Optical Carrier/Fiber to the End User	55	0	89	89
Illinois	Cable Modem	1876	169180	11084	180264
	Optical Carrier/Fiber to the End User	307	223	478	701
Indiana	Cable Modem	5184	269034	17841	286875
	Optical Carrier/Fiber to the End User	307	1207	493	1700
Kansas	Cable Modem	2527	110496	8810	119306
	Optical Carrier/Fiber to the End User	242	646	391	1037
Kentucky	Cable Modem	10672	659139	45483	704622
	Optical Carrier/Fiber to the End User	1180	5596	2029	7625
Louisiana	Cable Modem	1501	132448	10476	142924
	Optical Carrier/Fiber to the End User	195	0	310	310
Maine	Cable Modem	4922	377249	24597	401846
	Optical Carrier/Fiber to the End User	401	680	669	1349
Maryland	Cable Modem	24	1625	84	1709
Massachusetts	Cable Modem	2520	269459	17822	287281
	Optical Carrier/Fiber to the End User	391	2114	585	2699
Michigan	Cable Modem	9175	752581	57681	810262
	Optical Carrier/Fiber to the End User	979	1159	1406	2565
Minnesota	Cable Modem	3019	298843	19849	318692
	Optical Carrier/Fiber to the End User	335	1376	470	1846
Mississippi	Cable Modem	79	7672	561	8233
	Optical Carrier/Fiber to the End User	5	0	6	6
Missouri	Cable Modem	9540	712987	58815	771802
	Optical Carrier/Fiber to the End User	1510	3152	3095	6247
Montana	Cable Modem	1471	201779	19422	221201
	Optical Carrier/Fiber to the End User	210	871	284	1155
Nebraska	Cable Modem	2323	145667	9734	155401
	Optical Carrier/Fiber to the End User	214	148	258	406
Nevada	Cable Modem	1698	175571	12364	187935
	Optical Carrier/Fiber to the End User	275	885	595	1480
New Hampshire	Cable Modem	722	64271	4050	68321
	Optical Carrier/Fiber to the End User	73	37	120	157

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
New Jersey	Cable Modem	636	43693	3837	47530
	Optical Carrier/Fiber to the End User	44	294	105	399
New Mexico	Cable Modem	95	6913	193	7106
	Optical Carrier/Fiber to the End User	7	0	8	8
New York	Cable Modem	44773	2986310	207702	3194012
	Optical Carrier/Fiber to the End User	3815	12804	6180	18984
North Carolina	Cable Modem	28848	2280366	162425	2442791
	Optical Carrier/Fiber to the End User	3750	27835	6591	34426
Ohio	Cable Modem	38916	2243949	145077	2389026
	Optical Carrier/Fiber to the End User	4359	6480	8230	14710
Oklahoma	Optical Carrier/Fiber to the End User	1	0	1	1
Oregon	Cable Modem	2210	225038	19548	244586
	Optical Carrier/Fiber to the End User	196	522	237	759
Pennsylvania	Cable Modem	1869	111689	7661	119350
	Optical Carrier/Fiber to the End User	162	0	250	250
Rhode Island	Cable Modem	1	7	0	7
South Carolina	Cable Modem	9305	746432	53625	800057
	Optical Carrier/Fiber to the End User	1311	7857	2332	10189
Tennessee	Cable Modem	5335	412764	34725	447489
	Optical Carrier/Fiber to the End User	663	861	1031	1892
Texas	Cable Modem	41090	2854040	227895	3081935
	Optical Carrier/Fiber to the End User	5918	19966	11756	31722
Vermont	Cable Modem	226	13363	1242	14605
	Optical Carrier/Fiber to the End User	15	0	17	17
Virginia	Cable Modem	770	57758	3972	61730
	Optical Carrier/Fiber to the End User	112	0	162	162
Washington	Cable Modem	1605	184273	11683	195956
	Optical Carrier/Fiber to the End User	210	275	325	600
West Virginia	Cable Modem	462	19584	1280	20864
	Optical Carrier/Fiber to the End User	13	0	13	13
Wisconsin	Cable Modem	16410	1246403	89390	1335793
	Optical Carrier/Fiber to the End User	2751	2527	5408	7935
Wyoming	Cable Modem	801	103710	8599	112309

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
	Optical Carrier/Fiber to the End User	101	0	164	164
Total		395869	26327464	1956456	28283920

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
0.256	0.128	0	17	17
0.256	0.256	7	1	8
0.384	0.128	0	27	27
0.384	0.192	1	21	22
0.512	0.128	0	94	94
0.512	0.256	0	6	6
0.512	0.512	0	880	880
0.524	0.524	0	8	8
0.589	0.589	0	532	532
0.768	0.128	0	1	1
0.768	0.256	0	25	25
0.768	0.384	0	1	1
0.768	0.768	0	3	3
1.000	0.128	0	1	1
1.000	0.256	3	186	189
1.000	0.317	0	3	3
1.000	0.384	0	7	7
1.000	0.452	0	4	4
1.000	0.512	0	1	1
1.000	0.768	0	4	4
1.000	1.000	7450	462	7912
1.000	3.000	39291	0	39291
1.500	0.256	0	218	218
1.500	0.384	0	29	29
1.500	0.512	15	0	15
1.500	0.768	0	201	201
1.500	1.000	137	0	137
1.500	1.500	0	206	206
2.000	0.256	7	96	103

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
2.000	0.384	518	4826	5344
2.000	0.464	0	82	82
2.000	0.512	1	40	41
2.000	0.768	1	11	12
2.000	1.000	1	5	6
2.000	2.000	1	1207	1208
3.000	0.256	40	11088	11128
3.000	0.384	144	2106	2250
3.000	0.452	0	2	2
3.000	0.464	0	6	6
3.000	0.512	6	79	85
3.000	0.768	0	69	69
3.000	1.000	40991	164	41155
3.000	1.500	0	9	9
3.000	3.000	0	621	621
4.000	0.256	0	5	5
4.000	0.384	2	38	40
4.000	0.452	0	5	5
4.000	0.768	0	2	2
4.000	0.904	0	1116	1116
4.000	1.500	1	0	1
4.000	2.000	1	43	44
5.000	0.384	250	771	1021
5.000	0.442	0	37	37
5.000	0.512	3	1140	1143
5.000	0.603	0	26	26
5.000	0.768	44	1472	1516
5.000	1.000	452	598	1050
5.000	1.500	3	118	121
5.000	2.000	22	16	38
5.000	5.000	2590	883	3473
6.000	6.000	0	1	1
7.000	0.384	1	9	10
7.000	0.512	58	104	162

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
7.000	0.603	0	44	44
7.000	0.768	15	21767	21782
7.000	0.904	0	51	51
7.000	1.000	12413	408	12821
7.000	1.500	0	580	580
7.000	2.000	12	838	850
8.000	0.384	4	10	14
8.000	0.904	0	299	299
8.000	1.000	2	58	60
8.000	1.500	59	121	180
8.000	2.000	0	203	203
8.000	2.500	0	5	5
8.000	8.000	0	2	2
8.863	1.206	0	34	34
10.000	0.384	83	1570	1653
10.000	0.512	55	0	55
10.000	0.768	0	298	298
10.000	1.000	92	24425	24517
10.000	1.500	394	4945	5339
10.000	2.000	46	1323	1369
10.000	2.500	0	70	70
10.000	10.000	0	3303	3303
12.000	0.512	131	0	131
12.000	1.000	0	19	19
12.000	1.500	0	1292	1292
15.000	0.512	0	2	2
15.000	1.000	5093	3255	8348
15.000	2.000	203	34521	34724
15.000	3.000	95643	874	96517
15.000	15.000	0	18	18
16.000	2.500	0	41	41
18.000	1.000	12	4	16
18.000	2.000	6	1963	1969
18.000	3.000	0	56	56

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
20.000	1.000	30	99	129
20.000	2.000	900497	2483	902980
20.000	3.000	0	1685	1685
20.000	20.000	0	2611	2611
25.000	3.000	43230	4696	47926
25.000	25.000	0	18137	18137
30.000	2.000	9	0	9
30.000	4.000	1288794	28	1288822
30.000	5.000	180044	9	180053
30.000	30.000	0	647	647
35.000	3.000	0	1626	1626
35.000	5.000	1	6823	6824
35.000	35.000	0	25	25
40.000	4.000	0	100	100
40.000	40.000	1	188	189
45.000	45.000	0	13	13
50.000	5.000	173709	17074	190783
50.000	50.000	0	15128	15128
60.000	4.000	5	25295	25300
60.000	5.000	767854	15527	783381
60.000	60.000	0	49	49
65.000	65.000	0	1	1
70.000	5.000	20	14493	14513
70.000	70.000	0	50	50
75.000	7.000	0	4	4
80.000	5.000	0	1506	1506
80.000	80.000	0	38	38
90.000	90.000	0	10	10
100.000	1.000	566	0	566
100.000	4.000	0	7854	7854
100.000	5.000	1013	702	1715
100.000	7.000	0	70323	70323
100.000	10.000	9850833	358340	10209173
100.000	20.000	1	0	1

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
100.000	100.000	29298	17067	46365
120.000	10.000	860	2	862
120.000	120.000	0	1	1
150.000	5.000	0	279	279
150.000	150.000	0	35	35
155.000	155.000	0	6	6
200.000	7.000	0	2199	2199
200.000	10.000	8635738	899549	9535287
200.000	15.000	2	54627	54629
200.000	20.000	278347	4916	283263
200.000	200.000	0	7169	7169
250.000	250.000	0	25	25
300.000	20.000	316907	32477	349384
300.000	30.000	105	0	105
300.000	300.000	58428	137	58565
325.000	20.000	0	372	372
350.000	25.000	0	3105	3105
400.000	20.000	3461768	187332	3649100
400.000	400.000	0	19	19
500.000	500.000	120	2833	2953
550.000	550.000	0	2	2
600.000	35.000	0	22957	22957
600.000	600.000	0	4	4
700.000	700.000	0	1	1
800.000	800.000	0	1	1
850.000	850.000	0	1	1
900.000	900.000	0	1	1
940.000	35.000	131988	19073	151061
1000.000	1000.000	992	4049	5041
2000.000	2000.000	0	256	256
3000.000	3000.000	0	1	1
4000.000	4000.000	0	1	1
5000.000	5000.000	0	120	120
6000.000	6000.000	0	1	1

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
8000.000	8000.000	0	2	2
10000.000	10000.000	0	140	140
Total		26327464	1956456	28283920

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

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
Cable Modem	0.256	0.128	0	17	17
	0.256	0.256	7	1	8
	0.384	0.128	0	27	27
	0.384	0.192	1	21	22
	0.512	0.128	0	94	94
	0.512	0.256	0	6	6
	0.512	0.512	0	880	880
	0.524	0.524	0	8	8
	0.589	0.589	0	532	532
	0.768	0.128	0	1	1
	0.768	0.256	0	25	25
	0.768	0.384	0	1	1
	0.768	0.768	0	3	3
	1.000	0.128	0	1	1
	1.000	0.256	3	186	189
	1.000	0.317	0	3	3
	1.000	0.384	0	7	7
	1.000	0.452	0	4	4
	1.000	0.512	0	1	1
	1.000	0.768	0	4	4
	1.000	1.000	7450	251	7701
	1.000	3.000	39156	0	39156
	1.500	0.256	0	218	218
	1.500	0.384	0	29	29
	1.500	0.512	15	0	15
	1.500	0.768	0	201	201
	1.500	1.000	137	0	137
	1.500	1.500	0	206	206
2.000	0.256	7	96	103	

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	2.000	0.384	518	4822	5340
	2.000	0.464	0	82	82
	2.000	0.512	1	40	41
	2.000	0.768	1	11	12
	2.000	1.000	1	5	6
	2.000	2.000	1	1199	1200
	3.000	0.256	40	11088	11128
	3.000	0.384	144	2104	2248
	3.000	0.452	0	2	2
	3.000	0.464	0	6	6
	3.000	0.512	6	79	85
	3.000	0.768	0	69	69
	3.000	1.000	40964	164	41128
	3.000	1.500	0	9	9
	3.000	3.000	0	587	587
	4.000	0.256	0	5	5
	4.000	0.384	2	38	40
	4.000	0.452	0	5	5
	4.000	0.768	0	2	2
	4.000	0.904	0	1116	1116
	4.000	1.500	1	0	1
	4.000	2.000	1	43	44
	5.000	0.384	250	771	1021
	5.000	0.442	0	37	37
	5.000	0.512	3	1140	1143
	5.000	0.603	0	26	26
	5.000	0.768	44	1471	1515
	5.000	1.000	452	598	1050
	5.000	1.500	3	118	121
	5.000	2.000	22	16	38
	5.000	5.000	2589	513	3102
	7.000	0.384	1	9	10
	7.000	0.512	58	104	162

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	7.000	0.603	0	44	44
	7.000	0.768	15	21755	21770
	7.000	0.904	0	51	51
	7.000	1.000	12128	408	12536
	7.000	1.500	0	579	579
	7.000	2.000	12	838	850
	8.000	0.384	4	10	14
	8.000	0.904	0	299	299
	8.000	1.000	2	58	60
	8.000	1.500	59	121	180
	8.000	2.000	0	203	203
	8.000	2.500	0	5	5
	8.863	1.206	0	34	34
	10.000	0.384	83	1570	1653
	10.000	0.512	55	0	55
	10.000	0.768	0	298	298
	10.000	1.000	92	24401	24493
	10.000	1.500	394	4945	5339
	10.000	2.000	46	1322	1368
	10.000	2.500	0	70	70
	10.000	10.000	0	2138	2138
	12.000	0.512	131	0	131
	12.000	1.000	0	19	19
	12.000	1.500	0	1286	1286
	15.000	0.512	0	2	2
	15.000	1.000	5086	3255	8341
	15.000	2.000	203	34470	34673
	15.000	3.000	95640	874	96514
	16.000	2.500	0	41	41
	18.000	1.000	12	4	16
	18.000	2.000	6	1952	1958
	18.000	3.000	0	56	56
	20.000	1.000	30	99	129

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	20.000	2.000	900368	2483	902851
	20.000	3.000	0	1685	1685
	20.000	20.000	0	1268	1268
	25.000	3.000	43036	4684	47720
	30.000	2.000	9	0	9
	30.000	4.000	1288296	28	1288324
	30.000	5.000	180016	9	180025
	30.000	30.000	0	38	38
	35.000	3.000	0	1622	1622
	35.000	5.000	1	6807	6808
	40.000	4.000	0	100	100
	50.000	5.000	173631	17019	190650
	60.000	4.000	5	25295	25300
	60.000	5.000	767003	15520	782523
	70.000	5.000	20	14487	14507
	75.000	7.000	0	4	4
	80.000	5.000	0	1506	1506
	100.000	1.000	566	0	566
	100.000	4.000	0	7854	7854
	100.000	5.000	1013	701	1714
	100.000	7.000	0	70323	70323
	100.000	10.000	9822573	357230	10179803
	100.000	20.000	1	0	1
	120.000	10.000	860	2	862
	150.000	5.000	0	279	279
	200.000	7.000	0	2199	2199
	200.000	10.000	8629661	895536	9525197
	200.000	15.000	2	54362	54364
	200.000	20.000	277912	4906	282818
	300.000	20.000	314613	32159	346772
	325.000	20.000	0	371	371
	350.000	25.000	0	3103	3103
	400.000	20.000	3452020	185875	3637895

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	600.000	35.000	0	22846	22846
	940.000	35.000	131411	18898	150309
Optical Carrier/Fiber to the End User	1.000	1.000	0	211	211
	1.000	3.000	135	0	135
	2.000	0.384	0	4	4
	2.000	2.000	0	8	8
	3.000	0.384	0	2	2
	3.000	1.000	27	0	27
	3.000	3.000	0	34	34
	5.000	0.768	0	1	1
	5.000	5.000	1	370	371
	6.000	6.000	0	1	1
	7.000	0.768	0	12	12
	7.000	1.000	285	0	285
	7.000	1.500	0	1	1
	8.000	8.000	0	2	2
	10.000	1.000	0	24	24
	10.000	2.000	0	1	1
	10.000	10.000	0	1165	1165
	12.000	1.500	0	6	6
	15.000	1.000	7	0	7
	15.000	2.000	0	51	51
	15.000	3.000	3	0	3
	15.000	15.000	0	18	18
	18.000	2.000	0	11	11
	20.000	2.000	129	0	129
	20.000	20.000	0	1343	1343
	25.000	3.000	194	12	206
	25.000	25.000	0	18137	18137
	30.000	4.000	498	0	498
	30.000	5.000	28	0	28
	30.000	30.000	0	609	609
	35.000	3.000	0	4	4

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	35.000	5.000	0	16	16
	35.000	35.000	0	25	25
	40.000	40.000	1	188	189
	45.000	45.000	0	13	13
	50.000	5.000	78	55	133
	50.000	50.000	0	15128	15128
	60.000	5.000	851	7	858
	60.000	60.000	0	49	49
	65.000	65.000	0	1	1
	70.000	5.000	0	6	6
	70.000	70.000	0	50	50
	80.000	80.000	0	38	38
	90.000	90.000	0	10	10
	100.000	5.000	0	1	1
	100.000	10.000	28260	1110	29370
	100.000	100.000	29298	17067	46365
	120.000	120.000	0	1	1
	150.000	150.000	0	35	35
	155.000	155.000	0	6	6
	200.000	10.000	6077	4013	10090
	200.000	15.000	0	265	265
	200.000	20.000	435	10	445
	200.000	200.000	0	7169	7169
	250.000	250.000	0	25	25
	300.000	20.000	2294	318	2612
	300.000	30.000	105	0	105
	300.000	300.000	58428	137	58565
	325.000	20.000	0	1	1
	350.000	25.000	0	2	2
	400.000	20.000	9748	1457	11205
	400.000	400.000	0	19	19
	500.000	500.000	120	2833	2953
	550.000	550.000	0	2	2

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	600.000	35.000	0	111	111
	600.000	600.000	0	4	4
	700.000	700.000	0	1	1
	800.000	800.000	0	1	1
	850.000	850.000	0	1	1
	900.000	900.000	0	1	1
	940.000	35.000	577	175	752
	1000.000	1000.000	992	4049	5041
	2000.000	2000.000	0	256	256
	3000.000	3000.000	0	1	1
	4000.000	4000.000	0	1	1
	5000.000	5000.000	0	120	120
	6000.000	6000.000	0	1	1
	8000.000	8000.000	0	2	2
	10000.000	10000.000	0	140	140
Total			26327464	1956456	28283920

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Form 477 Filing Summary

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Filer Identification

Section	Question	Response
Filer Information	Company Name	Charter Communications, Inc.
	Holding Company Name	Charter Communications
	SAC ID	
	499 ID	
Data Contact Information	Data Contact Name	Denise J. Williams
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Certifying Official Contact Information	Certifying Official Name	Suzanne Curtis
	Certifying Official Phone Number	(203) 905-7819
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Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	CH_477_DEPLOYMENT_03_12_2021_DELIVERY.csv	Mar 12, 2021 16:35:35	2321290
Fixed Broadband Subscription	202012_TotalCompany477Internet.txt	Mar 1, 2021 15:45:23	386330

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Alabama	Charter Communications Inc	Cable Modem – DOCSIS 3.1	84044
		Optical Carrier/Fiber to the End User	753
Arizona	Charter Communications Inc	Cable Modem – DOCSIS 3.1	5283
		Optical Carrier/Fiber to the End User	81
Arkansas	Charter Communications Inc	Cable Modem – DOCSIS 3.1	2

State	DBA Name	Technology	Blocks
		Optical Carrier/Fiber to the End User	2
California	Charter Communications Inc	Cable Modem – DOCSIS 3.1	228539
		Optical Carrier/Fiber to the End User	7094
Colorado	Charter Communications Inc	Cable Modem – DOCSIS 3.1	15818
		Optical Carrier/Fiber to the End User	85
Connecticut	Charter Communications Inc	Cable Modem – DOCSIS 3.1	8834
		Optical Carrier/Fiber to the End User	107
Florida	Charter Communications Inc	Cable Modem – DOCSIS 3.1	145503
		Optical Carrier/Fiber to the End User	2849
Georgia	Charter Communications Inc	Cable Modem – DOCSIS 3.1	38573
		Optical Carrier/Fiber to the End User	668
Hawaii	Charter Communications Inc	Cable Modem – DOCSIS 3.1	14225
		Optical Carrier/Fiber to the End User	360
Idaho	Charter Communications Inc	Cable Modem – DOCSIS 3.1	4106
		Optical Carrier/Fiber to the End User	81
Illinois	Charter Communications Inc	Cable Modem – DOCSIS 3.1	22886
		Optical Carrier/Fiber to the End User	405
Indiana	Charter Communications Inc	Cable Modem – DOCSIS 3.1	35628
		Optical Carrier/Fiber to the End User	498
Iowa	Charter Communications Inc	Cable Modem – DOCSIS 3.1	3
		Optical Carrier/Fiber to the End User	3
Kansas	Charter Communications Inc	Cable Modem – DOCSIS 3.1	11240
		Optical Carrier/Fiber to the End User	355
Kentucky	Charter Communications Inc	Cable Modem – DOCSIS 3.1	61186
		Optical Carrier/Fiber to the End User	1915
Louisiana	Charter Communications Inc	Cable Modem – DOCSIS 3.1	18903
		Optical Carrier/Fiber to the End User	245
Maine	Charter Communications Inc	Cable Modem – DOCSIS 3.1	36579
		Optical Carrier/Fiber to the End User	644
Maryland	Charter Communications Inc	Cable Modem – DOCSIS 3.1	424
		Optical Carrier/Fiber to the End User	1
Massachusetts	Charter Communications Inc	Cable Modem – DOCSIS 3.1	22684

State	DBA Name	Technology	Blocks
		Optical Carrier/Fiber to the End User	640
Michigan	Charter Communications Inc	Cable Modem – DOCSIS 3.1	82397
		Optical Carrier/Fiber to the End User	1163
Minnesota	Charter Communications Inc	Cable Modem – DOCSIS 3.1	30024
		Optical Carrier/Fiber to the End User	447
Mississippi	Charter Communications Inc	Cable Modem – DOCSIS 3.1	1074
		Optical Carrier/Fiber to the End User	5
Missouri	Charter Communications Inc	Cable Modem – DOCSIS 3.1	84457
		Optical Carrier/Fiber to the End User	2107
Montana	Charter Communications Inc	Cable Modem – DOCSIS 3.1	22616
		Optical Carrier/Fiber to the End User	284
Nebraska	Charter Communications Inc	Cable Modem – DOCSIS 3.1	32438
		Optical Carrier/Fiber to the End User	255
Nevada	Charter Communications Inc	Cable Modem – DOCSIS 3.1	12686
		Optical Carrier/Fiber to the End User	359
New Hampshire	Charter Communications Inc	Cable Modem – DOCSIS 3.1	9216
		Optical Carrier/Fiber to the End User	110
New Jersey	Charter Communications Inc	Cable Modem – DOCSIS 3.1	2175
		Optical Carrier/Fiber to the End User	85
New Mexico	Charter Communications Inc	Cable Modem – DOCSIS 3.1	760
		Optical Carrier/Fiber to the End User	10
New York	Charter Communications Inc	Cable Modem – DOCSIS 3.1	196531
		Optical Carrier/Fiber to the End User	8583
North Carolina	Charter Communications Inc	Cable Modem – DOCSIS 3.1	191041
		Optical Carrier/Fiber to the End User	6068
Ohio	Charter Communications Inc	Cable Modem – DOCSIS 3.1	238464
		Optical Carrier/Fiber to the End User	6855
Oklahoma	Charter Communications Inc	Cable Modem – DOCSIS 3.1	1
		Optical Carrier/Fiber to the End User	1
Oregon	Charter Communications Inc	Cable Modem – DOCSIS 3.1	29440
		Optical Carrier/Fiber to the End User	221
Pennsylvania	Charter Communications Inc	Cable Modem – DOCSIS 3.1	10704

State	DBA Name	Technology	Blocks
		Optical Carrier/Fiber to the End User	232
Rhode Island	Charter Communications Inc	Cable Modem – DOCSIS 3.1	5
South Carolina	Charter Communications Inc	Cable Modem – DOCSIS 3.1	77228
		Optical Carrier/Fiber to the End User	2075
Tennessee	Charter Communications Inc	Cable Modem – DOCSIS 3.1	65424
		Optical Carrier/Fiber to the End User	884
Texas	Charter Communications Inc	Cable Modem – DOCSIS 3.1	252104
		Optical Carrier/Fiber to the End User	8829
Utah	Charter Communications Inc	Cable Modem – DOCSIS 3.1	1
		Optical Carrier/Fiber to the End User	1
Vermont	Charter Communications Inc	Cable Modem – DOCSIS 3.1	2296
		Optical Carrier/Fiber to the End User	15
Virginia	Charter Communications Inc	Cable Modem – DOCSIS 3.1	11209
		Optical Carrier/Fiber to the End User	132
Washington	Charter Communications Inc	Cable Modem – DOCSIS 3.1	16997
		Optical Carrier/Fiber to the End User	264
West Virginia	Charter Communications Inc	Cable Modem – DOCSIS 3.1	4028
		Optical Carrier/Fiber to the End User	16
Wisconsin	Charter Communications Inc	Cable Modem – DOCSIS 3.1	119116
		Optical Carrier/Fiber to the End User	4062
Wyoming	Charter Communications Inc	Cable Modem – DOCSIS 3.1	14410
		Optical Carrier/Fiber to the End User	139
Total			2321290

Fixed Broadband Subscription

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

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Alabama	Cable Modem	6993	525492	41380	566872
	Optical Carrier/Fiber to the End User	647	1162	988	2150
Arizona	Cable Modem	596	54456	2434	56890
	Optical Carrier/Fiber to the End User	75	0	94	94
Arkansas	Optical Carrier/Fiber to the End User	2	0	2	2

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
California	Cable Modem	53831	4581141	285807	4866948
	Optical Carrier/Fiber to the End User	7115	2311	17955	20266
Colorado	Cable Modem	929	108163	8482	116645
	Optical Carrier/Fiber to the End User	73	312	99	411
Connecticut	Cable Modem	986	108505	6881	115386
	Optical Carrier/Fiber to the End User	107	111	134	245
Florida	Cable Modem	27469	2413578	166796	2580374
	Optical Carrier/Fiber to the End User	3156	37842	5267	43109
Georgia	Cable Modem	4320	365803	33052	398855
	Optical Carrier/Fiber to the End User	533	1201	931	2132
Hawaii	Cable Modem	4317	390052	31600	421652
	Optical Carrier/Fiber to the End User	437	4425	617	5042
Idaho	Cable Modem	412	53763	3329	57092
	Optical Carrier/Fiber to the End User	59	0	100	100
Illinois	Cable Modem	1873	173700	11044	184744
	Optical Carrier/Fiber to the End User	328	209	516	725
Indiana	Cable Modem	4971	276922	17677	294599
	Optical Carrier/Fiber to the End User	368	977	626	1603
Iowa	Optical Carrier/Fiber to the End User	3	0	3	3
Kansas	Cable Modem	2439	111561	9193	120754
	Optical Carrier/Fiber to the End User	283	729	508	1237
Kentucky	Cable Modem	10290	668938	47884	716822
	Optical Carrier/Fiber to the End User	1395	4691	2760	7451
Louisiana	Cable Modem	1457	137605	10545	148150
	Optical Carrier/Fiber to the End User	197	0	317	317
Maine	Cable Modem	4720	385656	25158	410814
	Optical Carrier/Fiber to the End User	419	770	733	1503
Maryland	Cable Modem	21	1692	84	1776
	Optical Carrier/Fiber to the End User	1	0	1	1
Massachusetts	Cable Modem	2461	274834	18234	293068
	Optical Carrier/Fiber to the End User	404	2199	601	2800
Michigan	Cable Modem	9117	770522	55486	826008

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
	Optical Carrier/Fiber to the End User	998	1163	1473	2636
Minnesota	Cable Modem	2981	304435	18758	323193
	Optical Carrier/Fiber to the End User	356	1383	510	1893
Mississippi	Cable Modem	82	8212	570	8782
	Optical Carrier/Fiber to the End User	5	0	6	6
Missouri	Cable Modem	9369	726934	58625	785559
	Optical Carrier/Fiber to the End User	1586	2774	3345	6119
Montana	Cable Modem	1509	209063	20422	229485
	Optical Carrier/Fiber to the End User	230	965	319	1284
Nebraska	Cable Modem	2241	145105	9345	154450
	Optical Carrier/Fiber to the End User	229	149	288	437
Nevada	Cable Modem	1686	181418	12899	194317
	Optical Carrier/Fiber to the End User	289	1149	626	1775
New Hampshire	Cable Modem	681	66128	4252	70380
	Optical Carrier/Fiber to the End User	78	37	129	166
New Jersey	Cable Modem	599	43513	4091	47604
	Optical Carrier/Fiber to the End User	58	300	140	440
New Mexico	Cable Modem	88	7416	233	7649
	Optical Carrier/Fiber to the End User	9	0	11	11
New York	Cable Modem	42756	2995306	214580	3209886
	Optical Carrier/Fiber to the End User	4599	20433	7654	28087
North Carolina	Cable Modem	28146	2327809	168821	2496630
	Optical Carrier/Fiber to the End User	4460	29487	8633	38120
Ohio	Cable Modem	36556	2310233	150007	2460240
	Optical Carrier/Fiber to the End User	5061	5155	10239	15394
Oklahoma	Optical Carrier/Fiber to the End User	1	0	1	1
Oregon	Cable Modem	2147	233561	18090	251651
	Optical Carrier/Fiber to the End User	202	507	245	752
Pennsylvania	Cable Modem	1747	114753	7752	122505
	Optical Carrier/Fiber to the End User	185	0	281	281
Rhode Island	Cable Modem	1	7	0	7
South Carolina	Cable Modem	8989	770687	56391	827078

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
	Optical Carrier/Fiber to the End User	1447	8297	2726	11023
Tennessee	Cable Modem	5230	424236	33990	458226
	Optical Carrier/Fiber to the End User	690	989	1091	2080
Texas	Cable Modem	38723	2917224	238050	3155274
	Optical Carrier/Fiber to the End User	6638	23373	14289	37662
Utah	Optical Carrier/Fiber to the End User	1	0	1	1
Vermont	Cable Modem	234	13877	1223	15100
	Optical Carrier/Fiber to the End User	14	0	16	16
Virginia	Cable Modem	809	61995	4147	66142
	Optical Carrier/Fiber to the End User	114	0	169	169
Washington	Cable Modem	1582	191322	11483	202805
	Optical Carrier/Fiber to the End User	217	262	335	597
West Virginia	Cable Modem	447	20178	1357	21535
	Optical Carrier/Fiber to the End User	17	0	18	18
Wisconsin	Cable Modem	15569	1279976	86492	1366468
	Optical Carrier/Fiber to the End User	2951	2704	6081	8785
Wyoming	Cable Modem	818	105694	8894	114588
	Optical Carrier/Fiber to the End User	101	0	164	164
Total		386330	27017531	1996580	29014111

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
0.256	0.128	0	5	5
0.256	0.256	0	1	1
0.384	0.128	0	26	26
0.512	0.128	0	55	55
0.512	0.256	0	6	6
0.512	0.512	0	860	860
0.768	0.128	0	1	1
0.768	0.256	0	24	24
0.768	0.384	0	1	1
0.768	0.768	0	2	2
1.000	0.256	2	150	152

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
1.000	0.384	0	4	4
1.000	0.512	0	1	1
1.000	0.768	0	4	4
1.000	1.000	6053	365	6418
1.500	0.256	0	197	197
1.500	0.384	0	28	28
1.500	0.768	0	80	80
1.500	1.000	107	0	107
1.500	1.500	0	68	68
2.000	0.256	7	56	63
2.000	0.384	12	407	419
2.000	0.512	1	30	31
2.000	0.768	1	11	12
2.000	1.000	1	8	9
2.000	2.000	1	796	797
3.000	0.256	38	0	38
3.000	0.384	12	828	840
3.000	0.512	5	61	66
3.000	0.768	0	47	47
3.000	1.000	8306	81	8387
3.000	1.500	0	9	9
3.000	3.000	0	403	403
4.000	0.256	0	4	4
4.000	0.384	2	38	40
4.000	0.768	0	905	905
4.000	2.000	1	39	40
5.000	0.384	6	266	272
5.000	0.512	3	641	644
5.000	0.768	37	1146	1183
5.000	1.000	390	449	839
5.000	1.500	3	89	92
5.000	2.000	19	21	40

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
5.000	5.000	1540	805	2345
6.000	2.000	0	9	9
6.000	6.000	0	1	1
7.000	0.384	1	8	9
7.000	0.512	49	114	163
7.000	0.768	10	14071	14081
7.000	1.000	10127	126	10253
7.000	1.500	0	413	413
7.000	2.000	11	805	816
8.000	0.384	3	10	13
8.000	0.768	0	201	201
8.000	1.000	1	49	50
8.000	1.500	57	81	138
8.000	2.000	0	185	185
8.000	2.500	0	3	3
8.000	8.000	0	1	1
10.000	0.384	0	118	118
10.000	0.512	47	0	47
10.000	0.768	0	249	249
10.000	1.000	86	21928	22014
10.000	1.500	353	3915	4268
10.000	2.000	41	907	948
10.000	2.500	0	51	51
10.000	10.000	0	3345	3345
12.000	0.512	115	0	115
12.000	1.000	0	16	16
12.000	1.500	0	869	869
15.000	0.512	0	2	2
15.000	1.000	4243	2354	6597
15.000	2.000	170	29957	30127
15.000	3.000	83510	682	84192
15.000	15.000	0	17	17

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
16.000	2.500	0	33	33
18.000	1.000	10	3	13
18.000	2.000	6	1645	1651
18.000	3.000	0	40	40
20.000	1.000	30	49	79
20.000	2.000	768998	2363	771361
20.000	3.000	0	794	794
20.000	20.000	0	2552	2552
25.000	3.000	36909	3879	40788
25.000	25.000	0	22103	22103
30.000	2.000	6	0	6
30.000	4.000	1276547	29	1276576
30.000	5.000	144506	9	144515
30.000	10.000	0	105	105
30.000	30.000	0	811	811
35.000	3.000	0	1162	1162
35.000	5.000	0	5164	5164
35.000	35.000	0	18	18
40.000	4.000	0	83	83
40.000	40.000	0	176	176
45.000	45.000	0	10	10
50.000	5.000	299577	27456	327033
50.000	50.000	0	18369	18369
60.000	4.000	5	14489	14494
60.000	5.000	626741	12865	639606
60.000	60.000	0	37	37
65.000	65.000	0	1	1
70.000	5.000	2	2243	2245
70.000	70.000	0	49	49
75.000	7.000	0	3	3
80.000	5.000	0	760	760
80.000	80.000	0	43	43

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
90.000	90.000	0	7	7
100.000	1.000	475	0	475
100.000	4.000	0	4663	4663
100.000	5.000	866	191	1057
100.000	7.000	0	45799	45799
100.000	10.000	6814546	282272	7096818
100.000	20.000	1	0	1
100.000	100.000	26460	20116	46576
120.000	10.000	700	2	702
150.000	5.000	0	176	176
150.000	150.000	0	26	26
155.000	155.000	0	5	5
200.000	7.000	0	1238	1238
200.000	10.000	11665034	1052259	12717293
200.000	15.000	0	45042	45042
200.000	20.000	227005	3818	230823
200.000	200.000	0	8574	8574
250.000	250.000	0	19	19
300.000	20.000	269440	24871	294311
300.000	30.000	103	0	103
300.000	300.000	58801	144	58945
325.000	30.000	0	314	314
350.000	25.000	0	2545	2545
400.000	20.000	4474609	174570	4649179
400.000	400.000	3720	20	3740
500.000	500.000	230	3622	3852
600.000	35.000	0	90190	90190
600.000	600.000	0	4	4
700.000	700.000	0	1	1
800.000	800.000	0	1	1
850.000	850.000	0	1	1
900.000	900.000	0	2	2

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
940.000	35.000	205972	23499	229471
1000.000	1000.000	861	5056	5917
2000.000	2000.000	0	337	337
3000.000	3000.000	0	1	1
5000.000	5000.000	0	167	167
8000.000	8000.000	0	1	1
10000.000	10000.000	0	179	179
Total		27017531	1996580	29014111

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

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
Cable Modem	0.256	0.128	0	5	5
	0.256	0.256	0	1	1
	0.384	0.128	0	26	26
	0.512	0.128	0	55	55
	0.512	0.256	0	6	6
	0.512	0.512	0	860	860
	0.768	0.128	0	1	1
	0.768	0.256	0	24	24
	0.768	0.384	0	1	1
	0.768	0.768	0	2	2
	1.000	0.256	2	150	152
	1.000	0.384	0	4	4
	1.000	0.512	0	1	1
	1.000	0.768	0	4	4
	1.000	1.000	6053	182	6235
	1.500	0.256	0	197	197
	1.500	0.384	0	28	28
	1.500	0.768	0	80	80
	1.500	1.000	107	0	107
	1.500	1.500	0	68	68
	2.000	0.256	7	56	63
	2.000	0.384	12	406	418

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	2.000	0.512	1	30	31
	2.000	0.768	1	11	12
	2.000	1.000	1	8	9
	2.000	2.000	1	788	789
	3.000	0.256	38	0	38
	3.000	0.384	12	826	838
	3.000	0.512	5	61	66
	3.000	0.768	0	47	47
	3.000	1.000	8302	81	8383
	3.000	1.500	0	9	9
	3.000	3.000	0	374	374
	4.000	0.256	0	4	4
	4.000	0.384	2	38	40
	4.000	0.768	0	905	905
	4.000	2.000	1	39	40
	5.000	0.384	6	266	272
	5.000	0.512	3	641	644
	5.000	0.768	37	1146	1183
	5.000	1.000	390	449	839
	5.000	1.500	3	89	92
	5.000	2.000	19	21	40
	5.000	5.000	1540	470	2010
	6.000	2.000	0	9	9
	7.000	0.384	1	8	9
	7.000	0.512	49	114	163
	7.000	0.768	10	14064	14074
	7.000	1.000	9855	126	9981
	7.000	1.500	0	412	412
	7.000	2.000	11	805	816
	8.000	0.384	3	10	13
	8.000	0.768	0	201	201
	8.000	1.000	1	49	50

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	8.000	1.500	57	81	138
	8.000	2.000	0	185	185
	8.000	2.500	0	3	3
	10.000	0.384	0	118	118
	10.000	0.512	47	0	47
	10.000	0.768	0	249	249
	10.000	1.000	86	21902	21988
	10.000	1.500	353	3915	4268
	10.000	2.000	41	906	947
	10.000	2.500	0	51	51
	10.000	10.000	0	2159	2159
	12.000	0.512	115	0	115
	12.000	1.000	0	16	16
	12.000	1.500	0	864	864
	15.000	0.512	0	2	2
	15.000	1.000	4236	2354	6590
	15.000	2.000	170	29920	30090
	15.000	3.000	83507	682	84189
	16.000	2.500	0	33	33
	18.000	1.000	10	3	13
	18.000	2.000	6	1634	1640
	18.000	3.000	0	40	40
	20.000	1.000	30	49	79
	20.000	2.000	768875	2363	771238
	20.000	3.000	0	794	794
	20.000	20.000	0	1319	1319
	25.000	3.000	36753	3869	40622
	30.000	2.000	6	0	6
	30.000	4.000	1275918	29	1275947
	30.000	5.000	144482	9	144491
	30.000	10.000	0	105	105
	30.000	30.000	0	36	36

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	35,000	3,000	0	1158	1158
	35,000	5,000	0	5149	5149
	40,000	4,000	0	83	83
	50,000	5,000	299273	27412	326685
	60,000	4,000	5	14488	14493
	60,000	5,000	626030	12857	638887
	70,000	5,000	2	2243	2245
	75,000	7,000	0	3	3
	80,000	5,000	0	760	760
	100,000	1,000	475	0	475
	100,000	4,000	0	4663	4663
	100,000	5,000	866	191	1057
	100,000	7,000	0	45799	45799
	100,000	10,000	6802139	281436	7083575
	100,000	20,000	1	0	1
	120,000	10,000	700	2	702
	150,000	5,000	0	176	176
	200,000	7,000	0	1238	1238
	200,000	10,000	11632420	1047549	12679969
	200,000	15,000	0	44827	44827
	200,000	20,000	226631	3810	230441
	300,000	20,000	267416	24619	292035
	325,000	30,000	0	313	313
	350,000	25,000	0	2543	2543
	400,000	20,000	4459476	173293	4632769
	600,000	35,000	0	89678	89678
	940,000	35,000	204866	23300	228166
Optical Carrier/Fiber to the End User	1,000	1,000	0	183	183
	2,000	0,384	0	1	1
	2,000	2,000	0	8	8
	3,000	0,384	0	2	2
	3,000	1,000	4	0	4

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	3.000	3.000	0	29	29
	5.000	5.000	0	335	335
	6.000	6.000	0	1	1
	7.000	0.768	0	7	7
	7.000	1.000	272	0	272
	7.000	1.500	0	1	1
	8.000	8.000	0	1	1
	10.000	1.000	0	26	26
	10.000	2.000	0	1	1
	10.000	10.000	0	1186	1186
	12.000	1.500	0	5	5
	15.000	1.000	7	0	7
	15.000	2.000	0	37	37
	15.000	3.000	3	0	3
	15.000	15.000	0	17	17
	18.000	2.000	0	11	11
	20.000	2.000	123	0	123
	20.000	20.000	0	1233	1233
	25.000	3.000	156	10	166
	25.000	25.000	0	22103	22103
	30.000	4.000	629	0	629
	30.000	5.000	24	0	24
	30.000	30.000	0	775	775
	35.000	3.000	0	4	4
	35.000	5.000	0	15	15
	35.000	35.000	0	18	18
	40.000	40.000	0	176	176
	45.000	45.000	0	10	10
	50.000	5.000	304	44	348
	50.000	50.000	0	18369	18369
	60.000	4.000	0	1	1
	60.000	5.000	711	8	719

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	60.000	60.000	0	37	37
	65.000	65.000	0	1	1
	70.000	70.000	0	49	49
	80.000	80.000	0	43	43
	90.000	90.000	0	7	7
	100.000	10.000	12407	836	13243
	100.000	100.000	26460	20116	46576
	150.000	150.000	0	26	26
	155.000	155.000	0	5	5
	200.000	10.000	32614	4710	37324
	200.000	15.000	0	215	215
	200.000	20.000	374	8	382
	200.000	200.000	0	8574	8574
	250.000	250.000	0	19	19
	300.000	20.000	2024	252	2276
	300.000	30.000	103	0	103
	300.000	300.000	58801	144	58945
	325.000	30.000	0	1	1
	350.000	25.000	0	2	2
	400.000	20.000	15133	1277	16410
	400.000	400.000	3720	20	3740
	500.000	500.000	230	3622	3852
	600.000	35.000	0	512	512
	600.000	600.000	0	4	4
	700.000	700.000	0	1	1
	800.000	800.000	0	1	1
	850.000	850.000	0	1	1
	900.000	900.000	0	2	2
	940.000	35.000	1106	199	1305
	1000.000	1000.000	861	5056	5917
	2000.000	2000.000	0	337	337
	3000.000	3000.000	0	1	1

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	5000.000	5000.000	0	167	167
	8000.000	8000.000	0	1	1
	10000.000	10000.000	0	179	179
Total			27017531	1996580	29014111

Best Internet Providers for Rural Areas

U.S. News 360 Reviews takes an unbiased approach to our recommendations. When you use our links to buy products, we may earn a commission but that in no way affects our editorial independence.

By Onjeinika Brooks

July 8, 2021, at 1:00 p.m.

In most urban and densely populated areas of the U.S., broadband internet access is readily available. That's due in part to existing wiring and infrastructure, as well as new construction in expanding cities. But when it comes to Rural America, missing infrastructure can be an Achilles heel, leaving fewer options for households that need fast internet access for school, work, and other activities.

In an increasingly connected world, reliable internet is important for all. However, data collected by [the U.S. Census Bureau](#) found 81% of households in rural areas are connected to broadband internet. To help those in less populous areas find the best internet service, we've used our rating for the [Best Internet Service Providers of 2021](#) to create the Best Internet Service Providers for Rural Areas of 2021 rating. Satellite companies [HughesNet](#) and [Viasat](#) made our list because they're available almost anywhere with a clear view of the sky, but keep reading to see what other options you may have.



(SIMONAPIOLLA)

Our Best Rural Internet Providers Rating

- #1 [Spectrum Internet](#)
- #2 [HughesNet Internet](#)
- #2 [Frontier Internet](#)
- #2 [CenturyLink Internet](#)
- #5 [Viasat Internet](#)


Compare the Best Rural Internet Providers of 2021

Best Internet Service Providers for Rural Areas of 2021

COMPANY	MONTHLY COST	CONNECTION TYPE	DOWNLOAD SPEED (MBPS)	LEARN MORE
Spectrum Internet » 3.8 out of 5	\$49.99 and Up	Hybrid-Fiber Coax	100 Mbps - 940 Mbps	View Plans » 877-260-0656
HughesNet Internet » 3.7 out of 5	\$59.99 and Up	Satellite	25 Mbps	View Plans » 844-928-3884
Frontier Internet » 3.7 out of 5	\$34.99 and Up	Fiber, DSL	Up to 940 Mbps	View Plans » 844-912-1548
CenturyLink Internet » 3.7 out of 5	\$49 and Up	Fiber, DSL	10 Mbps - 940 Mbps	View Plans » 855-906-0340
Viasat Internet » 3.6 out of 5	\$39.99 and Up	Satellite	12 Mbps - 100 Mbps	View Plans » 844-923-1695

Best Rural Internet Providers in Detail

[Spectrum Internet](#) »



[877-260-0656](tel:877-260-0656)

[View Plans](#)

Best ISP for Rural Areas

360 OVERALL RATING 3.8 out of 5
MONTHLY COST \$49.99 and Up
CONNECTION TYPE Hybrid-Fiber Coax
DOWNLOAD SPEED 100 Mbps - 940 Mbps

BUNDLES Internet, TV, or Phone

[SEE REVIEW](#)

Spectrum: Spectrum places No. 1 in our rating of the Best Rural Internet Providers of 2021. It's available throughout most of the U.S. and is known for offering plans with unlimited data. It offers three hybrid fiber-coaxial plans, with prices starting at \$49.99. However, if you opt for one of Spectrum's bundles that include TV, mobile, or home phone, it may lower your monthly bill. Download speeds range from 200 megabits per second (Mbps) to 940 Mbps, with upload speeds from 10 to 35 Mbps. Spectrum is available in 41 states across the U.S. and its plans are contract-free.

Read more in our [review of Spectrum internet](#).

[HughesNet Internet »](#)

HughesNet.

[844-928-3884](#)

[View Plans](#)

Best Satellite ISP

360 OVERALL RATING 3.7 out of 5

MONTHLY COST \$59.99 and Up

CONNECTION TYPE Satellite

DOWNLOAD SPEED 25 Mbps

BUNDLES Internet, Voice Bundle (VOIP)

[SEE REVIEW](#)

HughesNet: Hughes Network Systems (HughesNet) offers satellite internet plans nationwide and around the world. It places No. 1 in our [Best Satellite Internet Service Providers](#) rating and No. 2 in the Best Internet Service Providers for Rural Areas. The company has more than one million subscribers. There are five plans available, with monthly prices ranging from \$59.99 to \$149.99. Most plans require a two-year contract. HughesNet's advantages include good reliability and low packet loss, which means there is not a large loss of data that can cause games or videos to freeze. HughesNet is available in all 50 states and Washington, D.C.

Read more in our [review of HughesNet](#).

[Frontier Internet »](#)

[844-912-1548](#)

Best ISP for Gaming

360 OVERALL RATING 3.7 out of 5

MONTHLY COST \$34.99 and Up

CONNECTION TYPE Fiber, DSL

DOWNLOAD SPEED Up to 940 Mbps

BUNDLES Internet, TV, or Phone

[SEE REVIEW](#)

Frontier: Frontier Internet is tied for second place with HughesNet and CenturyLink in our rating of the Best Internet Service Providers for Rural Areas of 2021. Frontier serves 25 states and stands out as our No. 1 pick for [Best Internet Service Providers for Gaming](#). It offers hybrid fiber-coaxial, fiber, cable, and DSL plans starting at \$34.99 up to \$79.99 for its 1 Gig plan. Frontier's fiber download and upload speeds are nearly equal with a range of 50 to 940 Mbps and 50 to 880 Mbps, respectively. It no longer lists speeds for its DSL service.

Read more in our [review of Frontier internet](#).

[CenturyLink Internet](#) »



[855-906-0340](tel:855-906-0340)

[View Plans](#)

360 OVERALL RATING 3.7 out of 5

MONTHLY COST \$49 and Up

CONNECTION TYPE Fiber, DSL

DOWNLOAD SPEED 10 Mbps - 940 Mbps

BUNDLES Internet, TV, or Phone

[SEE REVIEW](#)

CenturyLink: CenturyLink is in a three-way tie for the No. 2 spot in Best Internet Service Providers for Rural Areas. It has two plans available that start at \$49 for DSL and \$65 for fiber. The company covers 36 states with DSL service, while its fiber plans are currently only available in 19 cities. The ISP offers an internet plan called Price for Life, which comes with a locked-in monthly fee that never changes. It also offers a prepaid internet option. CenturyLink doesn't require a contract when you sign up for service.

Read more in our [review of CenturyLink internet](#).

[Viasat Internet](#) »



[844-923-1695](tel:844-923-1695)

[View Plans](#)

360 OVERALL RATING 3.6 out of 5
MONTHLY COST \$39.99 and Up
CONNECTION TYPE Satellite
DOWNLOAD SPEED 12 Mbps - 100 Mbps
BUNDLES Internet, TV, or Phone
[SEE REVIEW](#)

Viasat: Viasat ranks No. 5 on our list of the Best Internet Service Providers for Rural Areas and No. 2 on our list of the Best Satellite Internet Service Providers of 2021. It provides access to all of the U.S. and has five unlimited data internet plans that range from \$39.99 per month to \$149.99 per month. Download speeds range from 12 to 100 Mbps. A two-year contract is required.

Read more in our [review of Viasat](#).

How to Find the Right Rural Internet Providers for You

If you live in a rural area, you may have limited access to internet service providers. Which one is right for you depends on your location, your budget, and the type of internet activities you engage in. Ask yourself these questions:

1. Which internet service providers offer service in your area?
2. Which internet options are available? Rural areas may not have every option, but satellite and DSL are typical.
3. How many devices and appliances will you connect to the service?
4. Which activities do you plan to engage in? Streaming high-definition videos, downloading large files, and gaming all tend to require higher bandwidth than browsing the internet, checking email, and videoconferencing.
5. How much money can you allocate for monthly internet access? If you need help paying for high-speed internet, check [here](#) to see if you qualify for assistance.
6. How reliable is the internet service provider?

7. Does the company provide 24/7 support, an online help center, and/or a chatbot for troubleshooting connection problems?

Once you have the answers, compare plans to see which costs and speeds most align with your needs.

What Is a Rural Internet Provider?

A rural internet provider (ISP) makes its service available to people who live in rural communities. These providers differ from others in that they may specialize in a specific geographical location or type of internet service to meet the needs of people in a rural area.

Types of Rural Internet Providers

Our rating of the Best Internet Service Providers for Rural Areas of 2021 includes companies that offer fiber, hybrid-fiber, satellite, cable, and DSL. In some cases, the provider may only offer one type of service, like satellite internet providers HughesNet and Viasat. Other companies like Spectrum and CenturyLink offer cable, DSL, and/or fiber. Frontier offers hybrid-fiber internet service.

Satellite

Satellite internet uses orbiting satellites to transmit data over the internet. Unlike other types of internet connections, satellite does not require any wires to be run to your home. That makes it a good choice for rural areas. You need a modem and a satellite dish installed on your property to transmit and receive the signal. The dish sends your internet request into space, where it is picked up by a geostationary communications satellite. That satellite then beams your request back down to a ground station that communicates with the website you want to view. To receive data, the same steps occur in reverse.

DSL

A Digital Subscriber Line (DSL) uses a traditional telephone line to connect you to the internet. Because most homes are wired for a landline telephone, DSL is available to most households. Even though DSL uses your existing phone lines, you can still make calls while accessing the internet. The technology is being phased out due to its slower speeds compared to fiber and cable internet.

Cable

Cable internet service uses coaxial cable. It's readily available because it's the same type of cable used for your television. As a result, many cable TV providers offer to bundle TV service with your internet service. Coaxial cable consists of layers of

copper, steel, aluminum, and plastic. You can still watch TV while you use your cable to connect to the internet.

Fiber

Fiber refers to fiber-optic cable, which is made from thin strands of glass and can upload and download data at about 70% the speed of light. There are two types of fiber-optic cable: Single mode, which transmits data over long distances, and multimode, which transmits data over short distances. Fiber optic cables may run straight to your home or stop anywhere between the door and the internet provider's building, in which case the remaining distance will have to be bridged by another type of internet service like coaxial cable (see hybrid fiber-coaxial below). Fiber is second to cable in popularity but is not yet available in all U.S. cities, and that's why it may be difficult to find in rural areas.

Hybrid fiber-coaxial

Sometimes internet companies use a combination of fiber and cable wiring to connect households to the internet. In most cases, the connection begins as fiber, and then the internet company uses cable to connect the last mile or so up to the residence.

How Fast Are the Available Internet Options?

COMPANY	DOWNLOAD SPEED (MBPS)	UPLOAD SPEED (MBPS)	DATA CAP
Xfinity Internet »	50 Mbps - 2,000 Mbps	5 Mbps - 2,000 Mbps	Starting at 1.2 TB
Verizon Internet »	200 Mbps - 940 Mbps	200 Mbps - 880 Mbps	No Cap
AT&T Internet »	0.8 Mbps - 940 Mbps	0.4 Mbps - 940 Mbps	No Cap
Spectrum Internet »	100 Mbps - 940 Mbps	10 Mbps - 35 Mbps	No Cap
RCN Internet »	50 Mbps - 940 Mbps	N/A	N/A

What Do I Need To Get Set Up?

What you need to get set up for internet service will depend on which type of service you choose. However, you will have to lease or purchase and install some type of equipment regardless. Some ISP websites offer information on how to perform your own installation to get you up and running quickly and for less cost.

Should I Buy Or Rent Equipment?

There are pros and cons to buying or renting equipment.

Buying Equipment Is Best For:

- Saving money in the long run
- Tech-savvy people who can perform a DIY installation

Renting Equipment Is Best For:

- People who don't want to pay a large lump sum upfront
- Those that don't feel comfortable setting up the equipment themselves
- Those who want tech support for the equipment

When choosing between renting and buying (if your internet service provider allows you to do so), the most cost-efficient option is normally to pay for the equipment upfront. However, a lump-sum payment can be expensive or possibly unaffordable if you've not budgeted for the cost. If you decide to get your own equipment, remember that DIY installation comes along with the decision. So if you're not sure how to install technical equipment or you're not great with instructions, you may want to lease equipment that your ISP will install.

If your equipment malfunctions or needs an upgrade, your internet service provider will most likely provide technical support for rented equipment. That means you can schedule a technician to come to your home and help you troubleshoot and resolve the problem. If it's your own modem you bought and installed, you're on your own.

How Much Does a Rural Internet Provider Cost?

The cost of internet in a rural area ranges from \$34.99 to \$149.99 based on plans from providers that made our list. However, the cost you pay for service will depend on which company and which plan you choose. With the great need for families and households to have access to broadband internet, the Federal Communications Commission (FCC) has approved the [Emergency Broadband Benefit Program](#). The plan provides qualifying low-income families with a discount on internet service. Hundreds of providers across the U.S. have partnered with the FCC to bring lower-cost broadband to households that need it.

Which Rural Internet Providers are Available in My Area?

The ISPs available in your area may depend on the type of technology you're interested in using for your connection. For example, satellite internet is available almost everywhere, whereas fiber connections are limited. Cable and DSL are not as widespread as satellite but are good options in rural areas, as they work on infrastructure used for TV and phone. However, beware that DSL service can be very slow if your location is far away from the internet service provider's hub.

[The National Governor's Association reported](#) on several governors' initiatives and requests for funding to help increase access to broadband internet in rural areas within their respective states. Oregon Governor, Kate Brown, addressed the issue saying her budget included \$100 million to be used to help bridge the internet divide between urban and rural areas. As more funding is provided it could open the door for more internet service providers in remote areas.

To check the companies that made our Best ISPs for Rural Areas rating, visit their websites and enter your address or call a customer service representative to learn about availability in your area.

Other Internet Service Providers

- [AT&T Internet](#)
- [CenturyLink Internet](#)
- [Cox Internet](#)
- [Frontier Internet](#)
- [HughesNet Internet](#)
- [Mediacom Internet](#)
- [RCN Internet](#)
- [Spectrum Internet](#)
- [Suddenlink Internet](#)
- [Viasat Internet](#)
- [Verizon Internet](#)
- [Xfinity Internet](#)

How U.S. News Evaluated Internet Service Providers

We explain what matters when it comes to internet service by sourcing experts and professional reviewers. Then we provide an unbiased evaluation of internet service providers. Our goal is to empower consumers with the information and tools they need to make informed decisions. More information about our 360 Reviews methodology for evaluating internet service providers is [here](#).

U.S. News 360 Reviews takes an unbiased approach to our recommendations. When you use our links to buy products, we may earn a commission but that in no way affects our editorial independence.



SPECTRUM INTERNET® ASSIST

Affordable, reliable high-speed Internet access for qualifying households



Spectrum Internet Assist is a low-cost, high-speed broadband service that provides qualifying households with Internet service for **\$17.99 per month**.

To qualify for Spectrum Internet Assist, a member of the household must be a recipient of one of the following programs:

- The National School Lunch Program (NSLP); free or reduced-cost lunch
- The Community Eligibility Provision (CEP) of the NSLP
- Supplemental Security Income (SSI) (age 65 and over only)

Programs that do not qualify for Spectrum Internet Assist: Social Security Disability (SSD), Social Security Disability Insurance (SSDI), and Social Security Retirement and Survivor Benefits are different from Supplemental Security Income (SSI) and do NOT meet eligibility requirements.

If you believe you may qualify, visit SpectrumInternetAssist.com.

- Enter in your 5-digit ZIP code to see if Spectrum Internet Assist is available in your area.
- If available, you will receive direction to call 1-844-525-1574 to start the qualification process.
- If Spectrum Internet Assist is not available in your area, you will receive a coming-soon message and be asked to check back for updates.

GET CONNECTED WITH HIGH-SPEED INTERNET FOR **\$17.99/MO**

Spectrum Internet Assist gives your household a reliable, blazing-fast connection to the world of information, education, entertainment and services that are available online.

With Spectrum Internet Assist, you'll enjoy:

- 30 Mbps of Internet speed with NO data caps
- **FREE** Internet modem
- No contracts, ever
- Add fast in-home WiFi for \$5 more a month

To get started, visit:
SpectrumInternetAssist.com

SPECTRUM INTERNET ASSIST: Limited time offer; subject to change; not transferable. Availability of offer based on eligibility and service address that has been pre-qualified. Offer valid to qualified residential customers who (i) have not subscribed to Charter Communications' Internet services within 30 days prior to requesting services under this offer, (ii) have no outstanding debt for any of Charter Communications' services that was incurred within 1 year prior to requesting services under this offer and (iii) have no outstanding debt to Charter Communications that was incurred for services provided under this offer and that are subject to Charter Communications' ordinary debt collection procedures. Equipment, taxes, fees and surcharges may be extra and subject to change during and after the term; installation and additional services are extra. Available Internet speeds may vary by address. Download speeds are up to 30 Mbps and upload speeds are up to 4 Mbps. WiFi: Equipment, activation and installation fees may apply. Services subject to all applicable service terms and conditions, subject to change. Services not available in all areas. Restrictions apply. ©2019 Charter Communications.