

Application to DHCD Submitted through CAMS

County of Floyd

Floyd County VATI 2022

Application ID: 86509012021120355
Application Status: Pending
Program Name: Virginia Telecommunications Initiative 2022
Organization Name: County of Floyd
Organization Address: 120 West Oxford Street
Floyd, VA 24091-2222
Profile Manager Name: Lydeana Martin
Profile Manager Phone: (540) 745-9300
Profile Manager Email: lmartin@floydcova.org

Project Name: Floyd County VATI 2022
Project Contact Name: Lydeana Martin
Project Contact Phone: (540) 745-9300
Project Contact Email: lmartin@floydcova.org
Project Location: PO Box 218
Floyd, VA 24091-2222
Project Service Area: Floyd County

Total Requested Amount: \$1,310,267.00

Required Annual Audit Status: Accepted

Application to DHCD Submitted through CAMS

County of Floyd

Floyd County VATI 2022

Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	\$1,310,267.00	\$1,111,725.00	\$2,421,992.00
Construction	\$1,310,267.00	\$1,111,725.00	\$2,421,992.00
Total:	\$1,310,267.00	\$1,111,725.00	\$2,421,992.00

Budget Narrative:

This budget is fully developed, explained and supported in Attachments 12 and 13. Costs are divided between the two parts of the project--the 3% Unserved areas and the Long Driveways (Special Construction for LMI.) Linear footage calculations were completed by Citizens Telephone engineering department. Material and labor estimates were based on very recent invoices for similar work.

Questions and Responses:

Application to DHCD Submitted through CAMS

County of Floyd

Floyd County VATI 2022

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:

The remaining telecommunication needs in Floyd County are two-fold:

1) Extending fiber along state roads to the last 3 percent of the County not already planned (and scheduled) to be passed by the end of 2022 by Citizens Telephone Cooperative. These “3 percent areas” are small areas in the farthest corners of Floyd County. In the Meadows of Dan area (includes 3 addresses in Laurel Fork), the roads to be served are Burnette Rd, Danville Pike (1 in Laurel Fork), Fork Mountain Rd, Hoot Owl Hollow Rd, Hosta Lane, Mabry Mill Rd, Sollie Drive (Laurel Fork), Terry Trail and Turnip Patch. In Indian Valley, the roads to be served are Berry Creek and Macks Mountain. In Copper Hill, the roads to be served are Autumn Dr, Daniel Road, and Sugar Run. In Pilot/Riner, the roads to be served are Barker Lane, Dobbins Hollow, Laurel Ridge, and Otey. See **Attachment 1 for the “3% Unserviced Project Area Map”** for these areas.

2) Extending fiber down long private driveways for those who are income eligible. Even though about 60% of Floyd County is already passed by fiber along the state roads and another 37% will be by the end of 2022, many households still don't have broadband because they have very long driveways that neither they nor Citizens Telephone Cooperative can afford to cover. Citizens will pay for the first 500 ft, but even that cost takes many years of service to recover, and many households can't afford to pay for the rest of the driveway length. There are over 1,600 households in Floyd County with driveways that are 1,000 ft or longer (out of a total of about 8,100 households). Since the announcement of the new VATI funds, we have been working hard with Citizens' staff and partners to identify income eligible households for the "special construction" assistance. We also surveyed residents with long driveways who lacked service and 309 responded (see Attachment 17 Long Driveway Survey Responses.) We have identified 227 residences (43 include home-based businesses) who are income eligible and interested. Plus by extending to them, due to shared driveways, it will get within the Citizens 500 ft reach of an additional 382 households, many of these are also likely income eligible, but not verified.) See **Attachment 1 for the “Eligible Long Driveways Project Area” map.**

In total, 723 addresses (all households except 1 major community anchor) would be passed.

Application to DHCD Submitted through CAMS

County of Floyd

Floyd County VATI 2022

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:

We used broadbandmap.fcc.gov to access the latest information from providers (based on 477) and speeds listed as offered at each address. Unfortunately, this information overstates the availability of services. It appears that if a provider serves one address in a Census block, they show up as serving the entire Census block. So for example, the fcc site indicates Citizens Telephone Cooperative provides fiber services (1 Gbps/500 Mbps) to addresses in the 8400-8800 range of Autumn Drive in Copper Hill, but they do not. Similarly Virginia Everywhere (Allpoints) and Fastlink Communications are listed as providing 25/3 and 30/5 services, respectively, via fixed wireless in a few parts of the County; but when technical support was contacted for Allpoints, for example, about the Dobbins Hollow/Otey area in Riner/Pilot, they indicated that actually it appears they can offer only around 10 MB to that area, and that could be further inhibited by trees and hills. So while we are providing here the summary as listed on the FCC site, in #5 below we will adjust those numbers based on Citizens actual offerings at each address and the barriers to the maximum fixed-point wireless offerings (see also Attachment 4). The providers vary somewhat, but excluding satellite the providers area and speeds generally are as follows. Listed providers often just serve parts of the listed area. For address level information, please see Attachment 4. For the 3% areas...number indicate Up/Down MBPS...

- Meadows of Dan area providers are Citizens (2.6/0.768 to 10/1.5); Telephone and Data System (TDS 2/0.064); Century Link (from 10/1 to 15/0.75 to 25/2); Fastlink Communications (30/5, though given it's fixed point wireless, with tree cover and topography, this is likely not available at most listed addresses).
- Indian Valley area providers are Citizens (10/1.5); Telephone and Data System (TDS 2/0.064); Virginia Everywhere (15/3 to 25/3, though given it's fixed point wireless, with tree cover and topography, this is likely not available at most listed addresses.)
- Copper Hill area providers are Citizens (10/1 to to 50/10 to 1,000/500, though latter is not actually available at the addresses we've included in our application); Telephone and Data System (TDS 2/0.064); Verizon (3/0.768), Virginia Everywhere (15/3, though given it's fixed point wireless, with tree cover and topography, this is likely not available at most listed addresses.)
- Pilot/Riner area providers are Citizens (1.5/0.768); Telephone and Data System (TDS 2/0.064); Verizon (3/0.768), Virginia Everywhere (25/3, though given it's fixed point wireless, with tree cover and topography, this is likely not available at most listed addresses.)

For the remainder of Floyd County (long driveway and private road fiber drops), the offerings are varied and similar to those above except that Citizens either already has 1,000/500 along state roads in 60% of the County and will cover another 37% by the end of 2022. But these LMI households proposed to be served here cannot afford to connect to the fiber because of their long driveways. In addition to Citizens, Comcast is listed as serving about 9 addresses with 987/35 service and Cox Communications is listed as serving one of the addresses with 1,000/35.

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:

The "3% areas" did not receive federal grant funds. But most of Floyd County has been aided by ACAM funds via Citizens Telephone Cooperative. The areas shown as already served, or to be served in 2021 and 2022 are receiving ACAM funds. The areas eligible and receiving ACAM are the entire County except where we did our first VATI grant in Copper Hill and this proposed 3% area. Note that ACAM does not pay for fiber to be extended up driveways. See Attachment 2-Documentation of Federal Funding Area (Map of Floyd County Areas served with ACAMS, plus past and proposed VATI areas.)

Application to DHCD Submitted through CAMS

County of Floyd

Floyd County VATI 2022

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:

None

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

Answer:

As noted above, we used broadbandmap.fcc.gov to access the latest information on providers and speeds offered at each address. The providers vary somewhat, but excluding satellite the providers are and speeds generally are as follows. For address level information, please see [Attachment 4: Documentation Unserved Area VATI Criteria \(includes Provider and FCC Listed Speeds by Address plus LMI Info and Analysis of Listed Fixed Wireless Internet Service Providers\)](#). There are 8 non-satellite providers that serve some addresses in Floyd County. Of the 723 addresses we propose to serve, according to the FCC data, only the following offer 25/3 or more to some of the addresses we propose to serve with 1,000/500 service:

- Comcast and Cox serve a total of **10** addresses with 987/35 and 1,000/35, respectively.
- Beyond the 3% unserved area (where Citizens offers 10/1 or less), Citizens either does or will soon provide direct fiber 1,000/500 service along state roads, but this still doesn't help those with long driveways who can't afford to pay their part of a driveway build.
- Virginia Everywhere (All Points) offers exactly 25/3 service to 94 addresses according to the general FCC site (see # 3 for why this generally overstates.) Beyond the general overstating by Census block, fixed point wireless is generally problematic in rolling, heavily forested topography like we have. When one looks closely at the tree cover and topography, however, it is highly likely that that number is **19**. See Attachment 4 for images of tree cover plus relevant topo maps and interpolations based on those limiting factors.
- Fastlink Communication offers 30/5 service to 59 addresses according to the general FCC site (see # 3 for why this generally overstates.) Beyond the general overstating by Census block, fixed point wireless is generally problematic in rolling, heavily forested topography like we have. When one looks closely at the tree cover and topography, however, it is highly likely that that number is **9**. See Attachment 4 for images of tree cover plus relevant topo maps and interpolations based on those limiting factors.

So of the 723 addresses proposed to be passed with fiber (1,000/500) service with our project, about 38 likely have access to at least 25/3 at present (5.4%).

Application to DHCD Submitted through CAMS

County of Floyd

Floyd County VATI 2022

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

- There will be 723 passings, including 722 residential (61 with home-based businesses) and 1 community anchor, which is Mabry Mill—the most frequently photographed historic site on the Blue Ridge Parkway. It includes a restaurant and gift shop operated by a private vendor, in addition to the sites and exhibits by the National Park Service.
- No RDOF.
- There will be 227 passings with Special constructions costs. All of them are residential but 51 also have home-based businesses. We arrived at this number by first calculating the number of driveways or private roads in the County that were 1,000+ ft long and lacking fiber connection. In order to identify the low-to-moderate income households in short order, we did several things:
 - We collaborated with Social Services to help identify some eligible households.
 - We identified houses in the County listed as in Fair or Poor Condition in our land records; and we purchased some demographic data that included income estimates.
 - We surveyed residents This involved sending emails to the 500+ of the 1,600 that Citizens had email addresses for; sending a postcard to every household on the list; and doing follow up calls with those who hadn't responded. Ultimately we go 309 responses (see [Attachment 17 for Long Driveway Survey Responses](#).) We also did some conservative take estimate (25%) for some eligible households that didn't respond. Not of those who did respond, 94.8% said they would sign up for Citizen's Gigabit service if the grant is awarded.
- After extending fiber down the driveways or shared private roads to the 227 that are income eligible, there will then also be another 382 households that are within reach of Citizens free 500 ft fiber drops. So a total of 609 households will be served by this ultimately and at least 51 have home-based businesses.)
- There are 379 passings in the project that have 10/1 mbps or less. One of those is Mabry Mill, a community anchor and business location. The rest are households, though at least 35 of those also have a home-based business. These 379 locations include locations where the FCC page reports that Citizens offers 10/1.5 service, because in reality Citizens can only offer that 1.5 upload with a twisted pair again and that have limited capacity to do that (could only do at a few places—not all.) See Attachment 4.

Application to DHCD Submitted through CAMS

County of Floyd

Floyd County VATI 2022

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:

N/A

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:

Citizens will provide direct fiber to the proposed customers. See # 9 below for network design. All will have 1,000Mbps (1Gbps) Download / 500Mbps (0.5Gbps) Upload plus Wifi. Citizens provides premium services at affordable prices for our community. Residential pricing is based on data tiers:

- 150 GB for \$49.95 per month
- 400GB for \$69.95 (90% of current Citizens' customers use less than this).
- 800GB for \$89.95

Higher tiers are also available. Incremental charge of \$5 per 50 GB will be charged should subscribers go over subscribed monthly usage. Citizens will continue to partner with Floyd County Public Schools and provide reduced broadband fees (\$10/month) through our Student Connect program for students in households with low-to-moderate incomes. They also provide half price rates for low-income adult households.

Application to DHCD Submitted through CAMS

County of Floyd

Floyd County VATI 2022

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:

This is a 100% fiber design. We currently have distribution fiber throughout Floyd County and are constructing more in the next 12 months. The electronics for this project will be served out of one of our existing telecommunications buildings using existing backup power generators on-site.

Having a 100% fiber design offers many benefits over other types of broadband infrastructure: 1) Provides virtually unlimited bandwidth capacity 2) Less susceptible to corrosion or power surges from lightning and other sources, resulting in greater reliability and less service interruptions 3) it is impacted less by distance than other types of broadband service; 4) no RF (Radio Frequency) interference.

The network topology will be PON (Passive Optical Network) with Active Ethernet overlay. We will be using 32:1 ratio on the network (or up to 32 customers per PON) for residential and small office/home office customers. The PON equipment will meet or exceed the G-PON standard with the ultimate goal of deploying or upgrading to a NG-PON2 solution which may happen after the grant is completed. G-PON and NG-PON2 can work on the same fiber; however NG-PON2 (new standard) equipment is currently running 3 to 4 times the price of G-PON equipment. We currently have G-PON deployed in the town of Floyd, VA with the current utilization of 2-4% per PON using a 32:1 ratio.

This project is adjacent to our current Fiber to the Home overbuild in our traditional ILEC (Incumbent Local Exchange Carrier) footprint (predominantly Floyd County). That project is already underway and is being funded by the FCC Alternative Connect America Fund Model (A-CAM) that applies to Rate of Return carriers like ourselves.

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:

Citizens Telephone Cooperative was originally to serve over 90% of the County that they were the original ILAC for with Broadband by 2026, in partnership with ACAM. But they have been working much faster than that and now expect to finish by the end of 2022. The VATI 2018 program allowed them to serve an additional part of the County (much of Copper Hill). And this VATI application would allow them to serve the last 3 %. Perhaps we would be one of the first Counties in Virginia, or at least rural counties, to have universal coverage. See Attachment 2 for Map of Floyd County Fiber Built Out with Timeline and Partners.

Application to DHCD Submitted through CAMS

County of Floyd

Floyd County VATI 2022

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:

Citizens has identified all households to be served. As soon as grant funds are awarded, Citizens would be able schedule 125 of the long driveways (where fiber is already available along the road) and complete those by the end of June 2022. Their internal Engineering team would begin final engineering and permitting work for the 3% unserved area; design, staking and easements would be completed by end of May 2022. Fiber construction to the 3% unserved area would begin in June 2022 and be complete by the end of October 2022. Once Citizens finishes the rest of its already planned and financed fiber construction (end of December 2022), it will be able to do the remaining qualified customers. Citizens can add these additional areas into the current Fiber to the Home overbuild we are currently working on. Their internal engineering team is very familiar with the planning, design, and permitting required for this project and they would do this work internally for this project. As of September 1, 2021, Citizens is approximately 60% complete on our overbuild project. If awarded grant funds in December, we would immediately be able to schedule construction on 50% of the locations that are in completed areas, resulting in home installation of service within 6-12 weeks. The remaining locations would be scheduled as the main line overbuild is completed in their area. All main line fiber construction will be completed by December 2022, leaving ample time for us to get customers in the final areas completed within 18 months of project start.

See Attachments: Attachment 7 – Timeline/Project Management Plan; Attachment 8 – MOU/MOA between Applicant/Co-Applicant

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:

Yes, we received a 2018 VATI grant. The project work was completely on time (within 12 months of award), but the delayed invoice required us to ask for a several month extension. The project received interim close out approval and the final compliance review is scheduled for October 15, 2021.

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:

Citizens Telephone Cooperative is providing \$1,011,725 in matching funds for this project (42% of project), which includes materials and installation of long drops and customer premise equipment and installation. Floyd County is contributing \$100,000 (4% of project) from our local ARPA funds (only received \$3.1 million and putting much of it toward urgent water and sewer repairs); these local funds will be publicly committed on Tuesday, September 28. Not included in these match numbers are the in-kind match of staff time for project engineering, construction and financial management, and marketing by Citizens and grant administration by Floyd County staff.

Application to DHCD Submitted through CAMS

County of Floyd

Floyd County VATI 2022

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:

Though it is not included in the budget for this project, Citizens will provide up to 500 ft installation of fiber (drop) to the 382 households that will be serviceable by fiber due to proximity to the eligible (LMI) special construction households—if and when these additional households order the new service. We assume 25% of them will request it within the first few months and be installed during this 18 month project, and up to 75% will ultimately subscribe (within 3 years.) Many of these 382 households are likely also LMI, but we were not able to confirm this during this application period. The value of the estimated 96 installations during the immediate life of this project is at least \$1,300 per household, for a total of at least \$124,800.

The Floyd County EDA also stands ready to help home-based businesses learn to capitalize on the Gigabyte service through their multiple programs including the Floyd C4 Business Development Series and Challenge, the Floyd Growth Wheel program (a peer-to-peer program), the Floyd 5 & 10 Small Business Loan Program, Floyd Grown (technical support for agricultural and forestry-related businesses), the Floyd Innovation Center and very soon the Floyd Growth Center and Building 1 to provide next-stage space and sites for growing businesses. One thread that runs through these programs is the effort to encourage and support entrepreneurship, innovation, and the development and sale of premium products and services, especially online. (see Attachment 11 for a letter of support from the Economic Development Authority of Floyd County Chairman as well as letters of support from residents and small businesses that would be served.)

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:

Citizens has been providing and promoting telecommunications services for over 100 years in Floyd County. They are a regional leader in broadband and very involved in the community. If this project is funded, Floyd County will have 100% coverage by Citizens Telephone Cooperative. Currently, Citizens has to have nuanced marketing as different parts of the County have different levels of service, but when this project is completed, it will be ubiquitous, and marketing can be stronger and broader. Citizens uses marketing channels including email, direct mail, billboard, social media (including ad purchases), their community cable channel, and partnerships such as with the Floyd County Public School system. Citizens' advantage is their strong base of knowledge and relationships with customers in prior telecom services. Take rates are expected to be 25% very quickly, then reach 50-75% within 3 years based on the recent rates in other areas of the County with access to fiber already. Note that in the Survey of Long Driveway Residents (309 responses), of those who were income eligible for help (116) 94.8% said they would want to sign up for Citizens Gigabit broadband.

Digital literacy efforts have been a broad community effort, including through public schools which Citizens partnered with in the mid-1990's to extend Internet to every classroom in the County. Today all 5 public schools have fiber service. As noted elsewhere, Citizens also coordinates with the school to provide low-to-moderate income students with broadband for just \$10/month. The Jessie Peterman Memorial Library in Floyd also has fiber connectivity; they have long had a computer lab available for training and public use. The Floyd County Economic Development office also focuses on providing training for the County's many small businesses on social media marketing and e-commerce. By covering the last 3% of the County, this project will serve at least 52 small businesses.

Application to DHCD Submitted through CAMS

County of Floyd

Floyd County VATI 2022

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:

Donna Smith, Chief Operating Officer, will be the Project Manager, overseeing all planning, procurement and construction. Strategic direction and guidance will be provided by Greg Sapp, the CEO and General Manager of Citizens Telephone Cooperative and its subsidiaries (since 2008.) Citizens is already working with firms on related projects so this could be readily added to that work. Engineering will be completed in-house by Citizen's Engineering team lead by Russell Janney. See management plan table in [Attachment 7 Timeline and Management Plan](#). Lydeana Martin (Community and Economic Development Director, MBA, AICP) will lead grant administration and project support for the County along with Chris Bond, Citizen's Chief Financial Officer, and the County's Finance Director (Cindy Ryan, retiring in October 2021). They will request assistance from Linda Millsaps, PhD, County Administrator; Mark Bolt, Building Official, and Tabitha Hodge, Economic Development Operations Manager, as needed. All of this work will be completed by Citizens unless otherwise noted. The co-applicant (Citizens) will perform all work as outlined in the application and follow-on agreement, if the grant is awarded. See Attachment 10 for [Letters from Applicant and Co-Applicant](#) which affirm this. Grant administration including review of co-applicant requests for reimbursement, seeking funds, providing disbursement, and preparing related County information for auditors will be managed by County staff (Finance Director, Tabitha Hodge and Lydeana Martin), and overseen by Linda Millsaps, PhD, County Administrator. All decisions on reimbursement will be made by the Grantor (DHCD), and the County will not be responsible for any non-reimbursable expenses by the co-applicant or any contractor.

Floyd County has managed millions of dollars of grants in recent years including a 2018 VATI grant, over \$2 million in state R&D

grants, over \$2 million in construction grants for the Floyd Innovation Center, and more than a dozen smaller

grants for various programs. Citizens has been providing communications services to rural parts of Virginia and since 1914 and serves as the

ILEC (Incumbent Local Exchange Carrier) to approximately 85% of Floyd County. They are a member-owned

cooperative focused on bringing modern communications services to rural areas that are available in urban areas of

the country. Citizens started deploying fiber more than 2 decades ago. By 1995, every classroom in Floyd County (4 elementary schools and one high school) had access to the Internet; for context, here are the founding dates of some household names: Amazon, 1994; Ebay, 1995; Google, 1998; Facebook, 2004. Citizens has managed many millions of dollars in broadband facility grants from both federal and state sources. Citizens has successfully completed many fiber construction projects, including a \$11.5 million federal Broadband Technology Opportunity (BTOP) grant in 2013. Citizens currently offers FTTH (Fiber to the Home) in many areas of Floyd County thanks to ACAM support.

Citizens also provides cable services to several surrounding localities as well. From 2005 until 2013, Citizens partnered with localities and obtained grants to build a regional open access network in rural southwest Virginia. Citizens now operates a 440-mile regional open access fiber network in 10 Virginia that spans 10 counties, 10 towns and 3 cities including 15 industrial parks. Along this network, Citizens

provides wholesale transport and Internet bandwidth to a variety of service providers and provides service to first responders, educational institutions, and to medical facilities. Citizens also partners with other open access networks in Virginia like Mid Atlantic Broadband Cooperative (MBC) to provide high-capacity optical transport services that are necessary to assist in the economic revitalization efforts of Southwest and Southside Virginia.

Application to DHCD Submitted through CAMS

County of Floyd

Floyd County VATI 2022

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:

Detailed cost estimates are provided in Attachments 12 and 13, and are broken down between the 3% unserved area and the Long-Driveway Area. Estimates are based on recent invoices for similar work, and those invoices are in Attachment 13.

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:
- Total VATI funding request
 - Number of serviceable units (up to 125 points)

Answer:

Total VATI funding request is \$1,310,267 and total serviceable units is 723. The state cost per unit passed would be \$1,812.

19. Commonwealth Priorities (Up to 40 points)

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

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

- Mabry Mill is a major community anchor for Floyd County and Virginia. It is one of the most visited and photographed locations along the Blue Ridge Parkway. Currently it lacks broadband, meaning its Parkway staff and the restaurant and gift shop private vendor lack the means of efficient communication, training, etc. And it means that the tens of thousands of visitors each year are less likely to post their videos online, since there is no WiFi. Having Gigabit service at the site would help local businesses including artists and artisans be able to communicate with the private vendor about selling foods and locally-made items in the restaurant and gift shop.
- The three partnerships already alluded to are the Student Connect program wherein Citizens offers local Floyd County Public School students a \$10/month rate if they are income eligible. They do something comparable for LMI workers through Social Services. And the EDA of Floyd County will work closely with Citizens if this project is funded to reach out to home-based businesses who gain Gigabit service and providing entrepreneurial and marketing training and support.
- A huge part of this application is trying to get fiber Gigabit service to 273 LMI households (43 of which have home-based businesses.) Many of the additional 382 households to be served by passings for that work are also thought to be LMI, but we were not able to verify this.

Application to DHCD Submitted through CAMS

County of Floyd

Floyd County VATI 2022

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:

See Attachment 17 for the Survey Summary of Households with Long Driveways

Attachments:

Map(s) of project area, including proposed infrastructure

ATT1ProjectAreaMaps912202191319.pdf

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

ATT2MapofFederalFundingandCountyBuildoutPlan912202191458.pdf

Documentation that proposed project area is unserved based on VATI criteria

ATT4DocumentationofUnservedAreasbyVATICriteria912202191846.pdf

Passings Form (Use template provided)

ATT5PassingsForms912202192033.pdf

Application to DHCD Submitted through CAMS

County of Floyd

Floyd County VATI 2022

Timeline/Project Management Plan

ATT7TimelineandManagementPlan912202192044.pdf

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

ATT8MOUAgreement912202192056.pdf

Funding Sources Table (Use template provided)

ATT9FundingSourcesTable912202192108.pdf

Documentation of Match Funding

ATT10MatchingFundsDocumentation913202135121.pdf

Letters of Support

ATT11LettersofSupportandNeed913202135139.pdf

Derivation of Cost/Project Budget (Use template provided)

ATT12DerivationofCostsWorksheetfinal912202192221.pdf

Documentation of Supporting Cost Estimates

ATT13CostEstimatedetailandsupport912202192235.pdf

Two most recent Form 477 submitted to the FCC or equivalent

ATT14Twomostrecent477912202192255.pdf

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

ATT15Zipfileofprojectareaandpassings912202192310.zip

Optional

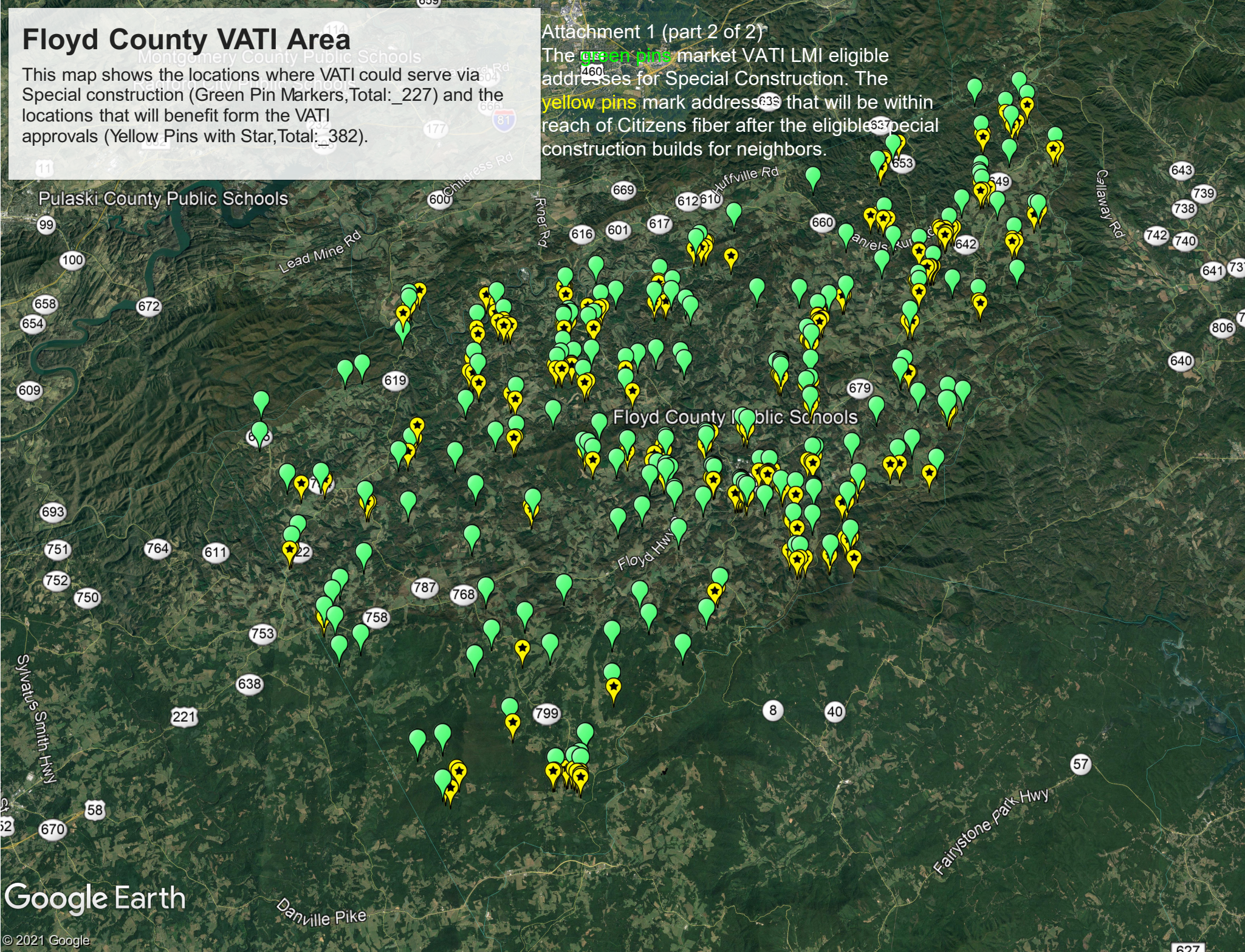
ATT17LongDrivewaySurveyresponses912202192455.pdf

Floyd County VATI Area

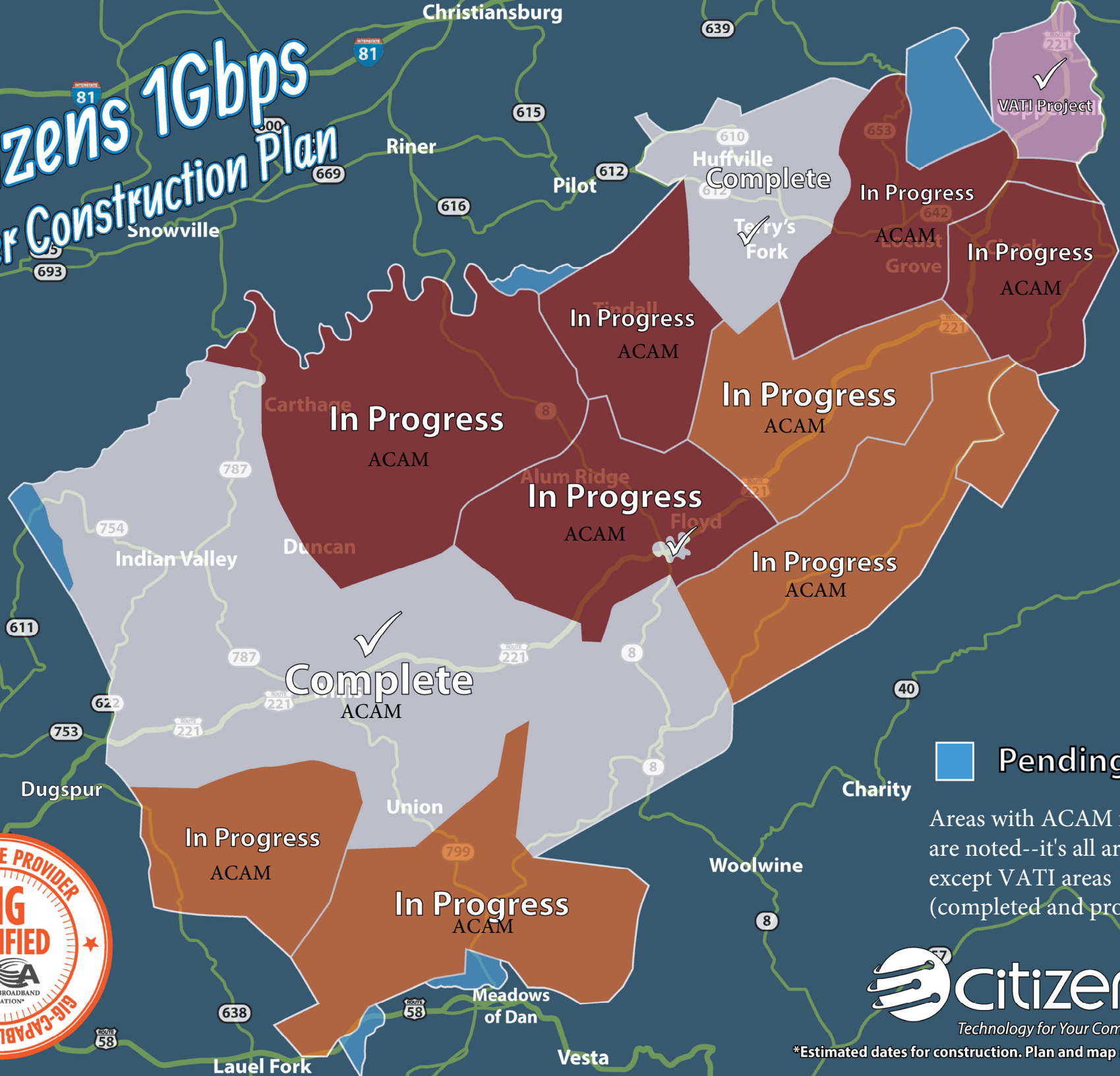
This map shows the locations where VATI could serve via Special construction (Green Pin Markers, Total: 227) and the locations that will benefit from the VATI approvals (Yellow Pins with Star, Total: 382).

Attachment 1 (part 2 of 2)

The **green pins** market VATI LMI eligible addresses for Special Construction. The **yellow pins** mark addresses that will be within reach of Citizens fiber after the eligible special construction builds for neighbors.



Citizens 1Gbps Fiber Construction Plan



 Pending Grant

Areas with ACAM funding are noted--it's all areas except VATI areas (completed and proposed.)



*Estimated dates for construction. Plan and map subject to change.

Attachment 4

Documentation of Unserved by VATI Criteria

Attached are 2 documents which demonstrate the Unserved by VATI Criteria. Conclusions are found at the bottom of this summary.

The first is an Address Spreadsheet with each of 723 addresses proposed to be served and many details about it included which providers and speeds are listed on the FCC site (broadbandmap.fcc.gov). The providers and services are listed in columns with gray headings. If it is a fixed point provider (Virginia Everywhere, LLC and Fastlink Communications, Inc.), then the speed shown on the FCC site is listed. Unfortunately, this information overstates the availability of services. It appears that if a provider serves one address in a Census block, they show up as serving the entire Census block. So for example, the FCC site indicates Citizens Telephone Cooperative provides fiber services (1 Gbps/500 Mbps) to addresses in the 8400-8800 range of Autumn Drive in Copper Hill, but they do not. Similarly Virginia Everywhere (Allpoints) and Fastlink Communications are listed as providing 25/3 and 30/5 services, respectively, via fixed wireless in a few parts of the County; but when technical support was contacted for Allpoints, for example, about the Dobbins Hollow/Otey area in Riner/Pilot, they indicated that actually it appears they can offer only around 10 MB to that area, and that could be further inhibited by trees and hills. These limitations are further explored in the Fixed Wireless Analysis described below.

Note that this project will serve 3 categories of eligible addresses:

- The 113 residents and 1 community anchor/business in the 3% unserved area (indicated as “Qual” in Column S) and listed in rows 2-114 and summarized in rows 115-116.
- The 227 households with low-to-moderate income in need of special construction to connect to service (e.g. long driveways.) Listed in rows 117-343; summarized in rows 344-345. This spreadsheet documents our records of LMI (marked “Qual” in Column T or V, which correlate to confidential shared data from a collaborating agency and a household survey response, respectively.)
- Those 382 households who will be passed by virtue of service to the LMI households. Shown in rows 346-727 and summarized in 730-734.

The second is an attachment called “**Fixed Wireless in Floyd County Project Area.**” This document analyzes slope and tree cover and the expected limitations on fixed wireless access and speeds, given its requirement for line of site. Addresses that can actual get at least 25/3 service are likely much fewer than those listed on the FCC database.

Overall, the key findings related are:

There are 8 non-satellite providers that serve some addresses in Floyd County. Of the 723 addresses we propose to serve, according to the FCC data, only the following offer 25/3 or more to some of the addresses we propose to serve with 1,000/500 service:

- Comcast and Cox serve a total of 10 addresses with 987/35 and 1,000/35, respectively.

- Beyond the 3% unserved area (where Citizens offers 10/1 or less), Citizens either does or will soon provide direct fiber 1,000/500 service along state roads, but this still doesn't help those with long driveways who can't afford to pay their part of a driveway build.
- Virginia Everywhere (All Points) offers exactly 25/3 service to 94 addresses according to the general FCC site (see # 3 for why this generally overstates.) Beyond the general overstating by Census block, fixed point wireless is generally problematic in rolling, heavily forested topography like we have. When one looks closely at the tree cover and topography, however, it is highly likely that that number is 19. See Attachment 4 for images of tree cover plus relevant topo maps and interpolations based on those limiting factors.
- Fastlink Communication offers 30/5 service to 59 addresses according to the general FCC site (see # 3 for why this generally overstates.) Beyond the general overstating by Census block, fixed point wireless is generally problematic in rolling, heavily forested topography like we have. When one looks closely at the tree cover and topography, however, it is highly likely that that number is 9. See Attachment 4 for images of tree cover plus relevant topo maps and interpolations based on those limiting factors.

So of the 723 addresses proposed to be passed with fiber (1,000/500) service with our project, about 38 likely have access to at least 25/3 at present (5.4%).

Also note that the addresses that do not truly have access greater than 10/1 are shaded reddish-in their rows under the provider column headings in the Address Spreadsheet. That is true despite the fact that the FCC site shows 10/1.5 or more for some from Citizens. Of the 723 we propose to serve, 379 are at or below 10/1.

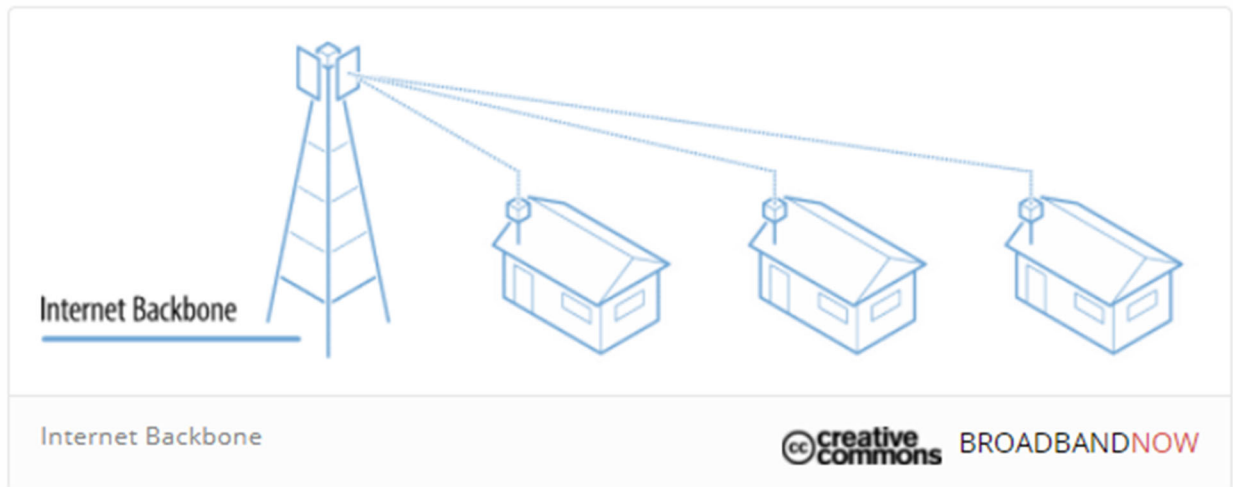
Row	QUAL	Parcel ID	Address	County	Year	Area	Footage	CTC	Rem	Remain	Housing Data	3% Unserv	AUTC	SURVEYED	SURVEYED	Current	Market	Income	Home	AGE	Kids?	Citizens fiber on 477 but not really available to these addresses	Citizens ADSL 10/1.5	Citizens ADSL 50/10 shows on 477 but not really available to these addresses	Citizens 1.5 /0.768	Satellite	TDS	VA Everywhere LLC FIXED WIRELESS shows on 477 but if coded green forest cover likely	Fastlink Comm FIXED WIRELESS shows on 477 but if coded green forest cover likely	Century Link ADSL 10/1	Verizon AD SL 3/0.768	Com cast 987/35	Cox Comm 1000/35			
56	QUAL	653	DOBBINS	HOLLOW		RINER	VA 24	included																			Y	Y	Y	Y	25/3					
57	QUAL	657	DOBBINS	HOLLOW		RINER	VA 24	included																				Y	Y	Y	Y	25/3				
58	QUAL	667	DOBBINS	HOLLOW		RINER	VA 24	included															YES	YE CELL				Y	Y	Y	Y	25/3				
59	QUAL	927	DOBBINS	HOLLOW		RINER	VA 24	included																				Y	Y	Y	Y	25/3				
60	QUAL	717	Fork Mtn	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				
61	QUAL	718	Fork Mtn	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
62	QUAL	771	Fork Mtn	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2023 ACAM
63	QUAL	862	Fork Mtn	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2024 ACAM
64	QUAL	951	Fork Mtn	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2025 ACAM
65	QUAL	1010	Fork Mtn	Rd		MEADOWS OF VA	24	included			FAIR	38444																Y	Y	Y	Y	25/3				2022 ACAM
66	QUAL	1033	Fork Mtn	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
67	QUAL	1077	Fork Mtn	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
68	QUAL	1094	Fork Mtn	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
69	QUAL	1107	Fork Mtn	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
70	QUAL	1173	Fork Mtn	Rd		MEADOWS OF VA	24	6,000	500	\$1,30	5,500	\$14,300.00																Y	Y	Y	Y	25/3				2022 ACAM
71	QUAL	1176	Fork Mtn	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
72	QUAL	1200	Fork Mtn	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
73	QUAL	101	Hoot Owl Hollow	Rd		MEADOWS OF VA	24	4,500	500	\$1,30	4,000	\$10,400.00		FAIR	31145													Y	Y	Y	Y	25/3				2022 ACAM
74	QUAL	153	Hoot Owl Hollow	Rd		MEADOWS OF VA	24	included			POOR	10825																Y	Y	Y	Y	25/3				2022 ACAM
75	QUAL	238	Hoot Owl Hollow	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
76	QUAL	282	Hoot Owl Hollow	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
77	QUAL	395	Hoot Owl Hollow	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
78	QUAL	101	Hosta	Ln		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
79	QUAL	106	Hosta	Ln		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
80	QUAL	138	Hosta	Ln		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
81	QUAL	150	Hosta	Ln		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
82	QUAL	152	Hosta	Ln		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
83	QUAL	207	Hosta	Ln		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
84	QUAL	211	Hosta	Ln		MEADOWS OF VA	24	1,300	500	\$1,30	800	\$2,080.00																Y	Y	Y	Y	25/3				2022 ACAM
85	QUAL	1105	LAUREL	RIDGE	MILL RD	RINER	VA 24	included																				Y	Y	Y	Y	25/3				2022 ACAM
86	QUAL	1111	LAUREL	RIDGE	MILL RD	RINER	VA 24	SPECIAL	500	\$1,30		\$88,700.00																Y	Y	Y	Y	25/3				2022 ACAM
87	QUAL	1179	LAUREL	RIDGE	MILL RD	RINER	VA 24	included																				Y	Y	Y	Y	25/3				2022 ACAM
88	QUAL	1689	LAUREL	RIDGE	MILL RD	RINER	VA 24	included																				Y	Y	Y	Y	25/3				2022 ACAM
89	QUAL	1725	LAUREL	RIDGE	MILL RD	RINER	VA 24	included																				Y	Y	Y	Y	25/3				2022 ACAM
90	QUAL	266	Mabry Mill	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
91	QUAL	447	Mabry Mill	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
92	QUAL	497	Mabry Mill	Rd		MEADOWS OF VA	24	included																				Y	Y	Y	Y	25/3				2022 ACAM
93	QUAL	577	Mabry Mill	Rd		MEADOWS OF VA	24	5500	500	\$1,30	5,000	\$13,000.00																Y	Y	Y	Y	25/3				2022 ACAM
94	QUAL	3233	MACKS	MTN	RD	INDIAN VALLE	VA 24	5000	500	\$1,30	4,500	\$11,700.00																Y	Y	Y	Y	15/3				2022 ACAM
95	QUAL	350	OTEY	RD	NW	RINER	VA 24	SPECIAL	500	\$1,30		\$24,700.00																Y	Y	Y	Y	25/3				2022 ACAM
96	QUAL	390	OTEY	RD	NW	RINER	VA 24	included																				Y	Y	Y	Y	25/3				2022 ACAM
97	QUAL	464	OTEY	RD	NW	RINER	VA 24	included																				Y	Y	Y	Y	25/3				2022 ACAM
98	QUAL	495	OTEY	RD	NW	RINER	VA 24	included																				Y	Y	Y	Y	25/3				2022 ACAM
99	QUAL	548	OTEY	RD	NW	RINER	VA 24	included																				Y	Y	Y	Y	25/3				2022 ACAM
100	QUAL	549	OTEY	RD	NW	RINER	VA 24	included																				Y	Y	Y	Y	25/3				2022 ACAM
101	QUAL	599	OTEY	RD	NW	RINER	VA 24	included																				Y	Y	Y	Y	25/3				2022 ACAM
102	QUAL	601	OTEY	RD	NW	RINER	VA 24	included																				Y	Y	Y	Y	25/3				2022 ACAM
103	QUAL	603	OTEY	RD	NW	RINER	VA 24	included																				Y	Y	Y	Y	25/3				2022 ACAM
104	QUAL	653	OTEY	RD	NW	RINER	VA 24	included																				Y	Y	Y	Y	25/3				2022 ACAM
105	QUAL	151	SOLLIE	DR		LAUREL FOR	VA 24	included																				Y	Y	Y	Y	25/3				2022 ACAM
106	QUAL	430	SOLLIE	DR		LAUREL FOR	VA 24	3800	500	\$1,30	3,300	\$8,580.00																Y	Y	Y	Y	25/3				2022 ACAM
107	QUAL	8266	SUGAR	RUN	RD	COPPER HILL	VA 24	included																				Y	Y	Y	Y	15/3				2022 ACAM
108	QUAL	8434	SUGAR	RUN	RD	COPPER HILL	VA 24	5500	500	\$1,30	5,000	\$13,000.00		FAIR	43582													Y	Y	Y	Y	15/3				2022 ACAM
109	QUAL	8448	SUGAR	RUN	RD	COPPER HILL	VA 24	included																				Y	Y	Y	Y	15/3				2022 ACAM

Row	QUAL	Parcel ID	Owner	Address	City	County	State	Zip	Area	Acres	Year Bld	Value	Assessed	Market	Home	AG	Kids	Citizens fiber on 477 but not really available to these addresses	Citizens ADSL 50/10 shows on 477 but not really available to these addresses	Citizens 1.5/0.768	Satellite	TDS	VA Everywhere LLC FIXED WIRELESS shows on 477 but if coded green forest cover likely	Fastlink Comm FIXED WIRELESS shows on 477 but if coded green forest cover likely	Century Link ADSL 10/1	Verizon DSL 3/0.768	Comcast 987/35	Cox Comm 1000/35					
										FOOTAGE	CTC	Rem	Remain	Housing Data	3% Unserv	AUTC	SURVEYED	SURVEYED	Current Interest	Market	Income	Home	AG	Kids									
214	QUAL	309	HALE	RD	NE	CHECK	VA	24	1120	500	\$1,300	620	\$1,612.00	FAIR-F	43135																		
215	QUAL	188	HARMAN	HILL	RD	FLOYD	VA	24	**1350	500	\$1,300	850	\$2,210.00																				
216	QUAL	453	HARRIS	HOLLOW	RD SW	FLOYD	VA	24	2500	500	\$1,300	2,000	\$5,200.00	FAIR	25051																		
217	QUAL	123	HELMS	LN	SE	FLOYD	VA	24	**1400	500	\$1,300	900	\$2,340.00	FAIR-F	36451																		
218	QUAL	634	HIGGS	RD	NW	WILLIS	VA	24	1835	500	\$1,300	1,331	\$3,471.00	FAIR	66458																		
219	QUAL	1153	HORSE	RIDGE	RD NW	WILLIS	VA	24	1640	500	\$1,300	1,141	\$2,964.00																				
220	QUAL	149	HORSESHOE	LN	NW	RINER	VA	24	2300	500	\$1,300	1,800	\$4,680.00																				
221	QUAL	213	HORSESHOE	LN	NW	RINER	VA	24	2400	Included																							
222	qual	1142	HUCKLEBERRY	RD		FLOYD	VA	24	1450	500	\$1,300	950	\$2,470.00																				
223	QUAL	1882	INDIAN	VALLEY	P O	RE INDIAN VALLE	VA	24	1500	500	\$1,300	1,000	\$2,600.00	FAIR	72080																		
224	QUAL	2159	INDIAN	VALLEY	P O	RE WILLIS	VA	24	3100	500	\$1,300	2,600	\$6,760.00																				
225	QUAL	162	INDIAN	VALLEY	RD NW	RADFORD	VA	24	2500	500	\$1,300	2,000	\$5,200.00	POOR	42940																		
226	QUAL	1294	INDIAN	VALLEY	RD NW	RADFORD	VA	24	1150	500	\$1,300	650	\$1,690.00	POOR	0																		
227	QUAL	248	IVY	DR	NE	FLOYD	VA	24	**included																								
228	QUAL	248	IVY	DR	NE	APT FLOYD	VA	24	**included																								
229	QUAL	622	IVY	DR	NE	FLOYD	VA	24	**8300	500	\$1,300	7,800	\$20,280.00	VERY	0																		
230	qual	144	JACKS MILL	RD	SE	COPPER HILL	VA	24	1400	500	\$1,300	900	\$2,340.00	FAIR	104557																		
231	QUAL	299	JAMES	LN	SE	FLOYD	VA	24	**6000	500	\$1,300	6,500	\$14,300.00																				
232	QUAL	360	JAMES	LN	SE	FLOYD	VA	24	**included																								
233	QUAL	179	JASMINE	LN	NE	FLOYD	VA	24	**2900	500	\$1,300	2,400	\$6,240.00																				
234	QUAL	128	JUSTICE	DR	NW	RINER	VA	24	**included																								
235	QUAL	2364	KYLE	WEEKS	RD SW	WILLIS	VA	24	1200	500	\$1,300	700	\$1,820.00																				
236	QUAL	364	LAST	RD	NW	RADFORD	VA	24	**7380	500	\$1,300	6,880	\$17,888.00	FAIR	36040																		
237	QUAL	786	LAUREL	BRANCH	RD NW	FLOYD	VA	24	1000	500	\$1,300	900	\$1,300.00																				
238	QUAL	1020	LAUREL	BRANCH	RD NW	FLOYD	VA	24	1300	500	\$1,300	800	\$2,080.00																				
239	QUAL	2128	LAUREL	BRANCH	RD NW	FLOYD	VA	24	1100	500	\$1,300	600	\$1,560.00	FAIR	85649																		
240	QUAL	134	LAUREL	DR	NW	FLOYD	VA	24	**4150	500	\$1,300	3,650	\$9,490.00																				
241	QUAL	223	LICK	CREEK	LN	COPPER HILL	VA	24	**3800	500	\$1,300	3,300	\$8,580.00																				
242	QUAL	490	LITTLE	CABIN	RD	FLOYD	VA	24	**5300	500	\$1,300	4,800	\$12,480.00	FAIR	0																		
243	QUAL	268	LITTLE	RIVER	CRCNW	RINER	VA	24	**8100	500	\$1,300	7,600	\$19,760.00																				
244	QUAL	682	LONG	LEVEL	RD SW	FLOYD	VA	24	900	500	\$1,300	400	\$1,040.00	POOR	0																		
245	QUAL	150	LONGBEARD	DR	NE	FLOYD	VA	24	**1150	500	\$1,300	650	\$1,690.00																				
246	QUAL	568	LOVELL	RD		PILOT	VA	24	3200	500	\$1,300	2,700	\$7,020.00																				
247	QUAL	528	LOW	GAP	RD NW	FLOYD	VA	24	shh 3200	500	\$1,300	2,700	\$7,020.00																				
248	QUAL	157	MALIBU	DR	SE	COPPER HILL	VA	24	**3300	500	\$1,300	2,800	\$7,280.00																				
249	QUAL	234	MAPLE	VIEW	LN NE	FLOYD	VA	24	**3000	500	\$1,300	2,500	\$6,500.00																				
250	QUAL	236	MAPLE	VIEW	LN NE	FLOYD	VA	24	**included																								
251	QUAL	303	MARTIN	LN	NE	CHECK	VA	24	**4600	500	\$1,300	4,100	\$10,660.00	FAIR	101912																		
252	QUAL	2000	MERIFIELD	RD	NW	WILLIS	VA	24	1400	500	\$1,300	900	\$2,340.00	FAIR	56183																		
253	QUAL	205	MIDKIFF	RD	SE	FLOYD	VA	24	**3425	500	\$1,300	2,920	\$7,605.00																				
254	QUAL	222	MILKY	WAY	NW	RINER	VA	24	**3700	500	\$1,300	3,200	\$8,320.00																				
255	QUAL	153	MILLUMETER	RD	SW	FLOYD	VA	24	2800	500	\$1,300	2,300	\$5,980.00	POOR	0																		
256	QUAL	530	MORGAN	DR	SE	FLOYD	VA	24	**1150	500	\$1,300	650	\$1,690.00																				
257	QUAL	190	OAK	VIEW	LN NE	RINER	VA	24	**1800	500	\$1,300	1,300	\$3,380.00																				
258	QUAL	111	ODESSIA	DR	SE	COPPER HILL	VA	24	**1800	500	\$1,300	1,300	\$3,380.00																				
259	QUAL	1108	OLD	FURNACE	RD SW	FLOYD	VA	24	1150	500	\$1,300	650	\$1,690.00	FAIR	111316																		
260	QUAL	198	OLD	MILL	RD NE	FLOYD	VA	24	shh 1000	500	\$1,300	500	\$1,300.00																				
261	QUAL	587	PARADISE	LN	SE	FLOYD	VA	24	2400	500	\$1,300	1,900	\$4,940.00	FAIR	69986																		
262	QUAL	145	PINE	CREEK	WAYSE	FLOYD	VA	24	**included																								
263	QUAL	171	PINE	CREEK	WAYSE	FLOYD	VA	24	**included																								
264	QUAL	9759	PINE	FOREST	RD NE	COPPER HILL	VA	24	2560	500	\$1,300	2,060	\$5,356.00	FAIR	84192																		
265	QUAL	144	PINE	LN	SW	MEADOWS OF	VA	24	**1300	500	\$1,300	800	\$2,080.00																				

Fixed Wireless Internet Options in the Floyd County Project Area

By Lydeana Martin, MBA, AICP

Fixed wireless internet provides “last mile” internet access through broadcast of data across radio or microwave spectrums. Because it does not require “last mile” cable, it can be less expensive to deliver. It is also generally more stable than satellite internet as the transmitter is usually 10-30 miles away instead of hundreds of miles away. Fixed wireless delivers last mile via transmitters that require line of site to the structure to be served. It is especially well-suited for some rural areas, where sufficient housing density is lacking and land is flat and largely open. Even then, severe storms can reduce download and upload speeds, called “rain fade” (Broadbandnow.com/fixed-wireless).



The main obstacles to line of site are mountains, hills, structures and trees. Some new high-speed, high-efficiency fixed wireless technologies can offer speeds comparable to fiber-to-the-premises and “near line of site” technologies, but these are generally deployed only in urban areas.

<https://www.designworldonline.com/the-challenges-of-rural-broadband-is-fixed-wireless-the-solution/>

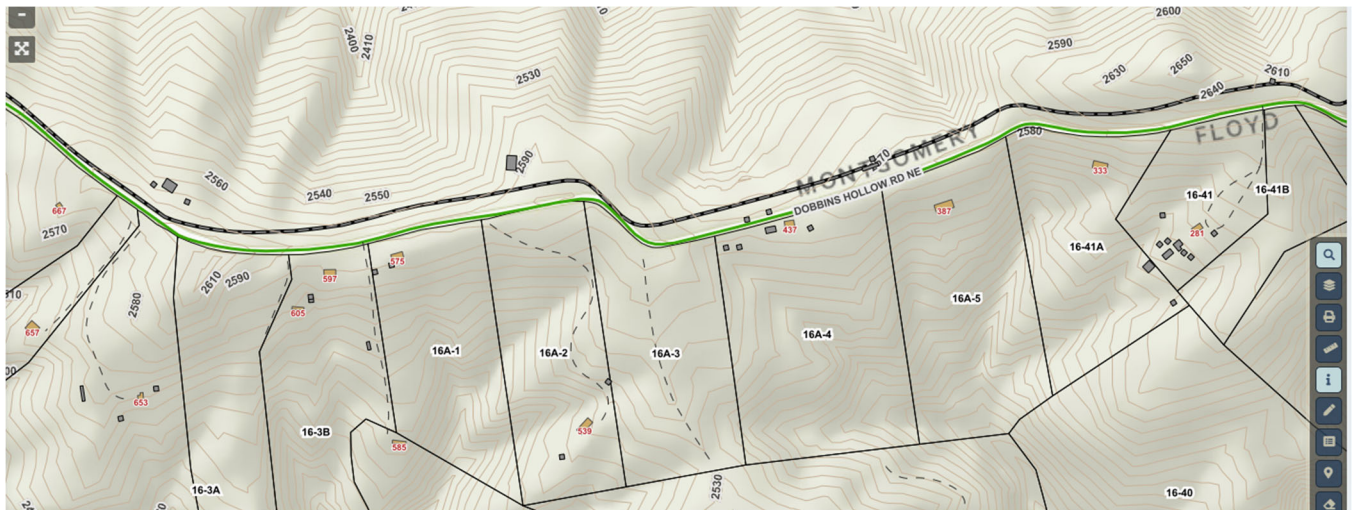
Providers in Floyd County

According to the Federal Communication Commission’s (FCC) searchable database of 477 filings, Virginia Everywhere (All Points) and Fastlink Communications, Inc. (Fastlink) offer basic fixed wireless services in portions of Floyd County. According to the site, Fastlink offers 30/5 while some of Virginia Everywhere’s offerings are 15/3 and some are 25/3 (<https://broadbandmap.fcc.gov/>). Only those listed at 25/3 and above (30/5) are addressed here as anything less is considered unserved.

One limitation of the FCC reporting process is that if a provider offers a service to one household in a Census block, it generally shows as serving that entire Census block, dramatically overstating offerings. This is the case with Citizens Telephone Cooperative, too. Though they do not have any fiber services in the “3% unserved” area, the FCC shows that they do serve some of those addresses because they serve someone else in the neighborhood. While this Census block approach may make sense in dense urban and suburban neighborhoods, it is not helpful in rural places where houses can be a mile or more apart.

So Fastlink and Virginia Everywhere may not even offer service to some of the addresses listed for them. Where they are able to offer service, the actual speeds may be less than listed on the FCC site. For example, the FCC site indicates that Virginia Everywhere offers 25/3 service in the Pilot/Riner area of Floyd County, along Barker Lane, Dobbins Hollow, Laurel Ridge, and Otey. A call to Virginia Everywhere’s technical support line (entity is actually All Points’ technical support) on Friday, September 9, 2021, demonstrates the difficulty. When asked if they could provide 25/3 service along Dobbins Hollow and vicinity, the technical support person said they would have to send someone out to do an assessment at the house. When asked if they have any customer in that vicinity getting 25/3, he said it looks more like it’s “in the 10 range.” Beyond the FCC reporting weakness, another culprit could be the topography and tree cover. As shown in the two images below with 10 ft contours, Dobbins Hollow Rd runs along the ridge top. On one side is more suburban Montgomery County (215 people per square mile) and on the other is Floyd County (36 people per square mile.) Houses tend to be 20-50 ft below the ridge top (typical, see Otey example, too) and thus blocked from line of site from the Montgomery County side.

Dobbins Hollow Road Area (topo)

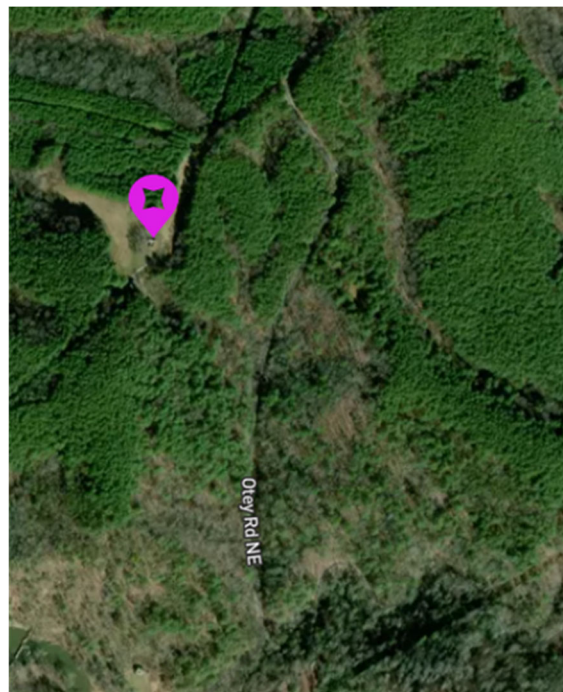
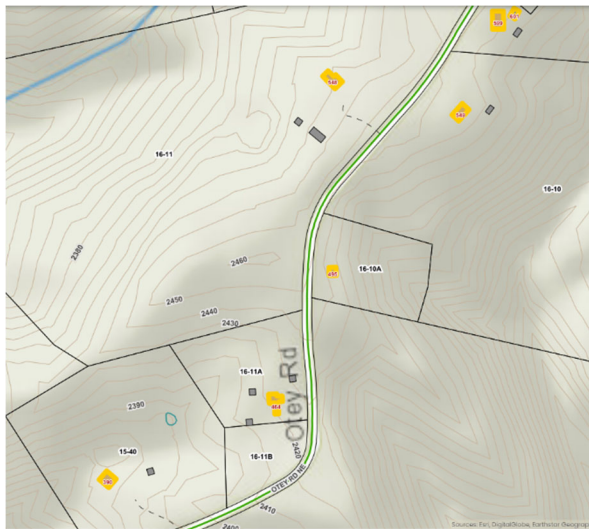


According to the Floyd County Comprehensive Plan (2012), the County is 243,981 acres and 59% of that is forested. The Riner/Pilot area is no exception. The image below shows that many of the houses along Dobbins Hollow Rd (see also Otey Rd below) have trees on multiple sides. It takes only one tree in the line of site to reduce or eliminate the fixed wireless signal. So it makes sense that fixed wireless service in the area would be generally limited to 10 MB if any.

Dobbins Hollow Road Area (tree cover)



Otey Road Area (topo and tree cover)



But these are not unusual cases in Floyd County. The county is known for its trees and rugged terrain. Topography alone reduces the likelihood of full fixed wireless speeds by half. Tree cover reduces it further. In the case of Dobbins Hollow it appears to reduce it another 50%; for Otey Rd, it likely reduces

another 80% beyond topography. So mathematically, of the 13 houses on Dobbins Hollow Rd in Riner/Pilot, half would be likely to have line of site after controlling for topography. Based on tree cover, that is likely cut in half again such that only 3.25 are expected to have full line of site. Of the 9 addresses on Otey, 4.5 may have line of site after topography, and that is reduced another 80% by tree cover such that only 1 is expected to half full line of site.

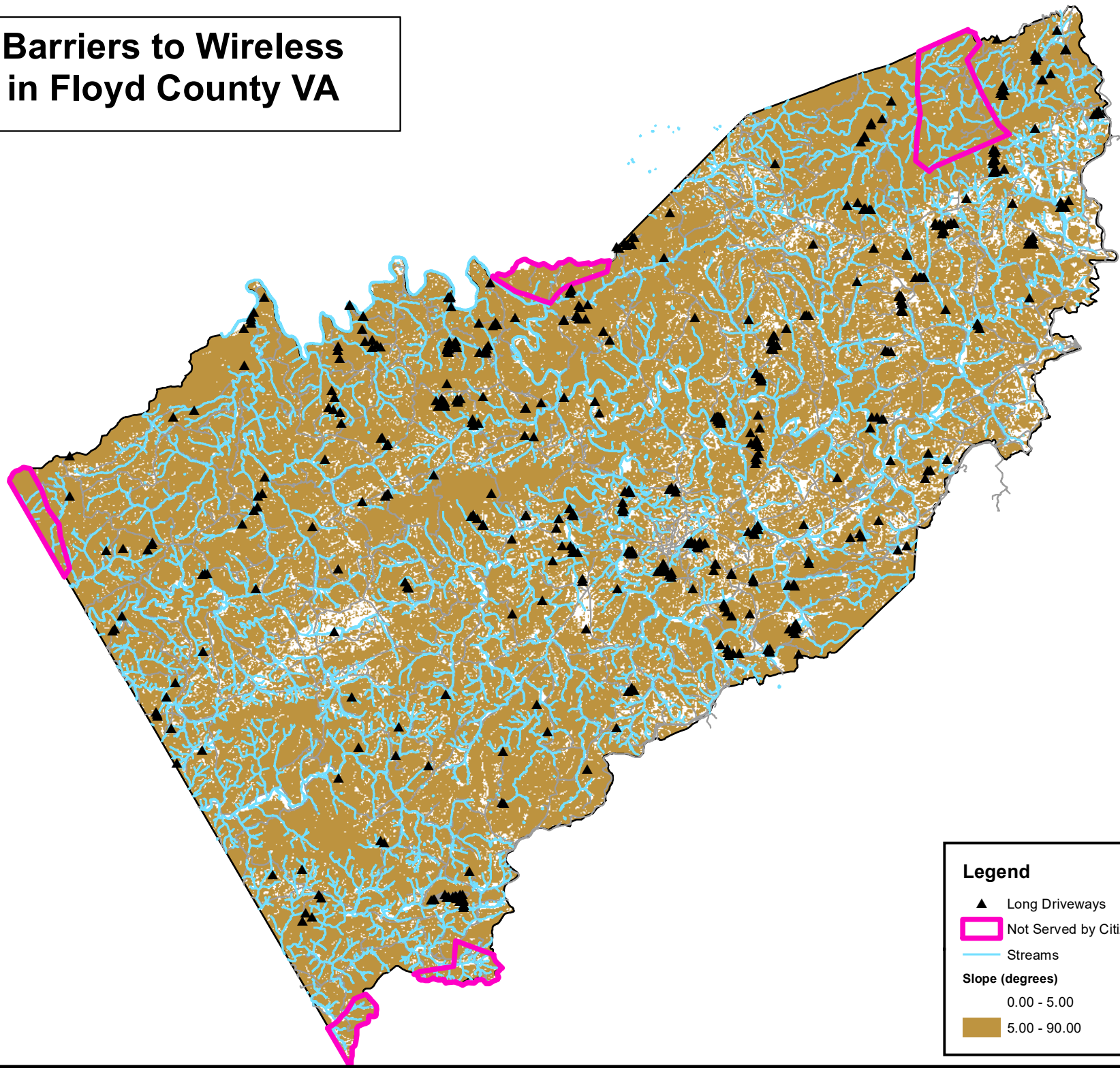
Below is a visual inventory of all of the other roads listed as served by fixed wireless in Floyd County. An estimate of tree cover is included parenthetically beside the road name header.

Summary

The follow page contains a table showing the streets listed with 25/3 or 30/5 fixed wireless service, how many addresses are listed on that street and what fixed wireless provider and speed is listed. It then adjusts that number of addresses downward based on topography (50% reduction) and tree cover (varies based on aerial/visual survey below). There were 153 addresses listed on the FCC site with at least 25/3 service, but our best estimation is 28 total (19 by Virginia Everywhere) and 9 by Fastlink Communications.

See also the map on the next page showing the areas of Floyd County with 5% or greater slope. It is virtually the entire County including the 3% Unserved areas, thus the 50% reduction for topography.

Barriers to Wireless in Floyd County VA



Legend

- ▲ Long Driveways
- Not Served by Citizens
- Streams

Slope (degrees)

- 0.00 - 5.00
- 5.00 - 90.00

FCC Listed Speed

Street	Number of Addresses Listed as Served	Location	Virginia Everywhere	Fastlink	Estimated addresses after line of site reduction of 50% for topography	Tree Cover % estimate	% estimate with Line of Site after tree impact	Estimate of Number of Addresses actually served by VE with at least 25/3	Estimate of addresses actually served by Fastlink with at least 25/3 (added 25% back since started higher)
Alpine Dr	3	Meadows of Dan		30/5	1.5	80%	20%	0	
Alta View Dr	1	Willis		30/5	0.5	70%	30%	0	
Barker Lane	3	Riner	25/3		1.5	70%	30%	0	
Berry Creek Rd	1	Indian Valley		30/5	0.5	75%	25%	0	
Berry Hill Rd	6	Riner	25/3		3	60%	40%	1	
Black Ridge RD	2	Floyd		30/5	1	40%	60%	1	
Boyd Lane	3	Indian Valley		30/5	1.5	50%	50%	1	
Buffalo Mtn	2	Willis		30/5	1	90%	10%	0	
Buffalo Vista	4	Willis		30/5	2	90%	10%	0	
Charlottes Dr	3	Floyd	25/3		1.5	70%	30%	0	
Cody's Ridge	5	Riner	25/3		2.5	40%	60%	2	
Conner Grove	1	Willis		30/5	0.5	70%	30%	0	
Danville Pike	9	Meadows of Dan		30/5	4.5	70%	30%	2	
Deer Crossing	4	Riner	25/3		2	50%	50%	1	
Dobbins Hollow	13	Riner & Pilot	25/3		6.5	50%	50%	3	
Dusty Rock	1	Riner	25/3		0.5	50%	50%	0	
Fox Trot	9	Meadows of Dan		30/5	4.5	80%	20%	1	
Higgs	1	Willis	25/3		0.5	25%	75%	0	
Horse Ridge	1	Willis	25/3		0.5	30%	70%	0	
Horseshow Ln	4	Riner	25/3		2	50%	50%	1	
Indian Valley Rd	3	Radford	25/3		1.5	90%	10%	0	
Indian Valley PO Rd	1	Willis		30/5	0.5	60%	40%	0	
Justice Dr	2	Riner	25/3		1	80%	20%	0	
Last Rd	4	Radford	25/3		2	80%	20%	0	
Laurel Ridge Mill	5	Riner	25/3		2.5	20%	80%	2	

FCC Listed Speed

Street	Number of Addresses Listed as Served	Location	Virginia		Estimated addresses after line of site reduction of 50% for topography	Tree Cover % estimate	% estimate with Line of Site after tree impact	Estimate of Number of Addresses actually served by VE with at least 25/3	Estimate of addresses actually served by Fastlink with at least 25/3 (added 25% back since started higher)
			Everywhere	Fastlink					
Little River Crossin	4	Riner	25/3		2	70%	30%	1	
Oak View La	5	Riner	25/3		2.5	40%	60%	2	
Otey Rd	9	Riner	25/3		4.5	80%	20%	1	
Pine Lane	3	Meadows of Dan		30/5	1.5	90%	10%		0
River Hill Rd	2	Riner	25/3		1	70%	30%	0	
Short Rd	7	Riner	25/3		3.5	80%	20%	1	
Slatemont Rd	6	Meadows of Dan		30/5	3	70%	30%		1
Slaughter Hill Rd	1	Indian Valley		30/5	0.5	40%	60%		0
Sollie Dr	2	Laurel Fork		30/5	1	70%	30%		0
Sons Drive	10	Riner	25/3		5	70%	30%	2	
Sugar Tree Rd	1	Willis		30/5	0.5	80%	20%		0
Sweetwater Way	3	Floyd		30/5	1.5	80%	20%		0
Telling	1	Willis		30/5	0.5	60%	40%		0
Terry Trail	3	Meadows of Dan		30/5	1.5	70%	30%		1
Turnip Patch	1	Meadows of Dan		30/5	0.5	70%	30%		0
White Oak Grove	2	Riner	25/3		1	50%	50%	1	
Wild Mtn Rd	2	Willis		30/5	1	70%	30%		0
Nominal Total	153			Est. After topography	76.5			19	9
Est Total Addresses with Fixed Wireless of 25/3 or better									28

Aerial View Inventory of All Roads in Floyd County that are Listing as Having 25/3 or 30/5 Fixed Wireless Providers on the FCC Site

Alpine Drive (80%)

Fixed Broadband Deployment

Address: 115 Alpine Drive Southwest, Meadows of Dan

All Providers Reporting Service
Census block ID: 510639202003119

Number of Fixed Residential Broadband Providers
0 1 2 3 4 6 12 or more

Broadband
Technology: ADSL, Cable, Fiber, Fixed Wireless, Satellite, Other
Speed: > 25/3 Mbps
Date: June 2020 (latest public release)

Provider	Tech	Down (Mbps)	Up (Mbps)
ViaSat, Inc.	Satellite	100	3
Fastlink Communications Inc.	Fixed Wireless	30	5
Hughes Network Systems, LLC	Satellite	25	3
Citizens Telephone Cooperative (VA)	ADSL	10	1.5
Telephone and Data Systems, Inc.	Fixed Wireless	2	0.064
VSAT Systems, LLC	Satellite	2	1.3

Alta View Dr (70%)

Fixed Broadband Deployment

Address: 248 Alta View Drive Southwest, Willis, Virginia

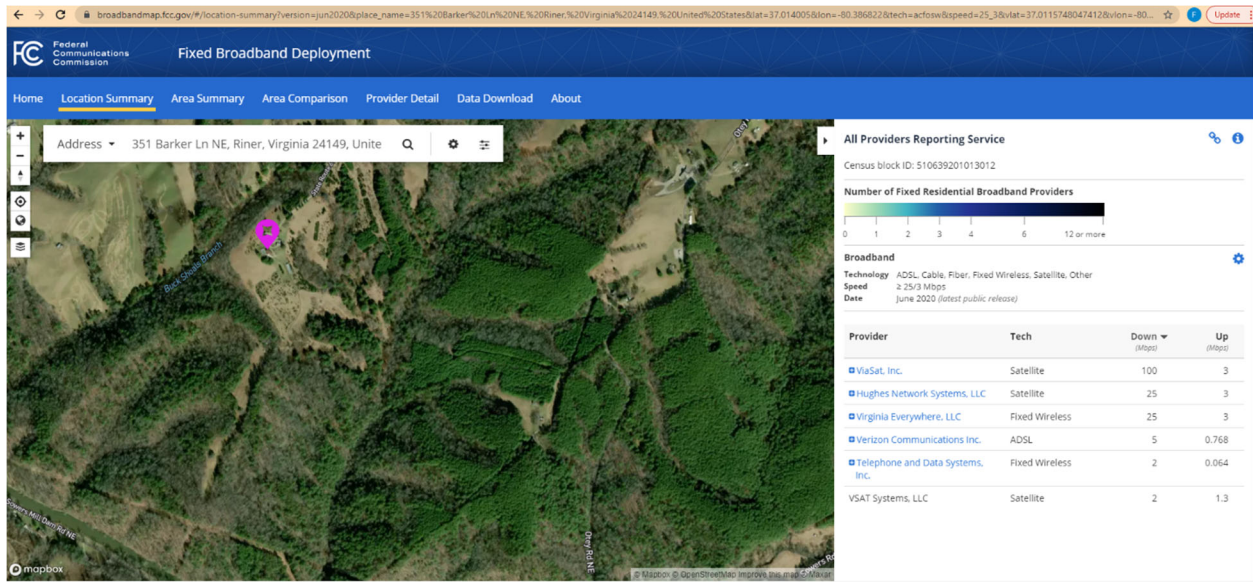
All Providers Reporting Service
Census block ID: 510639202003060

Number of Fixed Residential Broadband Providers
0 1 2 3 4 6 12 or more

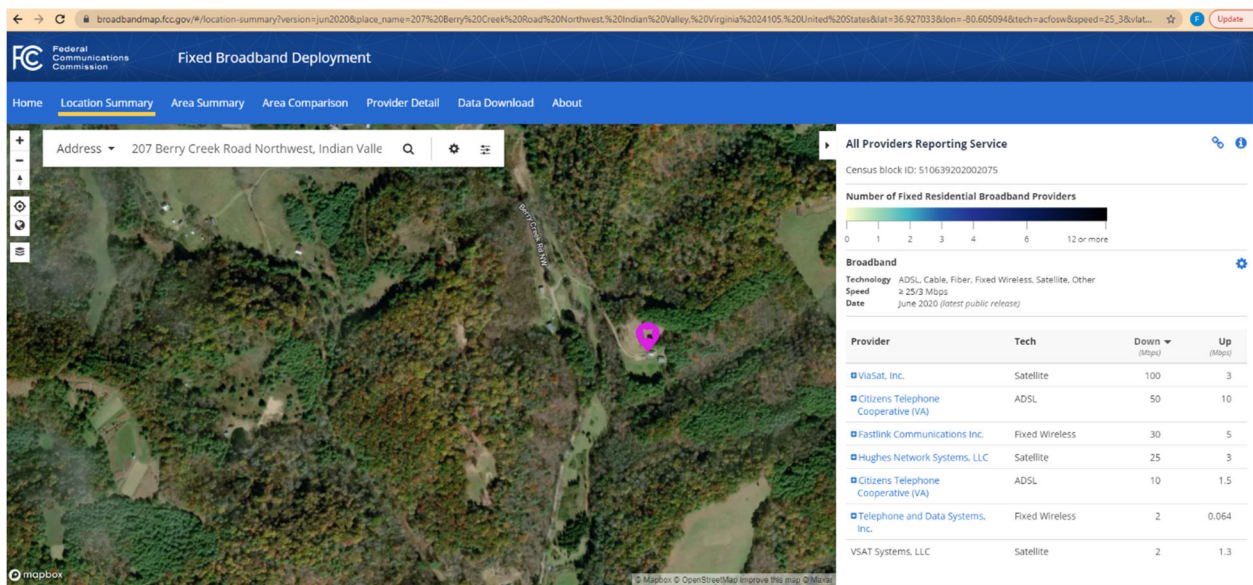
Broadband
Technology: ADSL, Cable, Fiber, Fixed Wireless, Satellite, Other
Speed: > 25/3 Mbps
Date: June 2020 (latest public release)

Provider	Tech	Down (Mbps)	Up (Mbps)
Citizens Telephone Cooperative (VA)	Fiber	1000	500
ViaSat, Inc.	Satellite	100	3
Fastlink Communications Inc.	Fixed Wireless	30	5
Hughes Network Systems, LLC	Satellite	25	3
Citizens Telephone Cooperative (VA)	ADSL	10	1.5
Telephone and Data Systems, Inc.	Fixed Wireless	2	0.064
VSAT Systems, LLC	Satellite	2	1.3

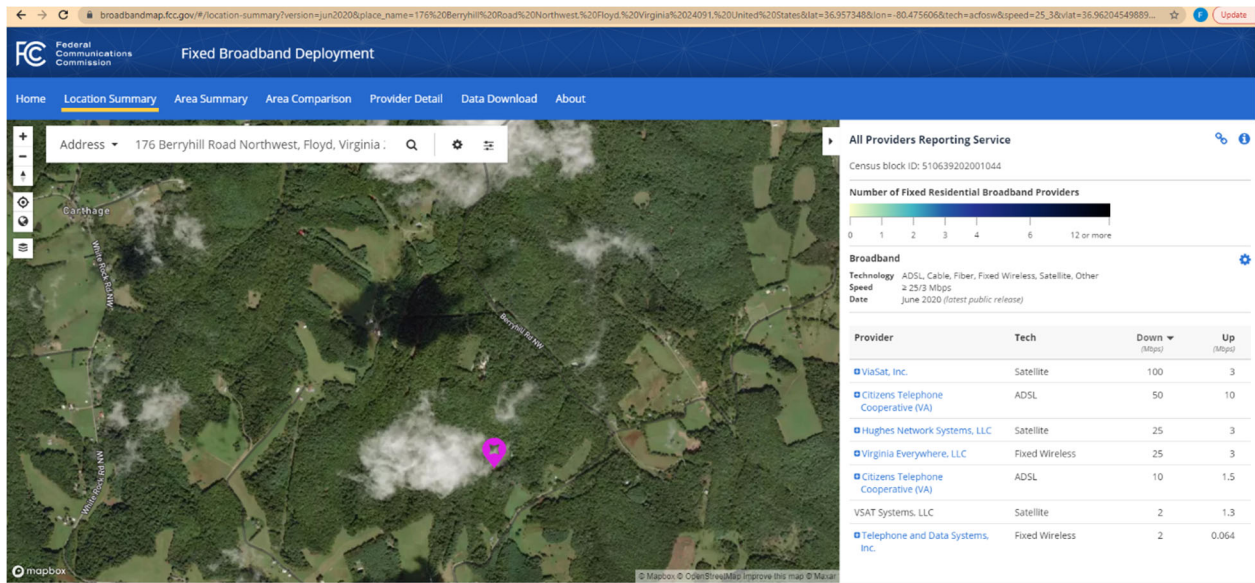
Barker Lane (70%)



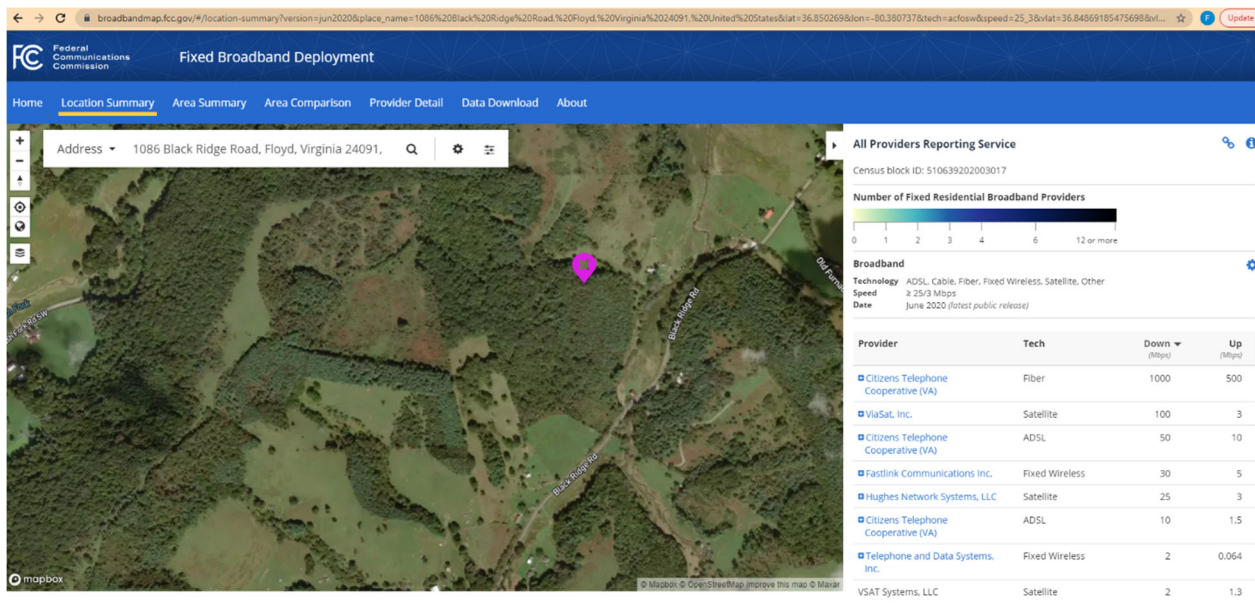
Berry Creek Rd (75%)



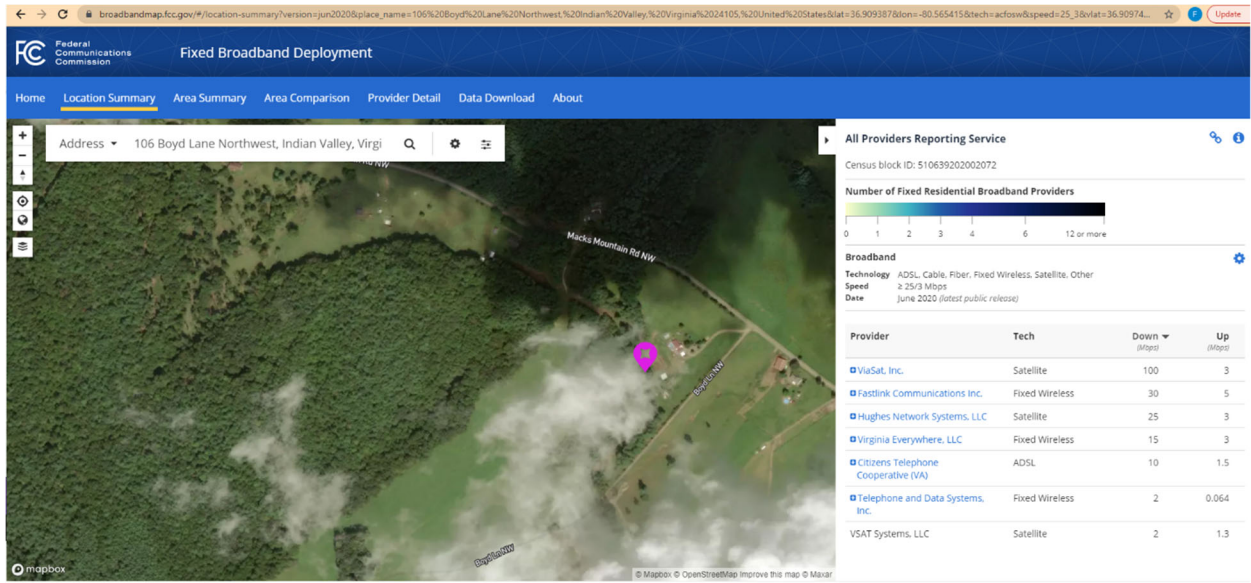
Berry Hill Rd (60%)



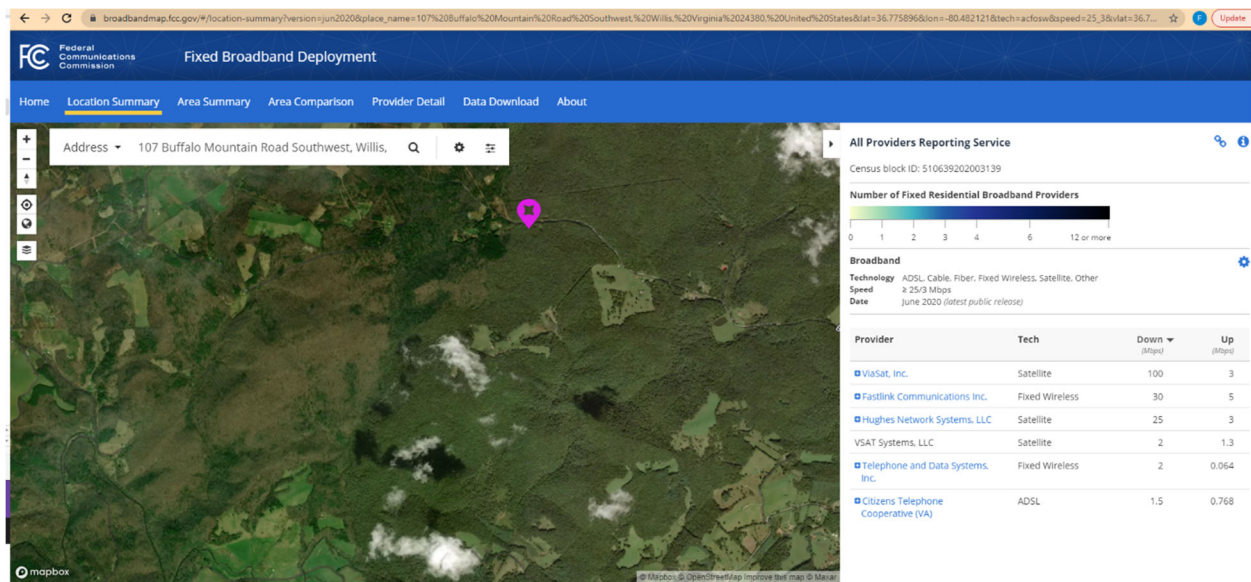
Black Ridge Rd (40%)



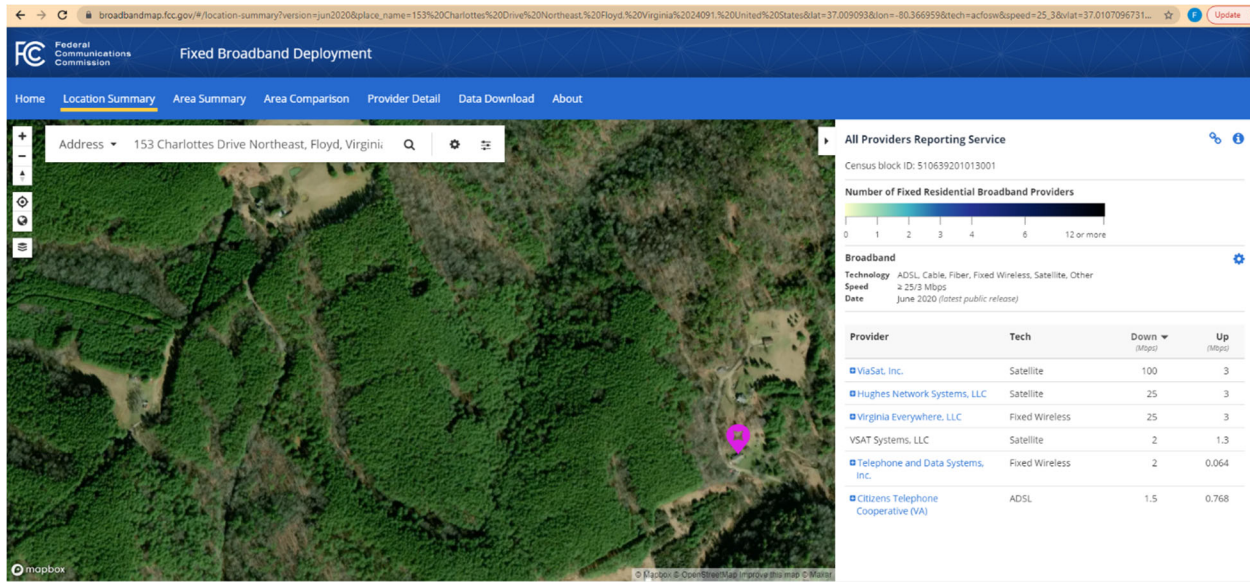
Boyd Lane (50%)



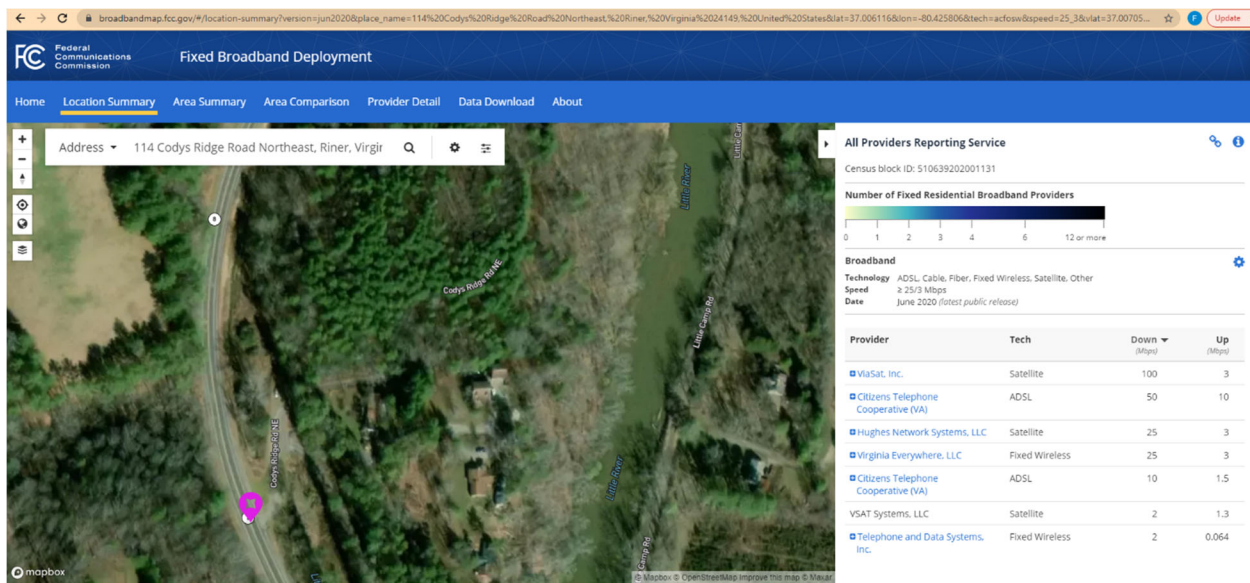
Buffalo Mountain Road and Buffalo Vista (90%)



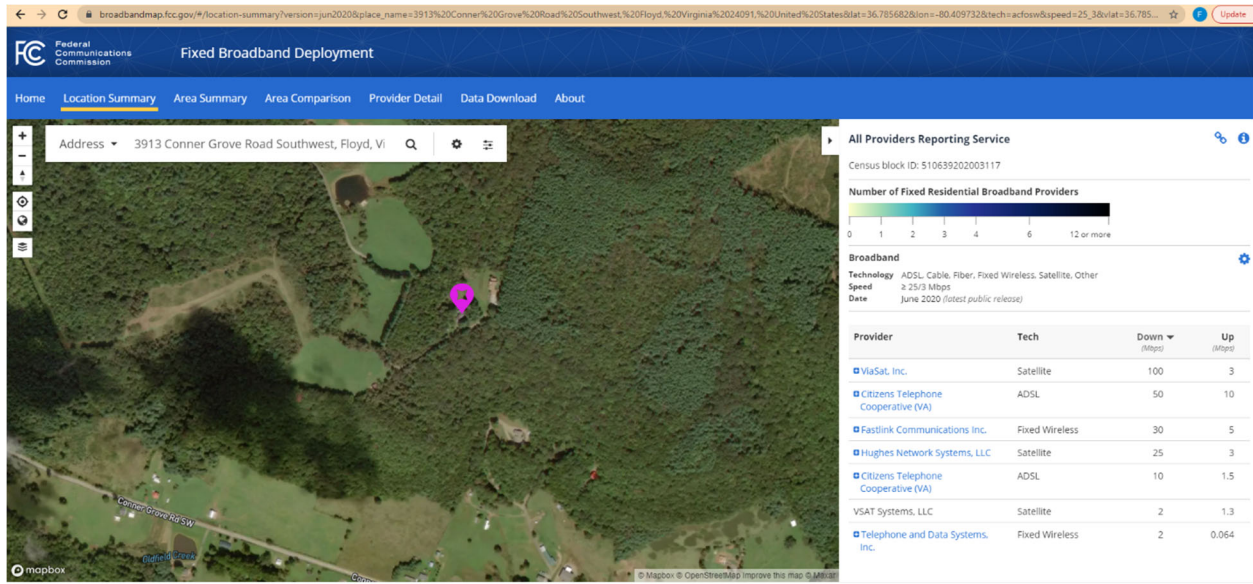
Charlottes Drive (70%)



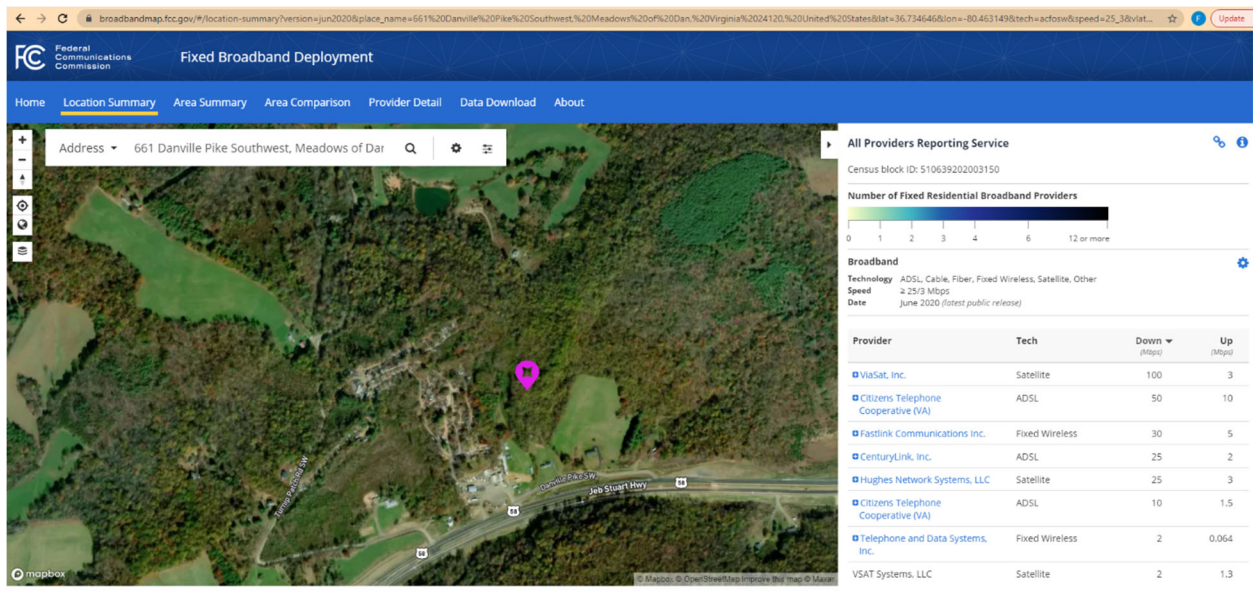
Cody's Ridge Rd (40%)



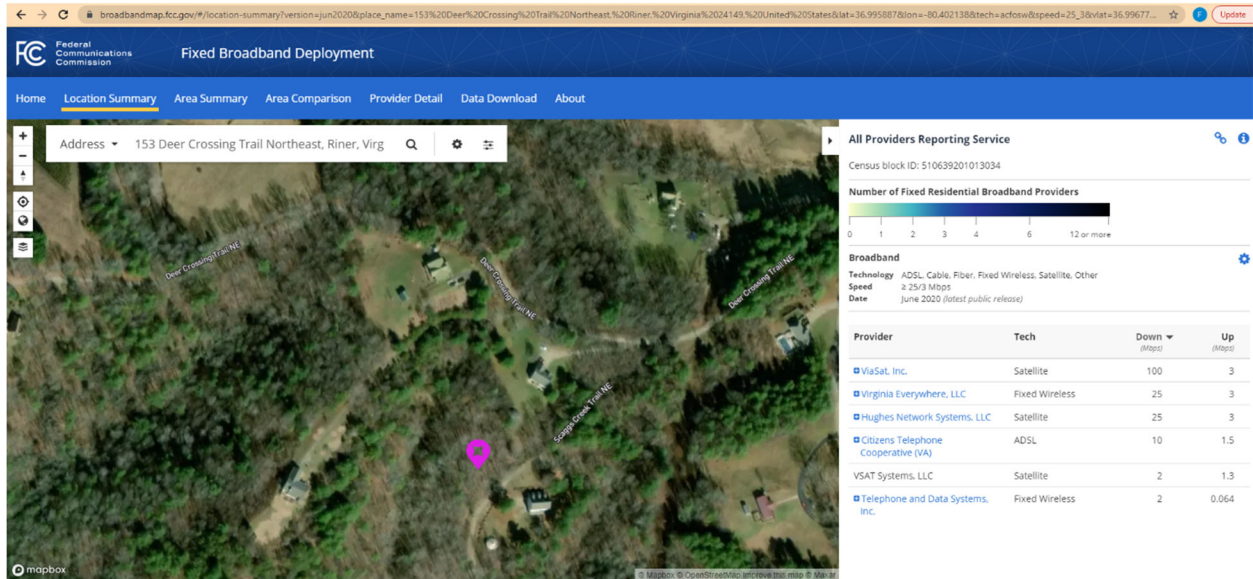
Conner Grove Rd (70%)



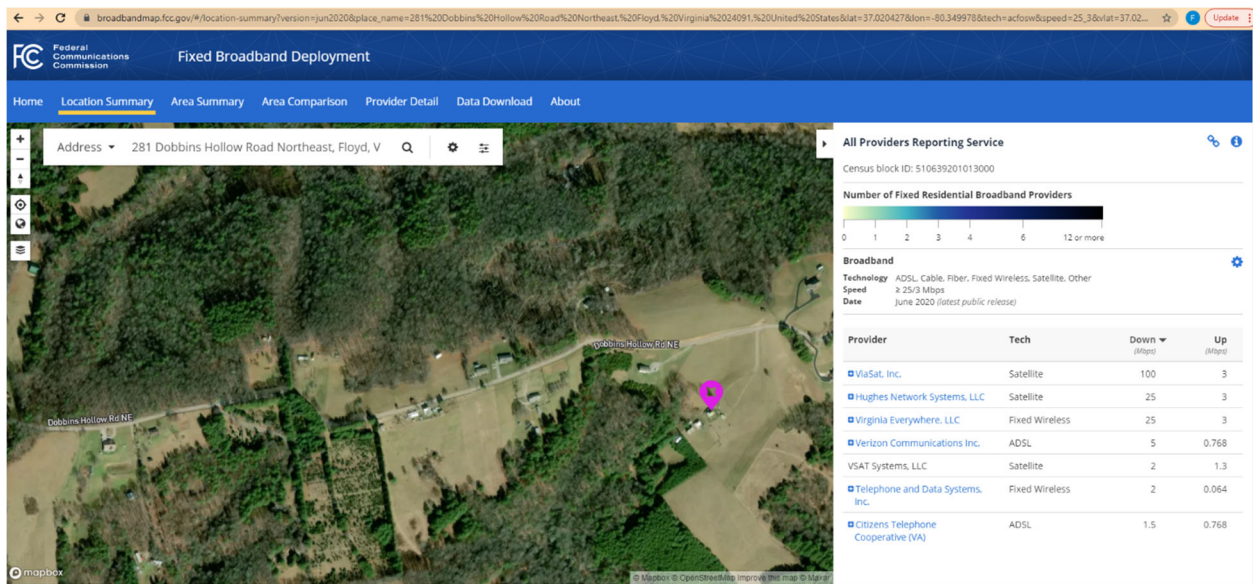
Danville Pike (70%)



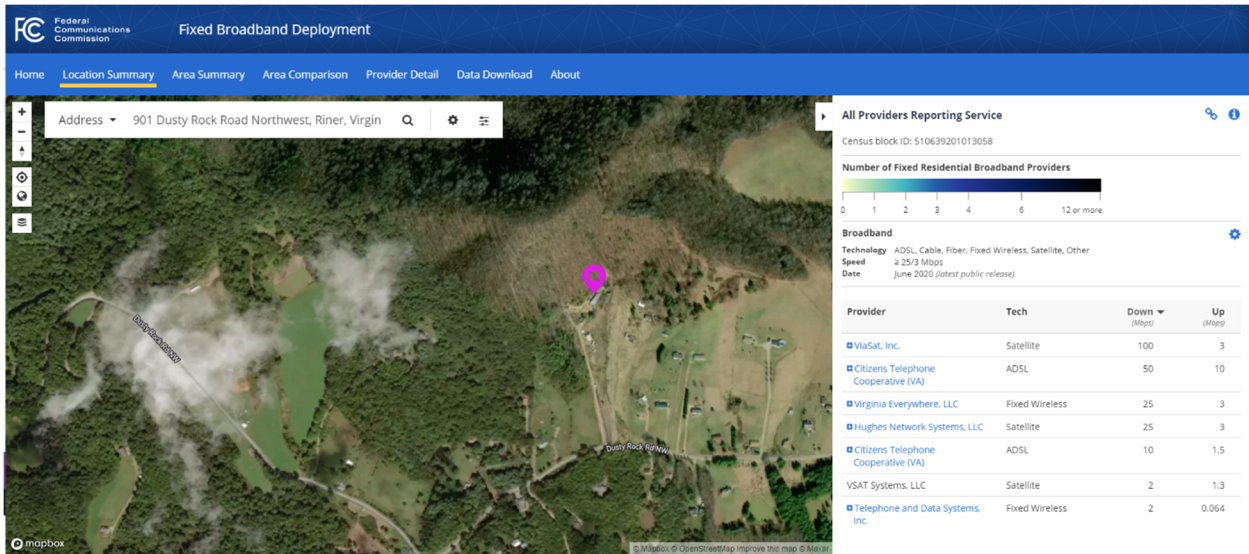
Deer Crossing (50%)



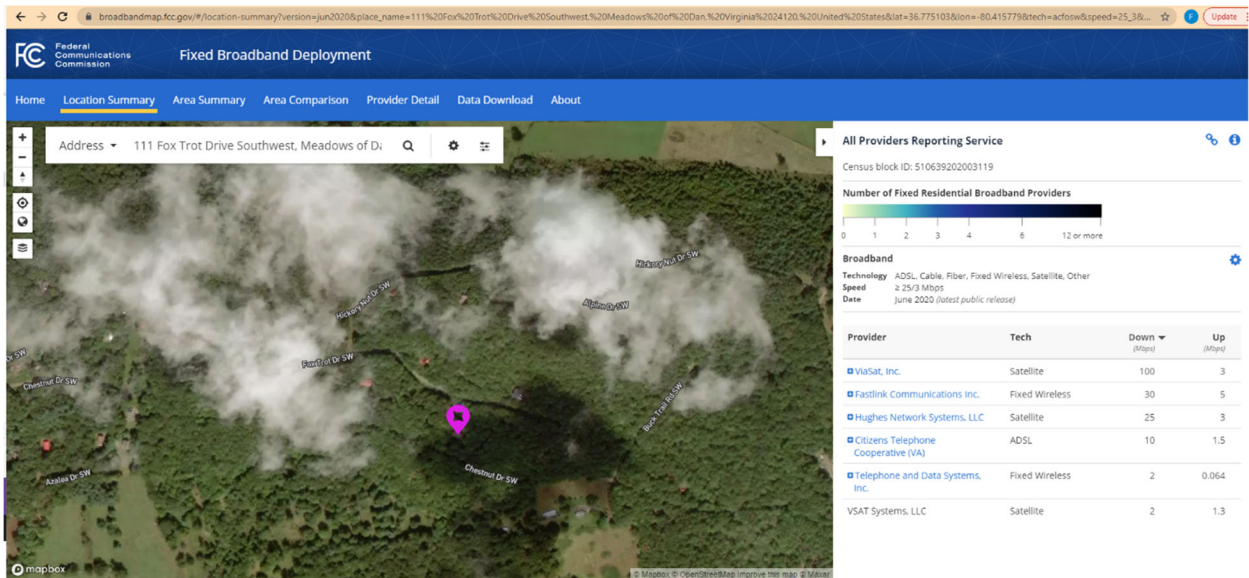
Dobbins Hollow (50%)



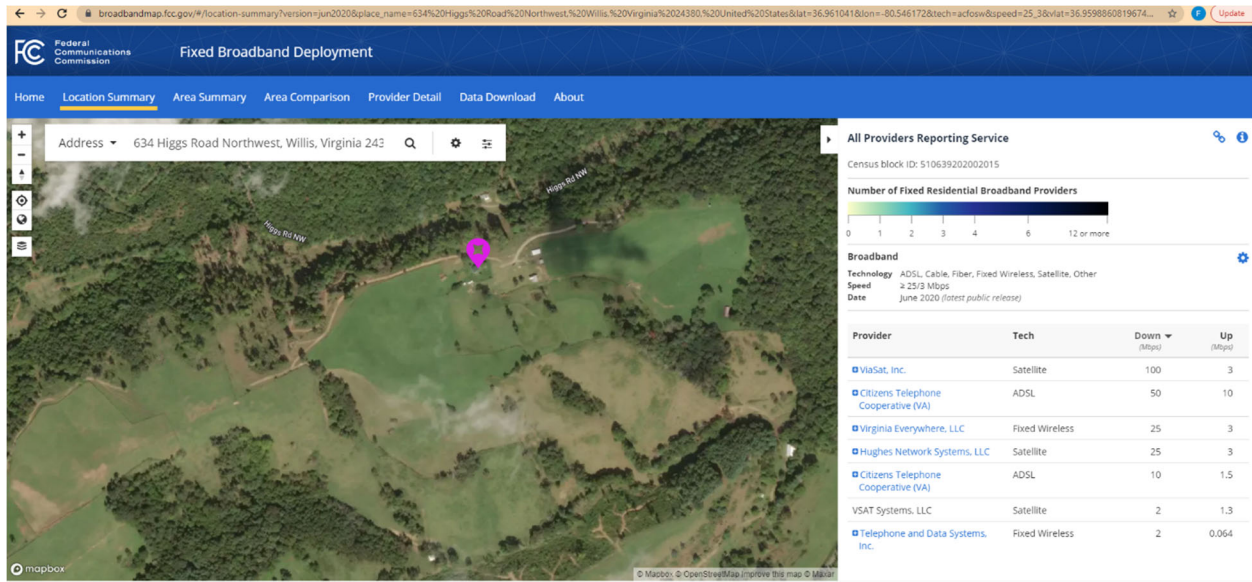
Dusty Rock Rd (50%)



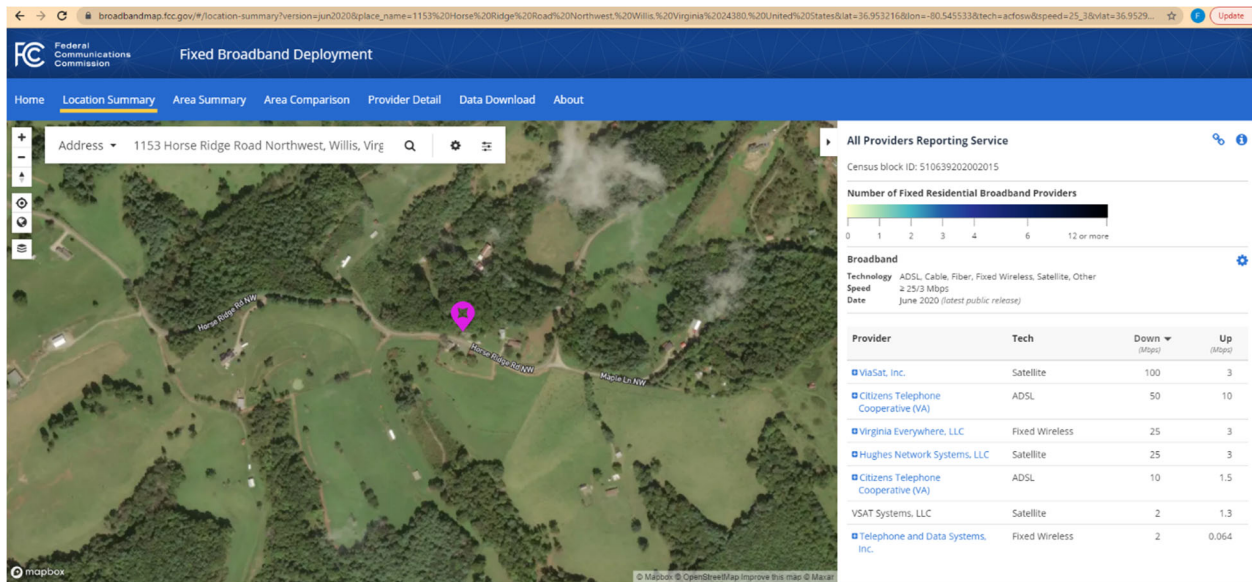
Fox Trot Dr (80%)



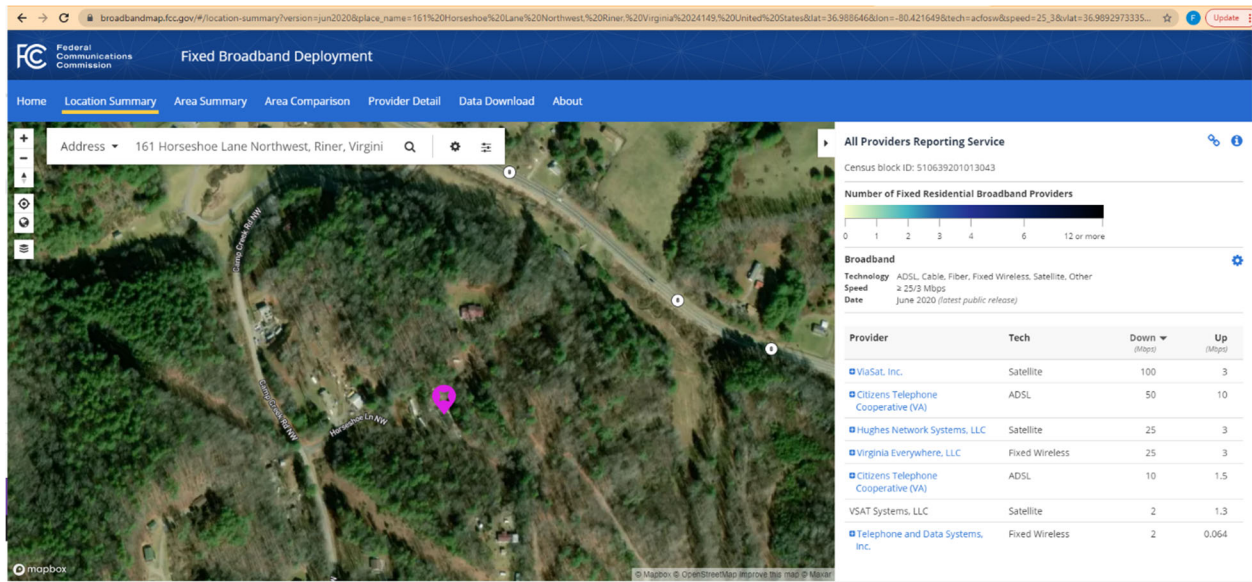
Higgs Rd (25%)



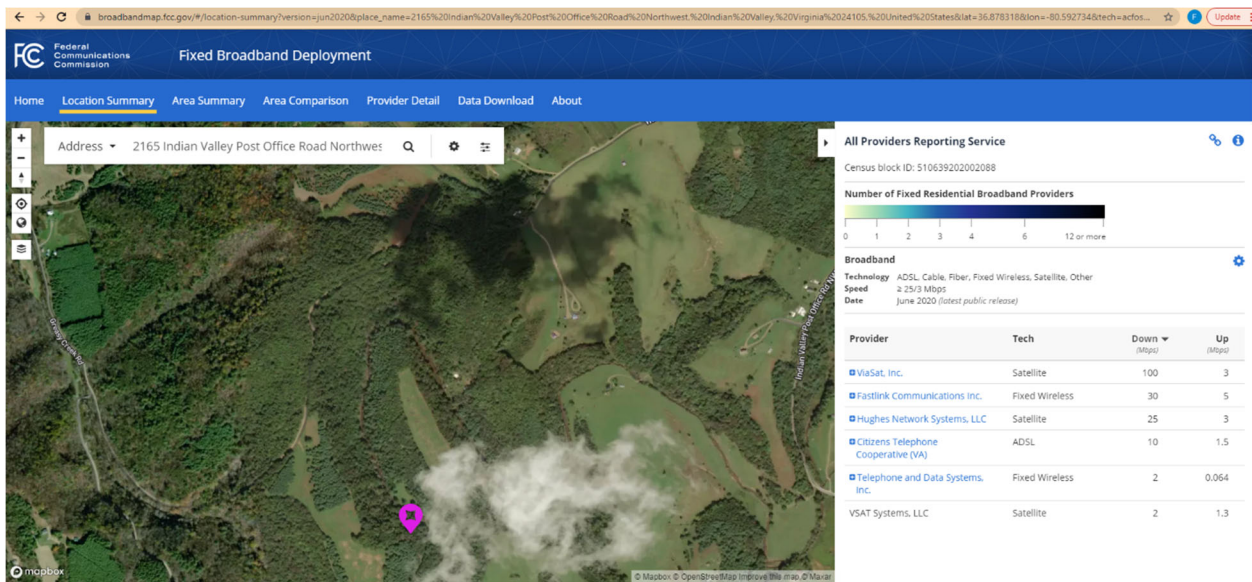
Horse Ridge Rd (30%)



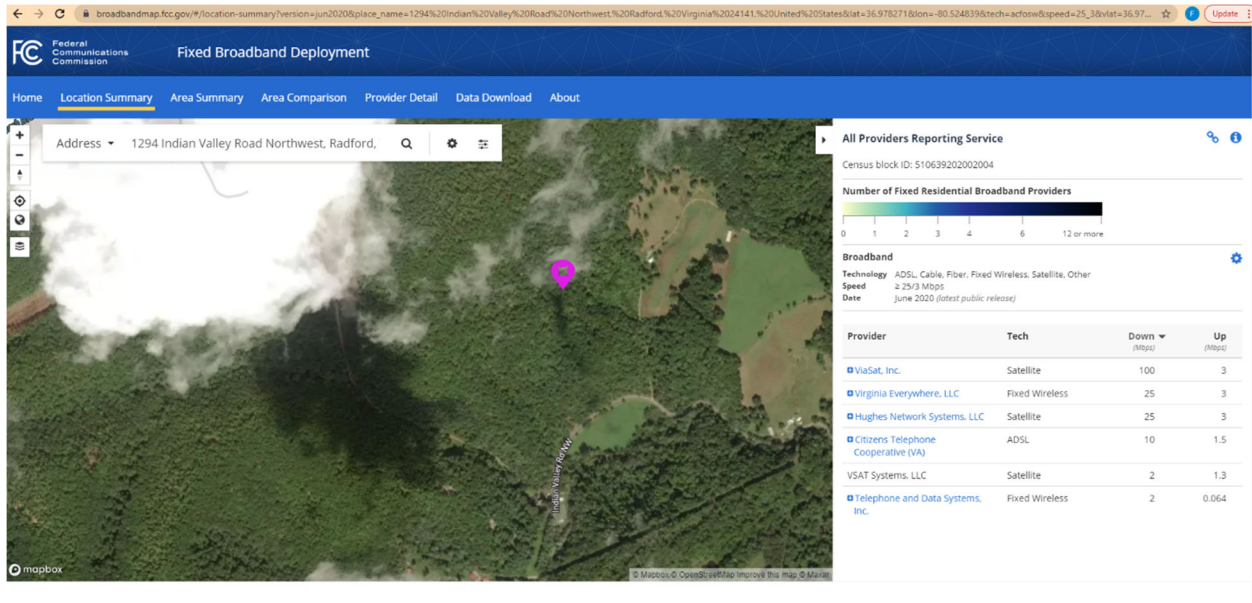
Horseshoe Lane (50%)



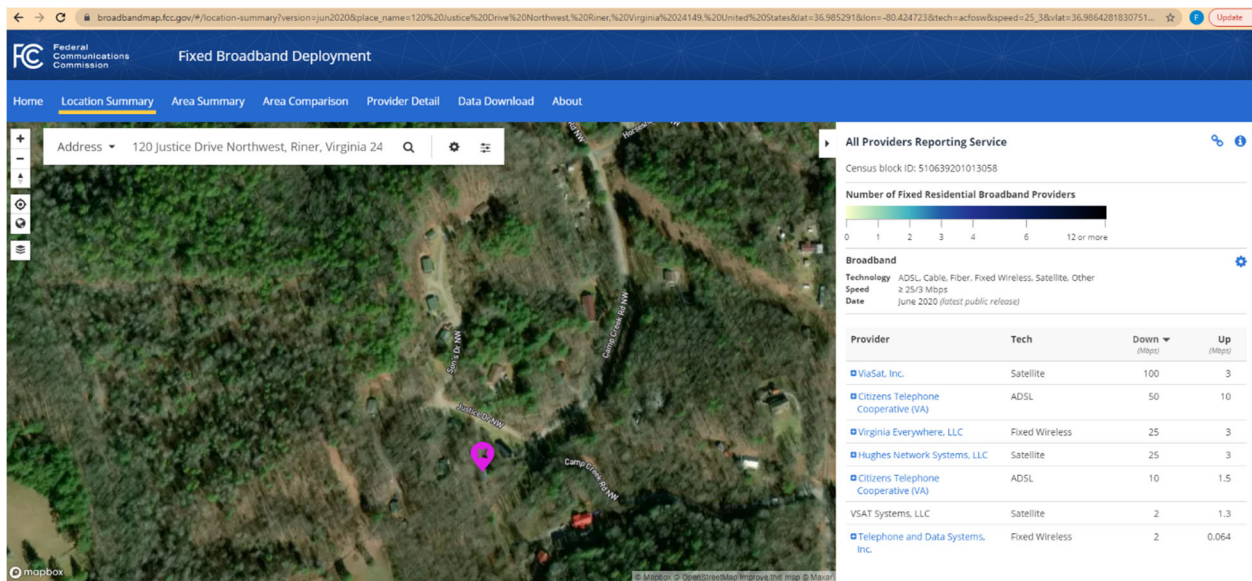
Indian Valley Post Office Rd (60%)



Indian Valley Rd (90%)



Justice Dr (80%)



Last Road (80%)

Address: 121 Last Road Northwest, Radford, Virginia 24141

Census block ID: 510639202001026

Number of Fixed Residential Broadband Providers: 6

Broadband Technology: ADSL, Cable, Fiber, Fixed Wireless, Satellite, Other
 Speed: ≥ 25/3 Mbps
 Date: June 2020 (latest public release)

Provider	Tech	Down (Mbps)	Up (Mbps)
ViaSat, Inc.	Satellite	100	3
Virginia Everywhere, LLC	Fixed Wireless	25	3
Hughes Network Systems, LLC	Satellite	25	3
Citizens Telephone Cooperative (VA)	ADSL	10	1.5
VSAT Systems, LLC	Satellite	2	1.3
Telephone and Data Systems, Inc.	Fixed Wireless	2	0.064

Laurel Ridge Mill Rd (20%)

Address: 1105 Laurel Ridge Mill Road, Riner, Virginia 24149

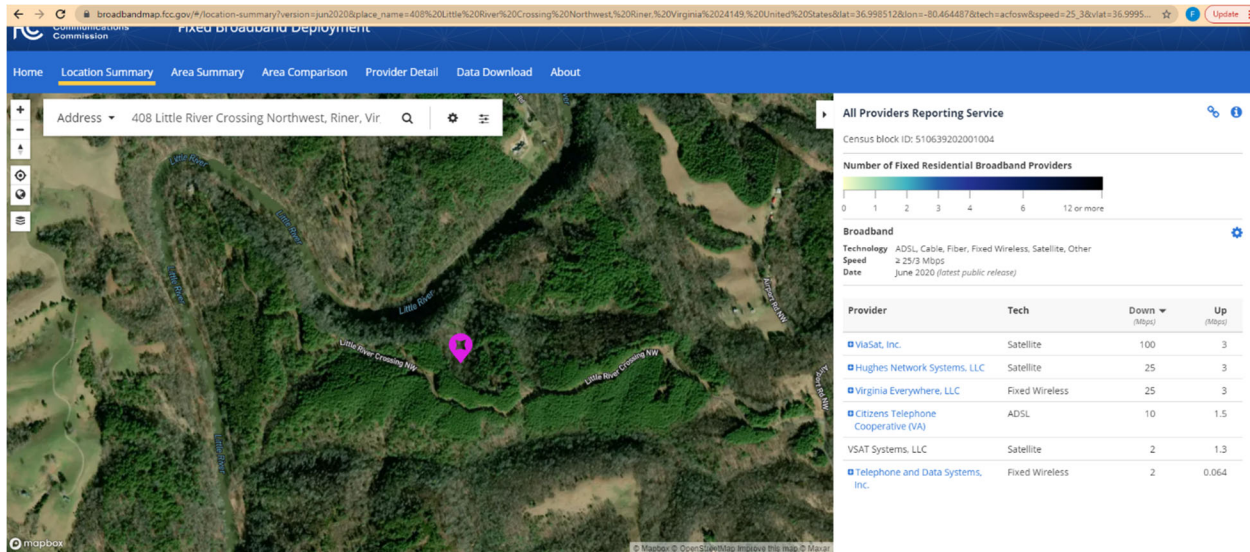
Census block ID: 510639201013012

Number of Fixed Residential Broadband Providers: 6

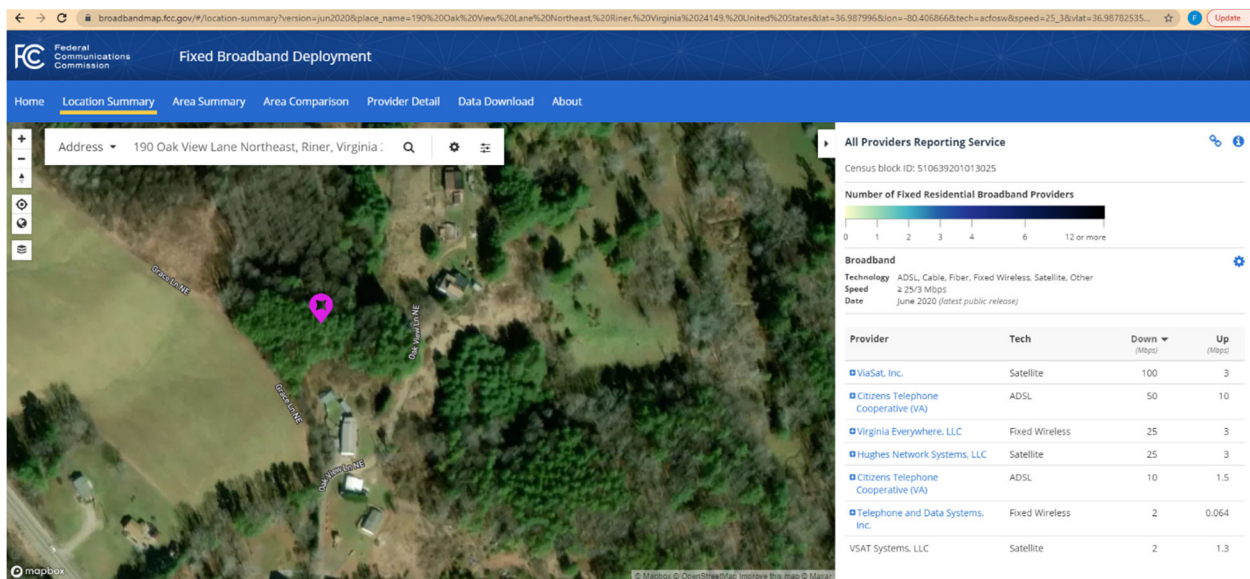
Broadband Technology: ADSL, Cable, Fiber, Fixed Wireless, Satellite, Other
 Speed: ≥ 25/3 Mbps
 Date: June 2020 (latest public release)

Provider	Tech	Down (Mbps)	Up (Mbps)
ViaSat, Inc.	Satellite	100	3
Hughes Network Systems, LLC	Satellite	25	3
Virginia Everywhere, LLC	Fixed Wireless	25	3
Verizon Communications, Inc.	ADSL	5	0.768
Telephone and Data Systems, Inc.	Fixed Wireless	2	0.064
VSAT Systems, LLC	Satellite	2	1.3

Little River Crossing (70%)



Oak View Lane (40%)

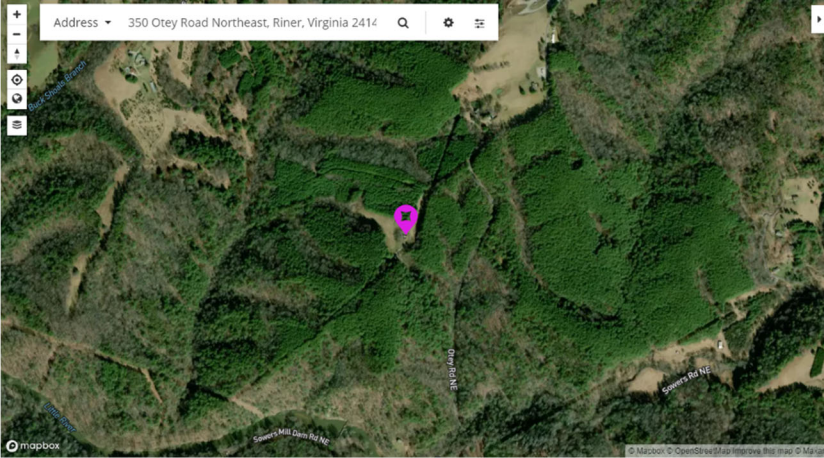


Otey Rd (80%)

Fixed Broadband Deployment

Home **Location Summary** Area Summary Area Comparison Provider Detail Data Download About

Address 350 Otey Road Northeast, Riner, Virginia 2414



All Providers Reporting Service

Census block ID: 510639201013012

Number of Fixed Residential Broadband Providers

0 1 2 3 4 6 12 or more

Broadband

Technology ADSL, Cable, Fiber, Fixed Wireless, Satellite, Other
 Speed ≥ 25/3 Mbps
 Date June 2020 (latest public release)

Provider	Tech	Down (Mbps)	Up (Mbps)
ViaSat, Inc.	Satellite	100	3
Hughes Network Systems, LLC	Satellite	25	3
Virginia Everywhere, LLC	Fixed Wireless	25	3
Verizon Communications Inc.	ADSL	5	0.768
Telephone and Data Systems, Inc.	Fixed Wireless	2	0.064
VSAT Systems, LLC	Satellite	2	1.3

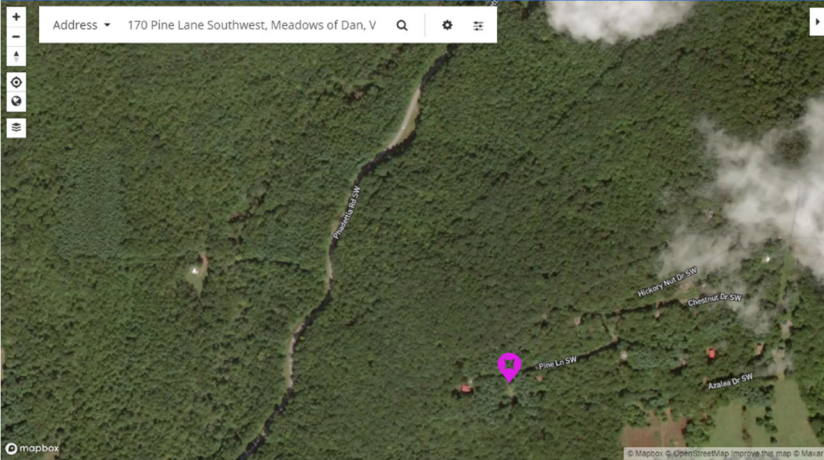
https://www.fcc.gov/ Federal Communications Commission Website Policies & Notices CATEGORIES BUREAUS & OFFICES

Pine Lane SW (90%)

Fixed Broadband Deployment

Home **Location Summary** Area Summary Area Comparison Provider Detail Data Download About

Address 170 Pine Lane Southwest, Meadows of Dan, V



All Providers Reporting Service

Census block ID: 510639202003118

Number of Fixed Residential Broadband Providers

0 1 2 3 4 6 12 or more

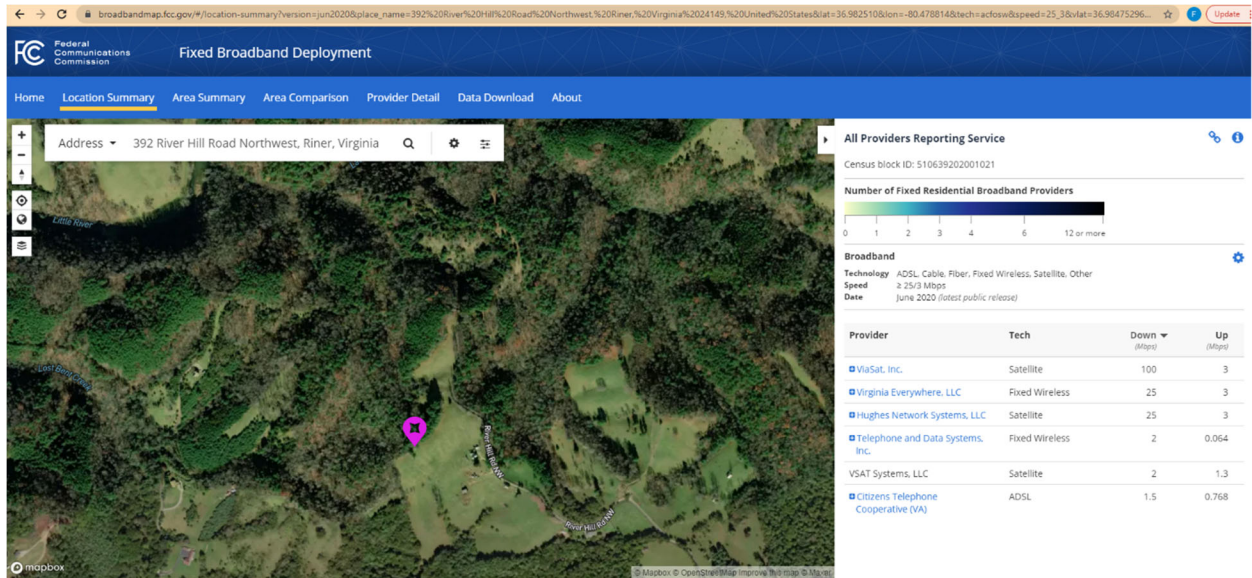
Broadband

Technology ADSL, Cable, Fiber, Fixed Wireless, Satellite, Other
 Speed ≥ 25/3 Mbps
 Date June 2020 (latest public release)

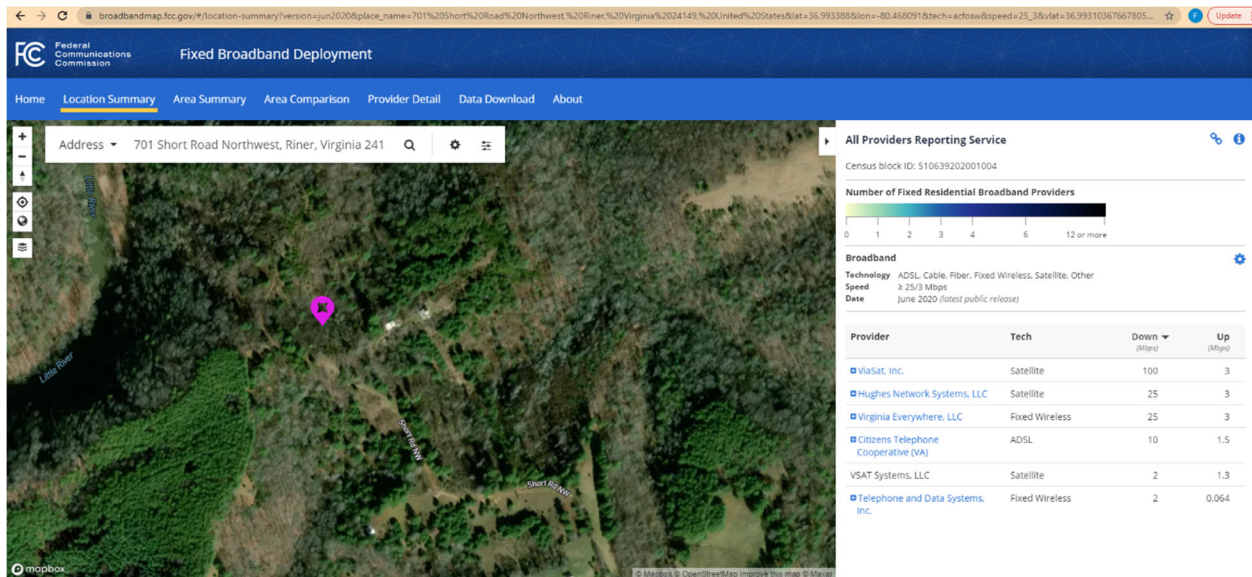
Provider	Tech	Down (Mbps)	Up (Mbps)
ViaSat, Inc.	Satellite	100	3
Citizens Telephone Cooperative (VA)	ADSL	50	10
Fastlink Communications Inc.	Fixed Wireless	30	5
Hughes Network Systems, LLC	Satellite	25	3
Citizens Telephone Cooperative (VA)	ADSL	10	1.5
VSAT Systems, LLC	Satellite	2	1.3
Telephone and Data Systems, Inc.	Fixed Wireless	2	0.064

Federal Communications Commission Website Policies & Notices CATEGORIES BUREAUS & OFFICES

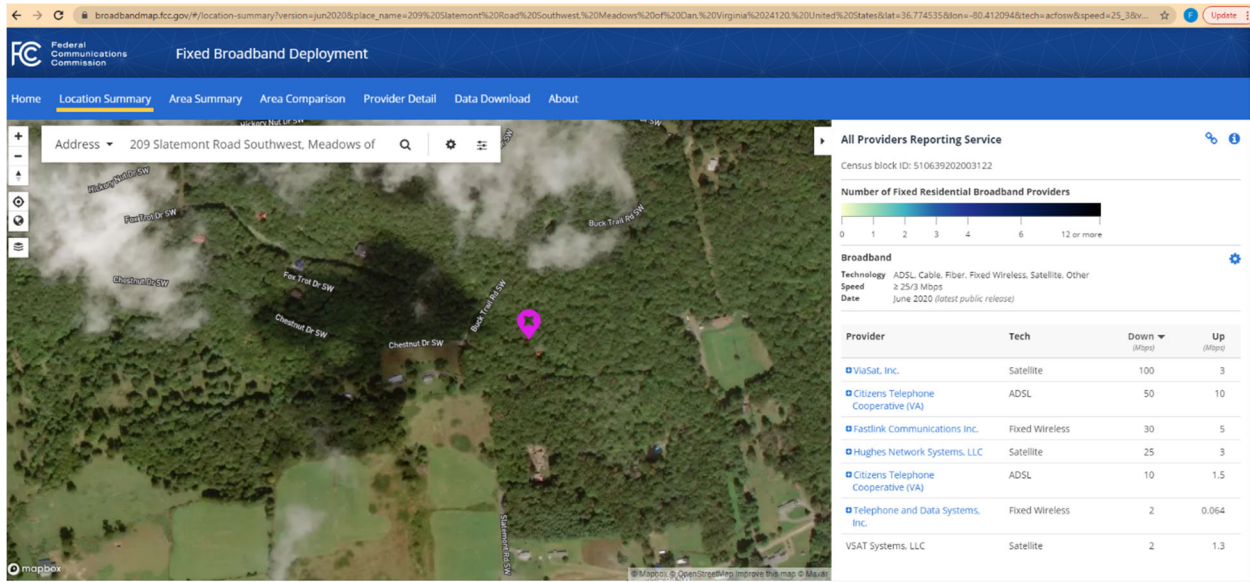
River Hill Rd (70%)



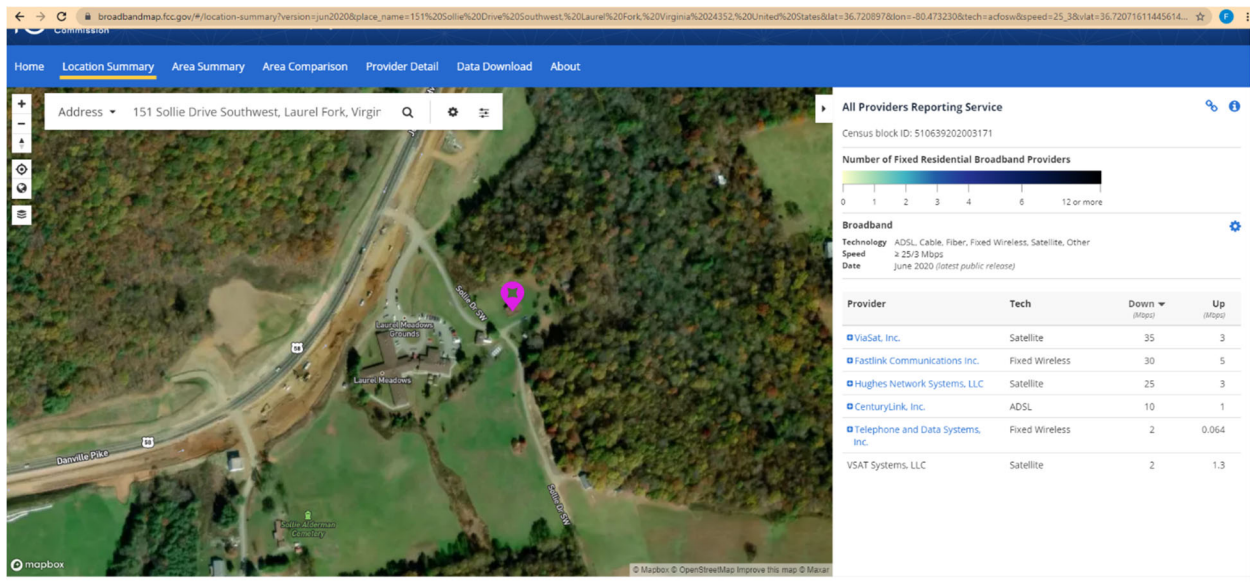
Short Rd (80%)



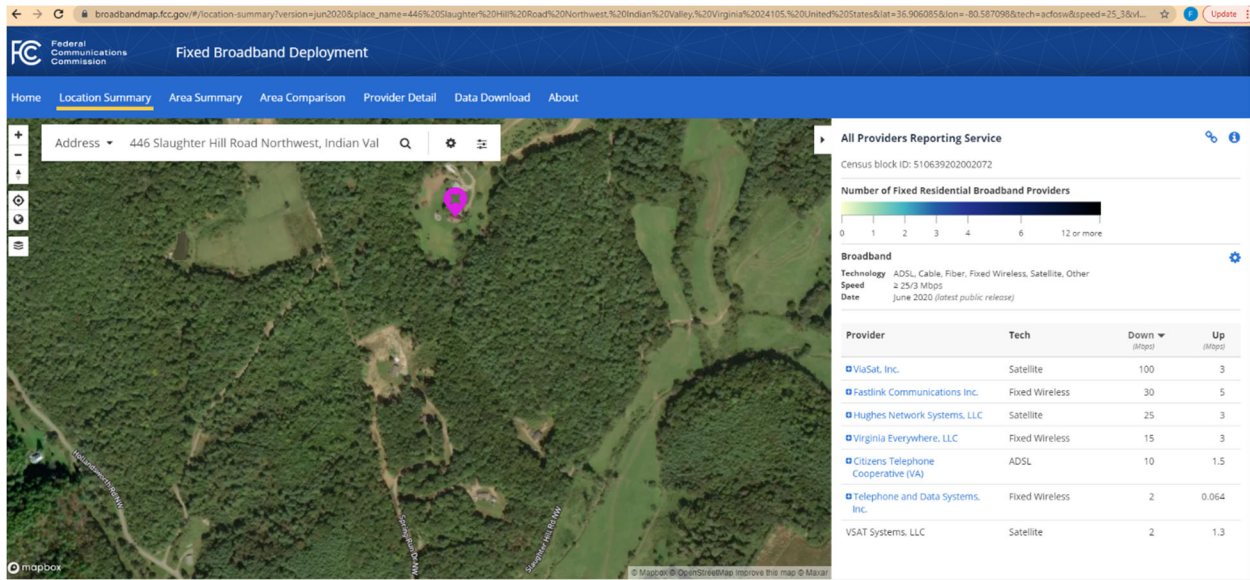
Slatemon Rd (70%)



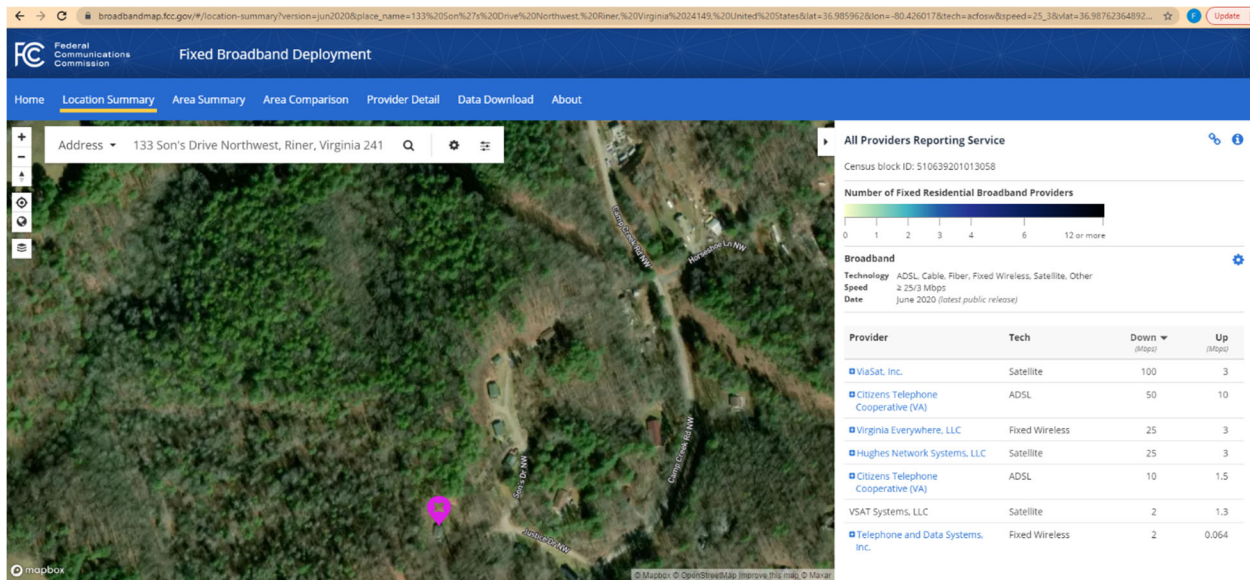
Slaughter Hill Rd (40%)



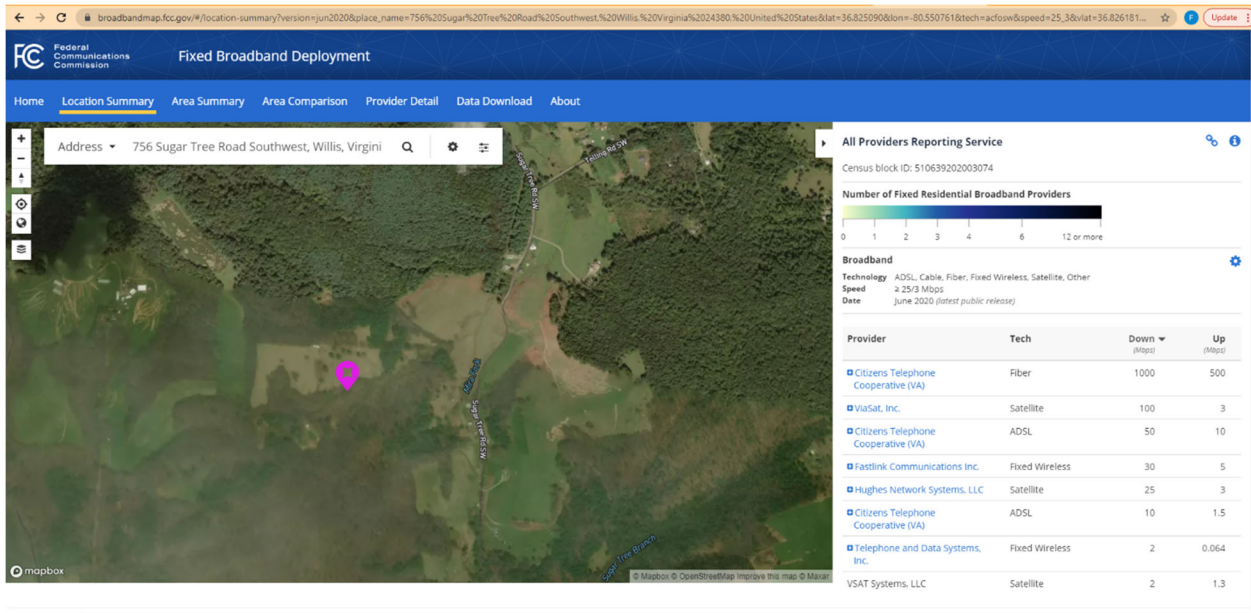
Sollie Dr (70%)



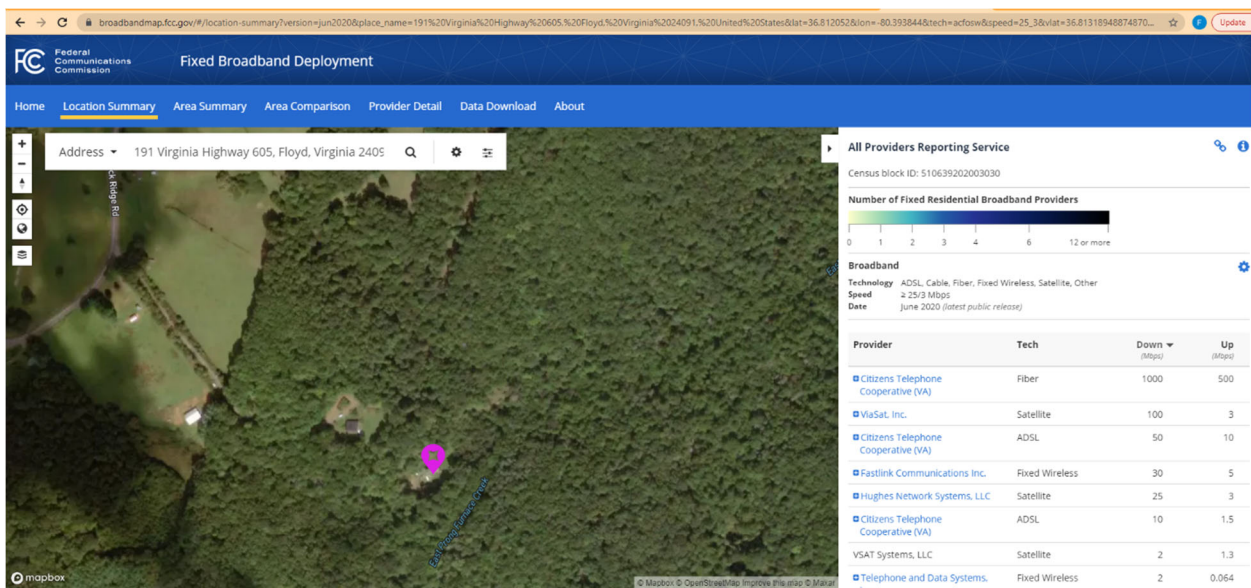
Sons Drive (70%)



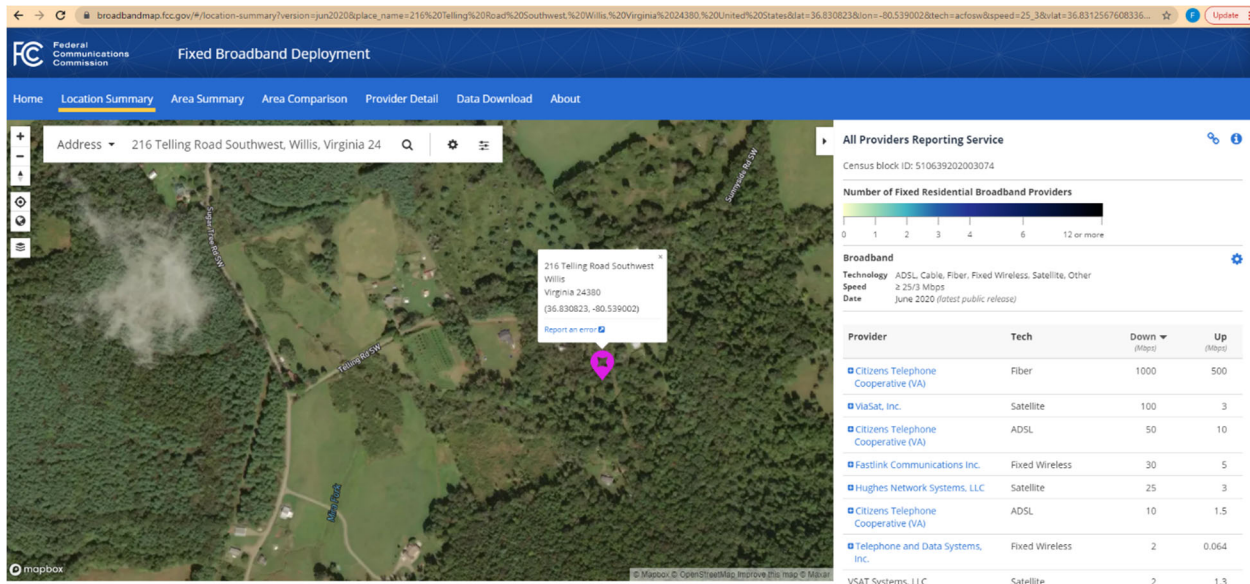
Sugar Tree Rd (80%)



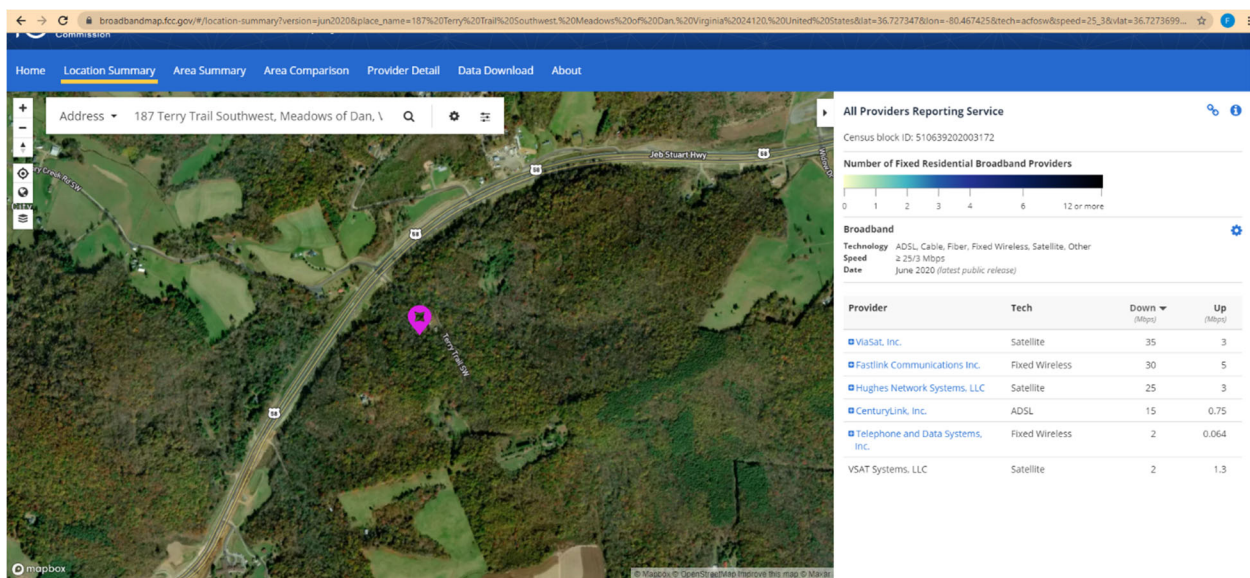
Sweetwater Way (80%)



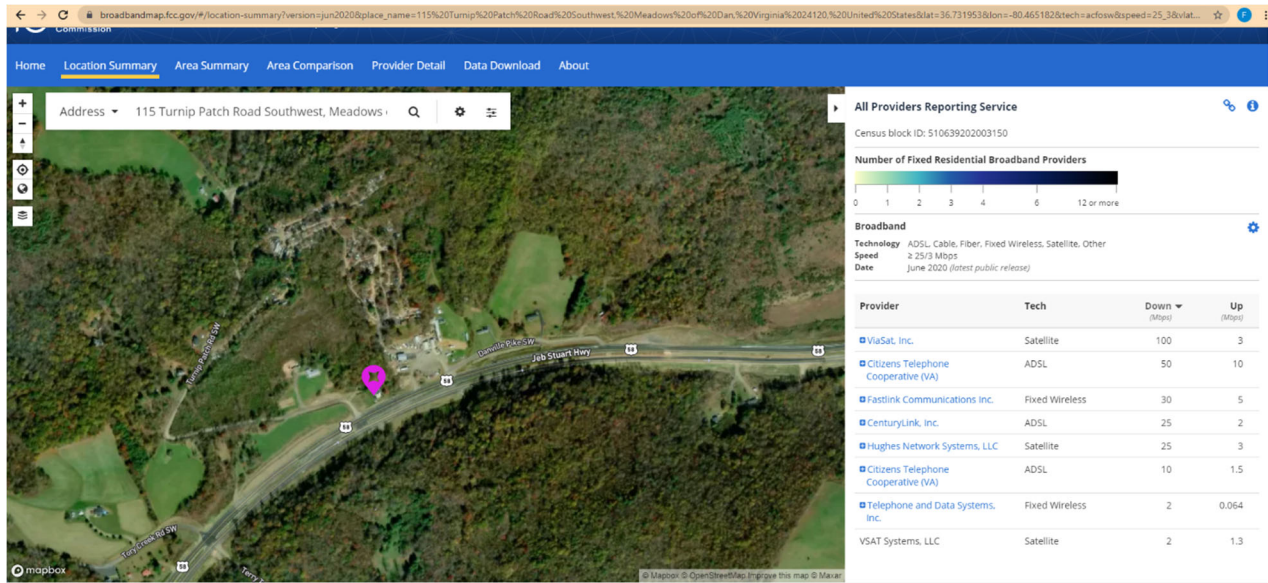
Telling Rd (60%)



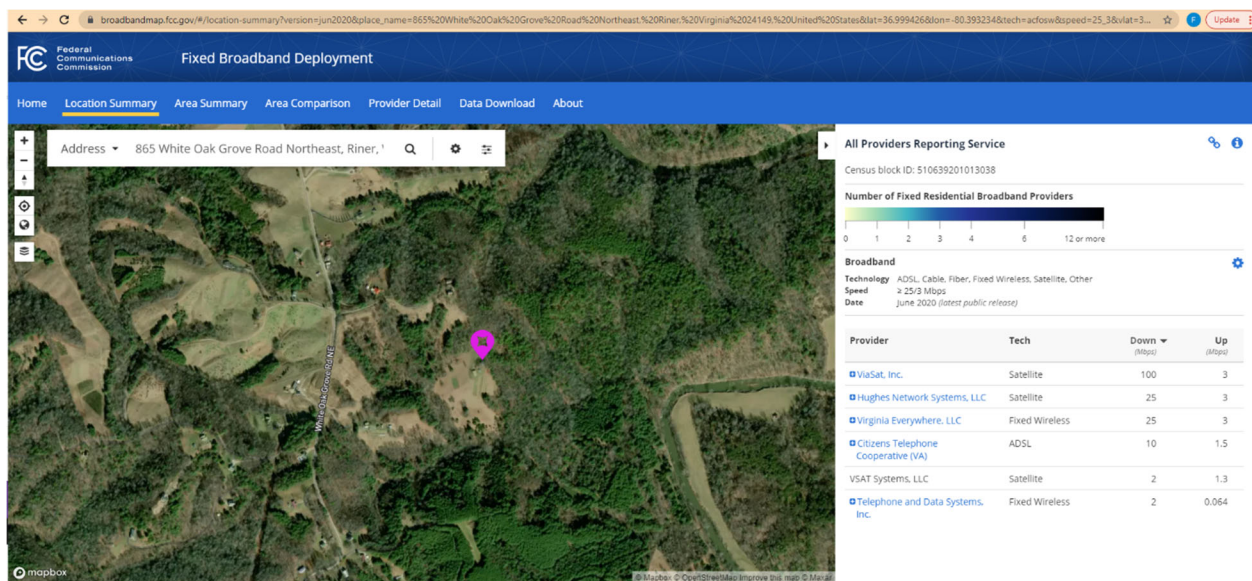
Terry Trail (70%)



Turnip Patch (70 %)



White Oak Grove Rd (50%)



Wild Mountain Rd (70%)

Fixed Broadband Deployment

Home **Location Summary** Area Summary Area Comparison Provider Detail Data Download About

Address: 172 Wild Mountain Road Southwest, Willis, Vir

All Providers Reporting Service

Census block ID: 510639202003090

Number of Fixed Residential Broadband Providers

0 1 2 3 4 6 12 or more

Broadband

Technology: ADSL, Cable, Fiber, Fixed Wireless, Satellite, Other
 Speed: ≥ 25/3 Mbps
 Date: June 2020 (latest public release)

Provider	Tech	Down (Mbps)	Up (Mbps)
Citizens Telephone Cooperative (VA)	Fiber	1000	500
ViaSat, Inc.	Satellite	100	3
Citizens Telephone Cooperative (VA)	ADSL	50	10
Fastlink Communications Inc.	Fixed Wireless	30	5
Hughes Network Systems, LLC	Satellite	25	3
Citizens Telephone Cooperative (VA)	ADSL	10	1.5
VSAT Systems, LLC	Satellite	2	1.3
Telephone and Data Systems, Inc.	Fixed Wireless	2	0.064

Attachment 5
Passings Forms

Attached are 6 passings forms:

TOTAL Passings (which is a summary of the other 5 below)

Passings in Copper Hill

Passings in Indian Valley

Passings in Meadows of Dan

Passings in Pilot and Riner

Passings in the Rest of the County (long driveways)

2022 Virginia Telecommunication Initiative (VATI)

Passing Form: **TOTAL FLOYD CO Project**

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	722	495	227	378
Businesses (non-home based)				
Businesses (home-based)	61	10	51	35
Community Anchors	1 (Mabry Mill and restaurant)	1		1
Non-residential				
Total	723	496	227	379

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.

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

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

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

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

2022 Virginia Telecommunication Initiative (VATI) Passing Form: Copper Hill

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	16+18+40=74	56	18	23
Businesses (non-home based)				
Businesses (home-based)	4	1	3	3
Community Anchors				
Non-residential				
Total	74	56	18	23

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.

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

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

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

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

2022 Virginia Telecommunication Initiative (VATI) Passing Form: Indian Valley

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	3+4+4=11	7	4	5
Businesses (non-home based)				
Businesses (home-based)	1		1	1
Community Anchors				
Non-residential				
Total	11	7	4	5

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.

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

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

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

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

2022 Virginia Telecommunication Initiative (VATI) Passing Form: Meadows of Dan (& 3 in Laurel Fork)

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	62+4+19=85	81	4	48
Businesses (non-home based)				
Businesses (home-based)	6+0+0=6			1
Community Anchors	1 (Mabry Mill and restaurant)	1		
Non-residential				
Total	86	82	4	48

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.

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

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

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

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

2022 Virginia Telecommunication Initiative (VATI) Passing Form: Pilot and Riner

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	31+24+58=113	31+58=89	24	0+1+0=1
Businesses (non-home based)				
Businesses (home-based)	4+5+1=10	4+1=5	5	0
Community Anchors				
Non-residential				
Total	113	89	24	1

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.

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

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

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

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

2022 Virginia Telecommunication Initiative (VATI)
Passing Form: Remainder of Floyd County
 (other than Meadows of Dan, Indian Valley, Copper Hill, and Pilot/Riner)

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	722-(85+11+74+113)=439	495-(81+7+56+89)=262	227-(4+4+18+24)=177	378 – (48+5+23+1)= 301
Businesses (non-home based)				
Businesses (home-based)	61 – (6+1+4+10)=40	10 – (0+0+1+5)=4	51- (0+1+3+5)=42	35- (1+1+3+0)=30
Community Anchors	1-1=0			
Non-residential				
Total	723 – (86+11+74+ 113)= 439	496- (82+ 7+56+89)= 262	227- (4+4+18+24)=177	379- (48+5+23+1)= 301

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.

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

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

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

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

Definitions

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

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

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

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

Attachment 7 Timeline and Project Management Plan

Project Timeline with Including Milestones and Deliverables, and Completion dates. Key actions and roles are also noted below.

Milestones	Deliverables	Anticipated Completion Date
Construct to customers in Active FTTH areas	125 Qualified customers installed	4/30/2022
Design, Staking, and Easements for 3% Unserved Areas	Finalized construction plan to include the unserved areas	5/31/2022
Construction Contractor to begin Construction	Construction Contractor has begun directional boring	6/1/2022
100% of Fiber Construction Complete	Fiber placement complete in all 3 unserved areas	10/31/2022
Construct to customers in newly complete FTTH areas	50 Qualified customers installed	10/31/2022
100% of FTTH Overbuild complete	100% of main line construction complete for FTTH	12/31/2022
Construct to customers in newly complete FTTH areas	Remaining 50 Qualified customers installed	5/31/2023

	Citizens	Floyd County
Apply for VDOT ROW permit, Donna Smith	Donna Smith	
Prepare Construction Package, Donna Smith	Donna Smith	
Prepare Monthly Reports and periodic invoices	Chris Bond	
Review and Submit Monthly and other Reports		Lydeana Martin
Invoice Review and Payment, Reimbursement requests to DHCD		Finance Director
Construction Oversight	Donna Smith	
Fiber testing and splicing	Donna Smith	
Project Completion	Donna Smith	
Marketing and Promotion	Lori Saltus	

Attachment 8 MOU

Model Agreement (from our 2018 VATI application)

Model Agreement for 2022 VATI Grant (from 2018 grant)

Agreement between Citizens Telephone Cooperative and Floyd County Regarding VATI Funding

On March 29, 2019 the Virginia Department of Housing and Community Development ("DHCD") announced that it had offered Floyd County (the "Grantee") a total of \$348,018 in funding under the Virginia Telecommunication Initiative (VATI) program in response to the joint application of the County and Citizens Telephone Cooperative. Pursuant to the program guidelines and statutory authority, the primary objective of the VATI is to provide financial assistance to supplement construction costs by private sector broadband providers, in partnership with local units of government to extend service to areas that presently are unserved by any broadband provider.

The grant agreement, between DHCD and the County (the "DHCD Agreement") will impose certain responsibilities on the Grantee in accepting the VATI grant. As anticipated in the joint application for funding submitted by Floyd County and Citizens Telephone Cooperative the parties wish to outline the roles of each party now that the grant has been awarded. Accordingly, the parties now hereby agree as follows:

Citizens Telephone Cooperative shall perform all work described in the DHCD Agreement and VATI #2019FC-001 Terms and Conditions (both of which are attached hereto and incorporated herein by reference), the submitted application, project management schedule and budget. Specifically, Citizens Telephone Cooperative shall complete all Grant Activities described in the DHCD Contract Documents (including but not limited to Construction of 14 miles of fiber; Electronics; and Provide broadband services to 313 serviceable units, including 6 businesses on or before May 20, 2020. Citizens Telephone Cooperative shall indemnify, defend and hold the County harmless for any failure(s) (a) to complete any Grant Activities described in the DHCD Contract Documents on or before May 20, 2020 and/or (b) to achieve any project Outcomes, as defined in the DHCD Agreement by {May 20, 2020 , Citizens Telephone Cooperative will provide information of subscribers and speed package selected, as well as speed validation data to ensure that the proposed Outcomes have been met and broadband speeds meet VATI criteria. Citizens Telephone Cooperative will submit monthly or quarterly invoices for payment upon completion of the work. No VATI funds shall be distributed unless and until (a) Citizens Telephone Cooperative has submitted all requested documents and (b) the County has verified that pre-construction and/or construction work has been completed or equipment has been ordered and received.

In their application, the parties estimated that 313 serviceable units will have access to the required broadband speeds. Floyd County and Citizens Telephone Cooperative will exercise due diligence and best efforts on community outreach and marketing the availability of service, which is the intent of the program. The parties understand, however, that the actual number of customers who choose to subscribe is beyond the parties' control. The parties also understand that the intent of the Department of Housing and Community Development is that the parties exercise due diligence and best efforts and that no funds will be returned to the Commonwealth nor retained by Floyd County so long as the parties exercise due diligence and best efforts to reach the program goals. The parties will at all times comply with all applicable provisions of state and federal law, including without limitation all non-discrimination, ethics public documents and telecommunications laws.

Floyd County

By: Terri Morris
Terri Morris, County Administrator

Citizens Telephone Cooperative

By: Greg Sapp
Greg Sapp, CEO

Date: May 28, 2019

Date: May 23, 2019

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	\$ 1,310,267	54%	Pending
Citizens Telephone	\$ 1,011,725	42%	committed
FLOYD CO ARPA	\$ 100,000	4%	committed
	\$		
	\$		
	\$		
	\$		
TOTAL	\$ 2,421,992	100 %	

Attachment 10

Documentation of Matching Funding

Citizens Telephone Letter

Floyd County letter



September 10, 2021

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

Dear Dr. Holmes:

We are excited to work with Floyd County on this application which would allow us to reach the far corners of Floyd County, the last 3% of state roads in the County, and thus have total, 100% fiber coverage. This would serve 113 households (8 of which have home-based businesses.) It would also serve Mabry Mill, the historic and major tourism venue along the Blue Ridge Parkway.

Additionally, this application would allow us to provide fiber drops on long driveway or private roads (1,000+ ft) for 227 low-to-moderate income households (43 of which include home-based businesses) by extending fiber to their homes from the nearest state road. By serving these homes, 382 other households will be within reach of Citizen's normal fiber build range, too.

In addition to the \$100,000 being pledged by Floyd County Board of Supervisors from their local ARPA funds, Citizens is committing \$1,011,725 in match. This includes \$262,600 in labor for the first 500 ft of fiber install, plus the materials for that (\$592,361), and \$156,765 in customer premise equipment and install. Though this is not included in the budget, we are also committing the time of our engineering staff to prepare the final plans and oversee construction, as well as our CEO/General Manager (Greg Sapp) and CFO (Chris Bond) to oversee and manage the project, transactions and documentation.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Donna Smith". The signature is fluid and cursive.

Donna Smith,

COO



September 10, 2021

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

Dear Dr. Holmes:

I am writing to confirm the Floyd County Board of Supervisors' strong support for this application.

Citizens Telephone Cooperative began in Floyd over 100 years ago to ensure that County residents had telephone service equal to or better than urban areas, despite our rural nature and low population density. They have continued that work by advancing telecom services over the decades. Thanks to their remarkable planning and funding partnerships, Citizens has already completed fiber builds along 60% of our public roads. By the end of 2022, they will have increased this number to 97%.

We propose in this application to serve the remaining 3% of Floyd County; these last few areas are in the far corners of the county that are even less densely settled. This would serve 113 households (8 of which have home-based businesses.) It would also serve Mabry Mill, the most famous location in the County, the most photographed historic site along the Blue Ridge Parkway, and home to a restaurant and gift shop.

Additionally, we propose to serve 227 low-to-moderate income households (43 of which include home-based businesses) that are on private roads or long driveways (more than 1,000 ft) in the County by extending fiber to their homes from the nearest state road. By extending to these homes, 382 other households will be within reach of Citizen's fiber, too (within 500 ft link that Citizen's would pay to build.)

The Floyd County Board of Supervisors has authorized this application and is willing to designate \$100,000 of their \$3.1 million in local ARPA funds to support it. We are also willing to contribute the necessary staff time of Lydeana Martin, Tabitha Hodge, and our Finance Director to manage the grant process. This is in addition to Citizen's commitment of more than \$1 million in match.

We are excited that this grant could bring us to likely be one of the first counties in Virginia to have a complete fiber build, offering affordable 1 GB download and 500MB upload service to residents, businesses, schools, and community anchors. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink that reads "Linda S. Millsaps". The signature is fluid and cursive, with the first letters of each word being capitalized and prominent.

Dr. Linda Struyk Millsaps
Floyd County Administrator

Attachment 11

Letters of Support and Need

Economic Development Authority of Floyd County

Residents and Businesses to be Served

See also Attachment 17: Long Driveway Survey Responses



September 10, 2021

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

Dear Dr. Holmes:

I am excited to offer my strong support for the Floyd County application with Citizens Telephone Cooperative to extend fiber to the last corners of Floyd County by the end of 2022. And the extension of fiber on long driveways of many low-to-moderate income residents will help them overcome the digital divide and have improved access to learning, working and starting or growing a business. I understand more than 60 of the households to be served already have a home-based business.

Having been deeply involved in economic development in Floyd County for more than 13 years, I can tell you that extending fiber truly extends opportunity to our residents. We focus most of our attention on the people and businesses who have already chosen Floyd County, no matter the stage of their business. We have many programs to help remove barriers to success: the Floyd C4 Business Development Series and Challenge, the Floyd Growth Wheel program (a peer-to-peer program), the Floyd 5 & 10 Small Business Loan Program, Floyd Grown (technical support for agricultural and forestry-related businesses), the Floyd Innovation Center and next week we're breaking ground on the Floyd Growth Center and Building 1 to provide next-stage space and sites for growing businesses. One thread that runs through these programs is the effort to encourage and support entrepreneurship, innovation, and the development and sale of premium products and services.

Gigabit service access is a powerful tool to help these home-grown businesses sell their premium goods and services to the world. We will be delighted to welcome any of these businesses into our programs to learn to capitalize on the Gigabyte service and other assets and work to develop new support as the needs arise.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink that reads "Jon Beegle". The signature is written in a cursive style with a large, prominent "J" and "B".

Jon Beegle,
Chairman

ROLLING THUNDER CBD

1107 Fork Mountain Rd. SW

Meadows of Dan, VA 24120 | 760-535-7017 | rollingthundercbd@gmail.com

September 7, 2021

Dr. Holmes
Director
Office of Broadband
Department of Housing and Community Development
600 East Main St., Ste 300
Richmond, VA 23219

Dear Dr. Holmes:

I am writing to express my strong support for the Floyd County VATI application that would extend fiber along our state road.

As both a resident and a small business owner, we really need broadband connectivity. Personally, it will connect us with more training and health care options. As a business owner, it will open me up to better communication, marketing, and sales options.

Thank you for your consideration.

Sincerely,

Amy Kellogg
Rolling Thunder CBD
1107 Fork Mountain Rd. SW
Meadows of Dan, VA 24120

September 9, 2021

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

Dear Dr. Holmes:

I am writing to express my strong support for the Floyd County VATI application that would extend fiber along our state road.

I am really in need of broadband connectivity for my job. I receive on a daily basis large construction files. I must leave my home to be able to open and download these documents. Fiber to my home would increase my daily productivity tenfold. It will connect us with more work, training and health care options. And it will help us better connect with family and friends. Covid has underlined this need.

Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read 'John Hawley', is written over the printed name.

John Hawley
575 Dobbins Hollow Rd.
Pilot, VA. 24138

September 9, 2021

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

Dear Dr. Holmes:

I am writing to express my strong support for the Floyd County VATI application that would extend fiber along our state road.

I have businesses that I do work for in my home. It will connect me with training and health care providers as well. It will help us better connect with family and friends too. Covid has underscored this need.

Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink that reads "Mark Cox". The signature is written in a cursive, flowing style.

Mark Cox
667 Dobbins Hollow Rd.
Pilot, VA. 24138

September 8, 2021

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

Dear Dr. Holmes:

I am writing to express my strong support for the Floyd County VATI application that would extend fiber along our state road here in Floyd County.

I have business that I conduct from my home. My son also is enrolled in college and has struggled with online class work during the Covid Pandemic due to unreliable internet access. Broadband internet service will connect my family with additional job training and health care providers too. It will help us better connect with family and friends too. The Covid crisis has underscored this need.

Thank you for your consideration.

Sincerely,



Mark Kesterson
333 Dobbins Hollow Rd.
Pilot, VA. 24138

September 8, 2021

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

Dear Dr. Holmes:

I am writing to express my strong support for the Floyd County VATI application that would extend fiber along our state road.

We really need broadband connectivity. When the pandemic crisis arose, my company allowed us to telecommute from home. Unfortunately, I was unable to take advantage of the opportunity due to the inadequate internet service I deal with at my home. If fiber was extended more of my family could work from home. It will also help us better connect with family, friends and healthcare providers. Covid has underlined this need.

Thank you for your consideration.

Sincerely



Colleen Marszalek

585 Dobbins Hollow Rd.

Pilot, VA 24138

September 12, 2021

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

Dear Dr. Holmes:

I am writing to express my strong support for the Floyd County VATI application that would extend fiber along Burnett Road where I live.

I am a bank officer and since [March 2020](#) my work shifted to remote work. During part of that time, my two sons also needed to use our limited internet service to access online classes. We very much need true broadband. I understand this upgrade would provide 1 Gigabyte/second download and 500 Gbps upload.

Beyond our need for broadband for work and learning, it will also provide better health-care options to us as we're 45 minutes away from the nearest hospital or urgent care center.

Thank you for your consideration.

Sincerely,

Laurie H. Boyd
439 Burnett Rd SW
Meadows of Dan, Virginia 24120

From: [Erika Hewlett](#)
To: [Lydeana Martin](#)
Subject: Letter of support for business fiber
Date: Monday, September 13, 2021 3:08:03 PM

Caution! This message was sent from outside your organization.

[Allow sender](#) | [Block sender](#)

Hi Lydeana,

I am writing to express my strong support for the Floyd County VATI application that would extend fiber along our state road.

As both a resident and a small business owner, we really need broadband connectivity. Personally, it will connect us with educational opportunities & telehealthcare. As a business owner, it will open me up to better communication with my clients, marketing and future sales options.

Thank you for your consideration,

Erika Hewlett
Compassion Nutrition & Wellness
617 Fork Mountain Rd SW
Meadows of Dan, VA 24120

September 13, 2021

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

Dear Dr. Holmes:

I am writing to express my strong support for the Floyd County VATI application that would extend fiber along our state road. As both a resident and a small business owner, we really need broadband connectivity. Personally it will connect us with more training and health care options. As a business owner, it will open me up to better communication, marketing and sales options. I operate a Real Estate firm just 2 miles from my home. My office is in Patrick County but my home, at 305 Burnett Rd. SW, is in Floyd County. With this business having no set hours, I am often working late into the night from the house. Any improvement in internet speed and dependability over what I am tolerating from CenturyLink would be greatly appreciated.

Thank you for your consideration.

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
Fax: (276) 952-6548

jim@crrva.com

www.CountryRoadRealtyVA.com

CDBG Derivation of Cost

Product	Total	VATI	Non-VATI	Source of Estimate	Date
EXAMPLE					
<u>Construction</u>					
200 LF of fiber @\$150/LF	\$ 30,000	\$15,000	\$15,000	Company A	9/5/2016
Tower	\$ 100,000	\$80,000	\$20,000	Company B	9/5/2016
Engineering	\$ 20,000	\$0	\$20,000	ABC Engineering Firm	9/5/2016

Product	Total	VATI	Non-VATI	Source of Estimate	Date
3% Build out area: Cost of Fiber= 57,234 ft * \$0.41 per foot = \$23,465.94	\$ 23,466	\$ -	\$ 23,466	Telecom Surplus Invoice	7/1/2021
3% Build out area: Pedestals (needed every 700 ft minimum) so 81.76 needed *\$208 each	\$ 17,007	\$ -	\$ 17,007	AMT Invoice	7/21/2021
3% Build out area: Splice kit for each pedestal \$130.99 * 81.76 pedestals	\$ 10,710	\$ -	\$ 10,710	Power & Tel Invoice	8/29/2021
3% Build out area: Pedestal Install Labor- 81.76 pedestals * \$125	\$ 10,220	\$ -	\$ 10,220	Whiting Construction	6/21/2021
3% Build Out Area TOTAL Material Costs	\$ 61,403	\$ -	\$ 61,403		
Private Road/Long Driveway: Cost of Fiber= 494,907 ft*\$0.41 per foot=	\$ 202,912	\$ -	\$ 202,912	Telecom Surplus Invoice	7/1/2021
Private Road/Long Driveway: pedestals (needed every 700 ft minimum) so 707.01 needed *\$208	\$ 147,058	\$ -	\$ 147,058	AMT Invoice	7/21/2021
Private Road/Long Driveway: Splice kit for each pedestal \$130.99 *707.01 pedestals	\$ 92,611	\$ -	\$ 92,611	Power & Tel Invoice	8/29/2021
Private Road/Long Driveway: Pedestal labor \$125 * 707.01 pedestals	\$ 88,376	\$ -	\$ 88,376	Whiting Construction	6/21/2021

CDBG Derivation of Cost

Private Road/Long Driveway TOTAL Materials Costs	\$ 530,957	\$ -	\$ 530,957		
Labor: Fiber installation 552,141 ft * \$2.60/foot	\$ 1,435,567	\$ 1,110,217	\$ 325,350	Whiting Construction Invoice	6/21/2021
Labor: main road construction-traffic control and boring	\$ 237,300	\$ 200,050	\$ 37,250		
Customer Premise equipment (ONT) = 341 premises *260.72	\$ 88,906	\$ -	\$ 88,906	Calix invoice	7/19/2021
Fiber installation fee (in home) waived and covered by Citizens \$199*341	\$ 67,859	\$ -	\$ 67,859	sample receipt	9/1/2021
	\$ 2,421,992	\$ 1,310,267	\$ 1,111,725		

Cost Estimate Detail

	Distance				
LABOR INSTALLATION COST	552,141	\$2.60	\$1,435,566.60		(Whitting Construction Invoice)
Main Road Construction-Traffic Control/Boring			\$237,300.00		
			\$1,672,866.60		
***Citizens committed to pay the first 500 feet			\$262,600.00		0.1569760554
			\$1,410,266.60		
CUSTOMER PREMISE EQUIPMENT					
Number of Homes - ONT per home	341	\$260.72	\$88,905.52		(Calix Invoice)
Fiber Connection Fee					
(Fiber Installation fee charged to all customers to help cover labor costs of installing fiber in the home; however Citizens will waive this fee to grant qualified homes based on income qualifications so they will have no upfront costs)	341	\$199.00	\$67,859.00		(Example Receipt)
			\$156,764.52		
MATERIAL COST					
Private Road/Long Driveway Area	Footage of Build	Cost Per Foot	Total Cost		
Cost of Fiber	494,907	\$0.41	\$202,911.87		(Telecom Supply Invoice)
Pedestal Install at every 700' (minimum)	700				
Pedestals Needed	707.01				
Pedestal Install Labor		\$125.00			(Whitting Construction Invoice)
Pedestal Cost		\$208.00			(AMT Invoice)
Splice Kit Cost		\$130.99			(Power & Tel Invoice)
Per Pedestal Cost		\$463.99			
Total Pedestal Cost			\$328,045.57		
Total Material Cost			\$530,957.44		

3% Build Out Area	Footage of Build	Cost Per Foot	Total Cost		
Cost of Fiber (Excludes Major Road calculated at different rate to include traffic control and increased boring costs)	57,234	\$0.41	\$23,465.94		(Telecom Supply Invoice) Yes
Pedestal Install at every 700' (minimum)	700				
Pedestals Needed	81.76				
Pedestal Install Labor		\$125.00			(Whitting Construction Invoice)
Pedestal Cost		\$208.00			(AMT Invoice)
Splice Kit Cost		\$130.99			(Power & Tel Invoice)
Per Pedestal Cost		\$463.99			
Total Pedestal Cost			\$37,937.15		
Total Material Cost			\$61,403.09		
Total Project Material Cost			\$592,360.53		
		TOTAL	\$2,421,991.65		

Whiting Construction Co., Inc.
 Post Office Box 485
 Troutman, North Carolina 28166
 704-528-9395

Invoice No. CT 5521 318

Date: June 21, 2021

Bill To:
Citizens Telephone Co.
 Attention: Mr. Russell Janney
 200 Old Mill Rd NE
 Floyd, VA 24091

Our Job Number: CT 55000

Work Order Number: 15612

Exchange/Location: Copper Hill

Date Work Completed: 6/18/21

Foreman: Mitcher & Campbell

Unit Description	Quantity	Unit Labor	Unit Material	Extended Labor	Extended Material	Total Labor & Material
WBD	2.0	75.00		150.00		150.00
BFO48	1,518.0	2.60		3,946.80		3,946.80
SEBO2	448.0	1.70		761.60		761.60
BD5	3.0	100.00		300.00		300.00
BM2	3.0	25.00		75.00		75.00
BM61	450.0	12.00		5,400.00		5,400.00
BFCT	50.0	3.10		155.00		155.00
Amount Due				10,788.40		\$10,788.40

LABOR

Labor to install a pedestal



Bill To:
 Attn: Accounts Payable
 CITIZENS TELEPHONE COOPERATIVE (VA)
 220 WEBBS MILL RD NW
 PO BOX 137
 Floyd, VA 24091

Ship To:
 CITIZENS TELEPHONE COOPERATIVE
 (VA)
 220 WEBBS MILL RD NW
 PO BOX 137
 Floyd, VA 24091

Invoice	
Number 265501	
Date 19-Jul-2021	Page 1 of 1
Purchase Order Number 15702	
Sales Order Number 50036078	
Customer Number 6465	
Terms 30 NET	Due Date 18-Aug-2021
Ship Date 2021-07-19	Ship Via UPS Ground
Shipping Reference 1z01e6480354105425	Currency USD
Customer Contact	

Line Number	Item Number	Customer item Number	Item Description	Quantity Shipped	Unit Price	Extended Amount
1	000-01201		GS4227, GPON SFP module, package Dual band 4x4 + 2x2 Wi-Fi 6; 4 GE, 2 POTS, AM power adapter	40	243.75	9,750.00
Special Instructions			Sub Total	Tax	Shipping & Handling	Total
			9,750.00	516.75	162.04	\$10,428.79

Check Remittance Address:

Calix Inc.
 P.O. Box 843163
 Dallas, TX 75284-3163
 United States

For any questions or concerns regarding this invoice, please reach out to accountsreceivable@calix.com and a member of the team will get back to you.

View your order details at any time from the [My Calix Store Order Manager](#). Did you know Calix makes it incredibly easy to order from the [My Calix Store](#)?

*90
= 260.72*



Citizens
220 Webbs Mill Road
FLOYD, VA 24091
(540) 745-2111

Trans: 12632-00001
Date: 09-01-2021 09:09:39

Items	Amount
-----	-----
FIBER CONNECTION FEE - 2YR COMMITME	\$199.00
Qty: 1 @ \$199.00	

Remit \$54.04
ALDERMAN JESSICA MICHELLE
Acct: 97070000031 97070000034

Sub-total \$253.04
Taxes \$11.68
Total \$264.72

Payment Methods Amount
VI 0127 \$264.72
Approval Code: 719146

Signature of card holder

MERCHANT COPY



Citizens
220 Webbs Mill Road
FLOYD, VA 24091
(540) 745-2111

Trans: 12632-00001
Date: 09-01-2021 09:09:39

Items	Amount
-----	-----
FIBER CONNECTION FEE - 2YR COMMITME	\$199.00
Qty: 1 @ \$199.00	

Remit \$54.04
ALDERMAN JESSICA MICHELLE
Acct: 97070000031 97070000034

Sub-total \$253.04
Taxes \$11.68
Total \$264.72

Connection Fee charged with 2yr service agreement.
No commitment = \$399.00

*Waived to grant qualified homes due to income qualification



Telecom Surplus Resources, Inc.
 DBA TSR ComSupply
 2635 S. Santa Fe Dr. Suite 3H
 Denver, CO 80223
 Phone # 303-399-6543

Invoice

Date	Invoice #
7/1/2021	13060

Bill To
Citizens Telephone Cooperative (BTOP) PO Box 137 Floyd, VA 24091

Ship To
Citizens Telephone Cooperative (BTOP) 220 Webbs Mill Rd. Floyd, VA 24091 USA Russell 540-230-7905

P.O. No.	Terms	Due Date	Ship Via	Rep
20035	Net 30	7/31/2021		GHR

Item	Description	Qty	Rate	Amount
48 Fiber LT SASJ	Teldor 48 strand OSP fiber cable. Loose Tube, Single Armor, Single Jacket. Corning SMF-28E+ Glass, dry tubes Catalog # F904804M6B Part number DRC-9-04X12-D-ZRP-D BK Reel IDs: EB5123 & EB5121 Lengths: 20,336 & 20,024	40,360	0.41	16,547.60
Freight	Freight - 4 day transit Total sales tax AvaTax	1	1,058.00 877.03	1,058.00 877.03

Fiber

	Total	\$18,482.63
All invoices are due in 30 days unless otherwise noted. This invoice may be subject to an additional 1.5% per month late charge if not paid on time. All paypal and credit card payments are subject to a 3% convenience charge. We appreciate your business and we look forward to working with you again.	Payments/Credits	\$0.00
	Balance Due	\$18,482.63



INVOICE

Page: 1

Advanced Media Technologies, Inc.
 An Itochu Company
 3150 SW 15th Street
 Deerfield Beach, FL 33442
 USA
 Phone: 954-427-5711
 Fax: 954-427-9688
 Toll Free: 888-293-5856

INVOICE NUMBER: INV01172764
INVOICE DATE: 7/21/2021
ORDER NUMBER: SO00742577
ORDER DATE: 7/15/2021
SALESPERSON: Scott Shreve
CUSTOMER NO.: CUST004856

SOLD TO:
Citizens Cablevision, Inc (VA)
 Frankie Turpin
 220 Webbs Mill Road North
 PO Box 196
 Floyd, VA 24091
 USA

SHIP TO: 1
Citizens Telephone Cooperative
 Jerry Sutphin
 220 Webbs Mill Road North
 Floyd, VA 24091
 USA

CUSTOMER P.O.	Ship Via	Shipping Terms	Terms
20145	ABF STANDARD	FOB-SP	NET DUE 30 DAYS

REQ.	SHIP	B/O	ITEM NO.	Special Order	UOM	Description	WHSE	PRICE (USD)	Amount
300	300		OP12126C1B1L01A08	<input checked="" type="checkbox"/>	EA	12X12X32 UPRIGHT PEDESTAL. NYLON	MAIN	208.00	62,400.00

External Tracking No.: 426220887

Pedistal

Please Remit To:
Advanced Media Technologies, Inc.
 P.O.Box 934327 Atlanta, GA 31193-4327

Sub Total:	62,400.00
Invoice Discount:	0.00
Total sales Tax:	0.00
Shipping & Hand:	2,064.60
Invoice Total:	64,464.60

All items sold by AMT remain the property of AMT until such time that they are paid for in full
 All prices, amounts, and totals are in USD-US Dollars

* Special Order, EOL, and non-inventoried Items are Non-Returnable and Non-Cancellable *

Please visit us at: www.amt.com



Power & Telephone
 200 Keough Drive
 Suite 101
 Piperton, TN 38017

INVOICE

Inv Date: 07/30/21 Due Date: 08/29/21 UPC Vendor: 000001 Order #: 7112836-00
 PO #: 15732 Page #: 1

Ship To: CITIZENS TELEPHONE CO
 220 WEBBS MILL RD NW
 FLOYD, VA 24091

Send Payments to: PO Box 1000, Dept 839
 Memphis, TN 38148-0839

Cust #: 20244
 Bill To: CITIZENS TELEPHONE CO
 P.O. BOX 137
 FLOYD, VA 24091

For Questions Contact: ar@ptsupply.com
 901-866-3070 - Credit Line

Currency	USD	Sales Rep In	JPG
Instructions		Terms	
		Net 30 Days	
Ship Point	Power & Tel LX Dist Center	Ship Via	Shipped 07/30/21
Requested Ship Date	07/30/21	Freight In/Out	N/Y

Product Ln# And Description	Quantity Ordered	Quantity B/O	Quantity Shipped	Qty U/M	Unit Price	Amount (Net)
PLEASE DO NOT SHIP R&L TRUCKING ****UPS ON SMALL PACKAGES**** ****FEDEX FREIGHT ON LTL****						
1 D06322000	128	0	128	EA	130.99	16,766.72
CLOSURE FOSC450A44121A1V (R) Customer Prod: 4426 4th shipment from 256 Please ship in increments of 128 untis (4 skids) Will work with Donna to schedule other shipments Estimated 4 skids every 8 weeks. TRACK: FDEF- 7665593110 TRACK: FDEF- 7665593110 TRACK: FDEF- 7665593110 TRACK: FDEF- 7665593110						

Spice

1 Lines Total	Qty Shipped Total	128	Total	16,766.72
			Freight Out	226.38
			Taxes	888.64
			Invoice Total	17,881.74

Customer Copy

Page 1 of 1

This sale is subject to Seller's full Terms and Conditions of Sale available at <https://www.ptsupply.com/terms-and-conditions>. Seller will not be bound by any different or additional terms or conditions proposed or submitted by Buyer, regardless of form unless expressly and specifically agreed to by Seller in writing. No conduct on the part of Seller, including but not limited to, (i) acceptance of a purchase order without expressly rejecting any Buyer terms or conditions reflected therein, (ii) or delivery of goods; or (iii) acceptance of payment, will constitute acceptance by Seller of such different or additional terms or conditions.

Attachment 14

Two Most Recent 477's

June 30, 2021

December 31, 2020

Form 477 Filing Summary

FRN:
0004381422

Data as of:
Jun 30, 2021

Operations:
ILEC

Submission Status:
Original - Submitted

Last Updated:

Filer Identification

Section	Field	Response
Filer Information	Company Name	Citizens Telephone Cooperative
	Holding Company Name	Citizens Telephone Cooperative (VA)
	Filing Type	ILEC
	SAC ID	190225
	499 ID	801231
Data Contact Information	Data Contact Name	Cindy Weaver
	Data Contact Phone Number	(540) 745-9522
	Data Contact E-mail	cindyweaver@citizens.coop
Emergency Operations Contact Information	Emergency Operations Name	J Gregory Sapp
	Emergency Operations Phone Number	(540) 745-2111
	Emergency Operations E-mail	gregsapp@citizens.coop
Certifying Official Contact Information	Certifying Official Name	J Gregory Sapp
	Certifying Official Phone Number	(540) 745-2111
	Certifying Official E-mail	gregsapp@citizens.coop

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	Broadband Deployment 2021-06-30 FINAL.csv	Aug 30, 2021 01:44 PM	2,230

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Subscription	Interactive data entry		153
Fixed Voice Subscription	Interactive data entry		10

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	Citizens Telephone Cooperative	ADSL2	962
		Cable Modem – DOCSIS 3.1	400
		Optical Carrier/Fiber to the End User	586
		VDSL	282
Total			2,230

Fixed Broadband Subscription

Fixed Broadband Subscriptions by State, Technology and End User Type

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business/Govt.	Total
Virginia	Asymmetric xDSL	60	4,198	271	4,469
	Cable Modem	31	1,467	70	1,537
	Optical Carrier/Fiber to the End User	62	1,277	228	1,505
Total		153	6,942	569	7,511

Fixed Broadband Subscriptions by Bandwidths and End User Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
1.000	1.000	27	0	27
1.500	0.768	1,009	65	1,074
3.000	0.768	1,310	61	1,371
5.000	2.000	0	1	1

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
5.000	3.000	0	21	21
6.000	0.768	1,021	54	1,075
6.000	1.500	149	20	169
10.000	3.000	432	27	459
25.000	5.000	242	21	263
25.000	10.000	766	120	886
50.000	10.000	414	87	501
75.000	10.000	266	10	276
100.000	10.000	29	7	36
100.000	25.000	1	36	37
200.000	10.000	28	6	34
200.000	50.000	0	13	13
300.000	10.000	0	1	1
300.000	50.000	0	7	7
1,000.000	500.000	1,248	12	1,260
Total		6,942	569	7,511

Fixed Broadband Subscriptions by Technology, Bandwidths and End User Type

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
Asymmetric xDSL	1.500	0.768	1,009	65	1,074
	3.000	0.768	1,310	61	1,371
	5.000	3.000	0	21	21
	6.000	0.768	1,021	54	1,075
	6.000	1.500	149	20	169
	10.000	3.000	432	27	459
	25.000	5.000	242	21	263
	50.000	10.000	35	2	37
Cable Modem	1.000	1.000	27	0	27
	25.000	10.000	745	26	771

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
	50.000	10.000	373	20	393
	75.000	10.000	265	10	275
	100.000	10.000	29	7	36
	200.000	10.000	28	6	34
	300.000	10.000	0	1	1
Optical Carrier/Fiber to the End User	5.000	2.000	0	1	1
	25.000	10.000	21	94	115
	50.000	10.000	6	65	71
	75.000	10.000	1	0	1
	100.000	25.000	1	36	37
	200.000	50.000	0	13	13
	300.000	50.000	0	7	7
	1,000.000	500.000	1,248	12	1,260
Total			6,942	569	7,511

Fixed Voice Subscription

VGE Lines and VoIP Subscriptions by State and End User Type

State	Total VGE Lines	Consumer VGE Lines	Total VoIP Subscriptions	Consumer VoIP Subscriptions
Virginia	6,567	5,736	0	0
Total	6,567	5,736	0	0

Fixed Voice Subscription (VGE Lines)

VGE Lines Provided to Unaffiliated Providers by State

State	Wholesale	UNE-L
Virginia	0	0
Total	0	0

VGE Lines Provided to End Users by State, Bundle and Product Type

State	Total	by Bundle		by Product Type			
		Sold w/ Internet	Sold w/o Internet	Consumer		Business/Govt.	
				& No PIC	& PIC	& No PIC	& PIC
Virginia	6,567	5,215	1,352	1,924	3,812	0	831
Total	6,567	5,215	1,352	1,924	3,812	0	831

VGE Lines Provided to End Users by State, Ownership and Last-Mile Medium

State	Total	by Ownership			by Last-Mile Medium			
		Owned	UNE-L	Resale	FTTP	Coax	Fixed Wireless	Copper
Virginia	6,567	6,567	0	0	704	0	0	5,863
Total	6,567	6,567	0	0	704	0	0	5,863

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

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

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

[Phone: 1-888-225-5322](tel:1-888-225-5322)

[TTY: 1-888-835-5322](tel:1-888-835-5322)

[Videophone: 1-844-432-2275](tel:1-844-432-2275)

[Fax: 1-866-418-0232](tel:1-866-418-0232)

Contact Us

[Website Policies & Notices](#)

[FOIA](#)

[No Fear Act Data](#)

[FCC Digital Strategy](#)

[Open Government Directive](#)

[Plain Writing Act](#)

[RSS Feeds & Email Updates](#)

[Disability Rights](#)

CATEGORIES

[About the FCC](#)

[Proceedings & Actions](#)

[Licensing & Databases](#)

[Reports & Research](#)

[News & Events](#)

[For Consumers](#)

BUREAUS & OFFICES

[Consumer](#)

[Enforcement](#)

[Inspector General](#)

[International](#)

[Media](#)

[Public Safety](#)

[Wireless](#)

[Wireline](#)

[Offices](#)

Form 477 Filing Summary

FRN:
0004381422

Data as of:
Dec 31, 2020

Operations:
ILEC

Submission Status:
Revised - Submitted

Last Updated:

Filer Identification

Section	Field	Response
Filer Information	Company Name	Citizens Telephone Cooperative
	Holding Company Name	Citizens Telephone Cooperative (VA)
	Filing Type	ILEC
	SAC ID	190225
	499 ID	801231
Data Contact Information	Data Contact Name	Cindy Weaver
	Data Contact Phone Number	(540) 745-9522
	Data Contact E-mail	cindyweaver@citizens.coop
Emergency Operations Contact Information	Emergency Operations Name	J. Gregory Sapp
	Emergency Operations Phone Number	(540) 745-2111
	Emergency Operations E-mail	gregsapp@citizens.coop
Certifying Official Contact Information	Certifying Official Name	J. Gregory Sapp
	Certifying Official Phone Number	(540) 745-2111
	Certifying Official E-mail	gregsapp@citizens.coop

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	Broadband Deployment 2020-12-31 FINAL.csv	Apr 13, 2021 04:07 AM	2,193

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Subscription	Interactive data entry		144
Fixed Voice Subscription	Interactive data entry		10

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	Citizens Telephone Cooperative	ADSL2	957
		Cable Modem – DOCSIS 3.0	397
		Optical Carrier/Fiber to the End User	558
		VDSL	281
Total			2,193

Fixed Broadband Subscription

Fixed Broadband Subscriptions by State, Technology and End User Type

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business/Govt.	Total
Virginia	Asymmetric xDSL	61	4,082	422	4,504
	Cable Modem	30	1,382	69	1,451
	Optical Carrier/Fiber to the End User	53	1,078	210	1,288
Total		144	6,542	701	7,243

Fixed Broadband Subscriptions by Bandwidths and End User Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
1.000	1.000	28	0	28
1.500	0.768	1,081	66	1,147
3.000	0.768	1,328	65	1,393
5.000	3.000	0	47	47

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
6.000	0.768	959	46	1,005
6.000	1.500	148	21	169
10.000	3.000	1,011	193	1,204
25.000	3.000	9	0	9
25.000	5.000	581	43	624
25.000	10.000	16	87	103
50.000	10.000	281	74	355
75.000	10.000	2	33	35
100.000	20.000	42	0	42
150.000	25.000	0	10	10
250.000	50.000	0	5	5
1,000.000	500.000	1,056	11	1,067
Total		6,542	701	7,243

Fixed Broadband Subscriptions by Technology, Bandwidths and End User Type

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
Asymmetric xDSL	1.500	0.768	1,081	66	1,147
	3.000	0.768	1,328	65	1,393
	5.000	3.000	0	23	23
	6.000	0.768	959	46	1,005
	6.000	1.500	148	21	169
	10.000	3.000	306	181	487
	25.000	5.000	228	19	247
	50.000	10.000	32	1	33
Cable Modem	1.000	1.000	28	0	28
	5.000	3.000	0	24	24
	10.000	3.000	705	12	717
	25.000	3.000	9	0	9
	25.000	5.000	353	24	377

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business/Govt.	Total
		50.000	10.000	245	9
	100.000	20.000	42	0	42
Optical Carrier/Fiber to the End User	25.000	10.000	16	87	103
	50.000	10.000	4	64	68
	75.000	10.000	2	33	35
	150.000	25.000	0	10	10
	250.000	50.000	0	5	5
	1,000.000	500.000	1,056	11	1,067
Total			6,542	701	7,243

Fixed Voice Subscription

VGE Lines and VoIP Subscriptions by State and End User Type

State	Total VGE Lines	Consumer VGE Lines	Total VoIP Subscriptions	Consumer VoIP Subscriptions
Virginia	6,609	5,769	0	0
Total	6,609	5,769	0	0

Fixed Voice Subscription (VGE Lines)

VGE Lines Provided to Unaffiliated Providers by State

State	Wholesale	UNE-L
Virginia	0	0
Total	0	0

VGE Lines Provided to End Users by State, Bundle and Product Type

State	Total	by Bundle		by Product Type			
		Sold w/ Internet	Sold w/o Internet	Consumer		Business/Govt.	
				& No PIC	& PIC	& No PIC	& PIC
Virginia	6,609	5,185	1,424	1,912	3,857	0	840
Total	6,609	5,185	1,424	1,912	3,857	0	840

VGE Lines Provided to End Users by State, Ownership and Last-Mile Medium

State	Total	by Ownership			by Last-Mile Medium			
		Owned	UNE-L	Resale	FTTP	Coax	Fixed Wireless	Copper
Virginia	6,609	6,609	0	0	612	0	0	5,997
Total	6,609	6,609	0	0	612	0	0	5,997

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

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

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

[Phone: 1-888-225-5322](#)

[TTY: 1-888-835-5322](#)

[Videophone: 1-844-432-2275](#)

[Fax: 1-866-418-0232](#)

Contact Us

[Website Policies & Notices](#)

[FOIA](#)

[No Fear Act Data](#)

[FCC Digital Strategy](#)

[Open Government Directive](#)

[Plain Writing Act](#)

[RSS Feeds & Email Updates](#)

[Disability Rights](#)

CATEGORIES

[About the FCC](#)

[Proceedings & Actions](#)

[Licensing & Databases](#)

[Reports & Research](#)

[News & Events](#)

[For Consumers](#)

BUREAUS & OFFICES

[Consumer](#)

[Enforcement](#)

[Inspector General](#)

[International](#)

[Media](#)

[Public Safety](#)

[Wireless](#)

[Wireline](#)

[Offices](#)

Attachment 17 Long Driveway Survey Responses

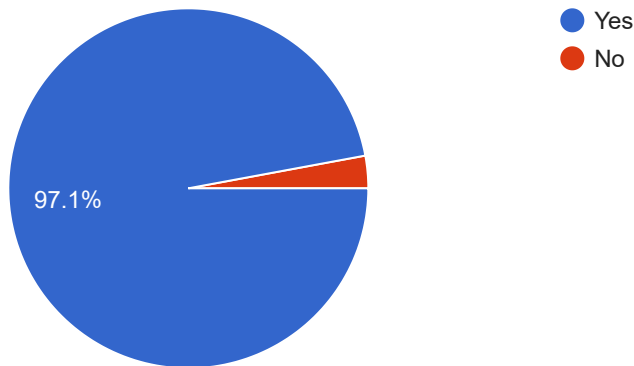
Find out if you could be eligible for free extension of Citizens' fiber to your home

309 responses

[Publish analytics](#)

Do you currently have internet service at your home?

309 responses

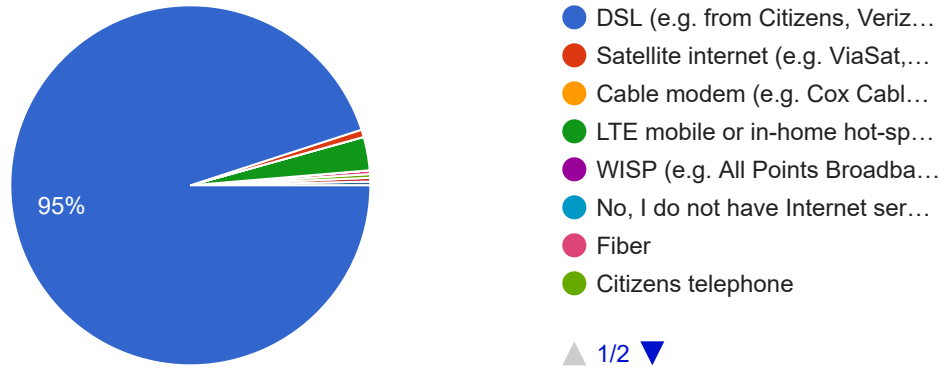


Current Internet Service



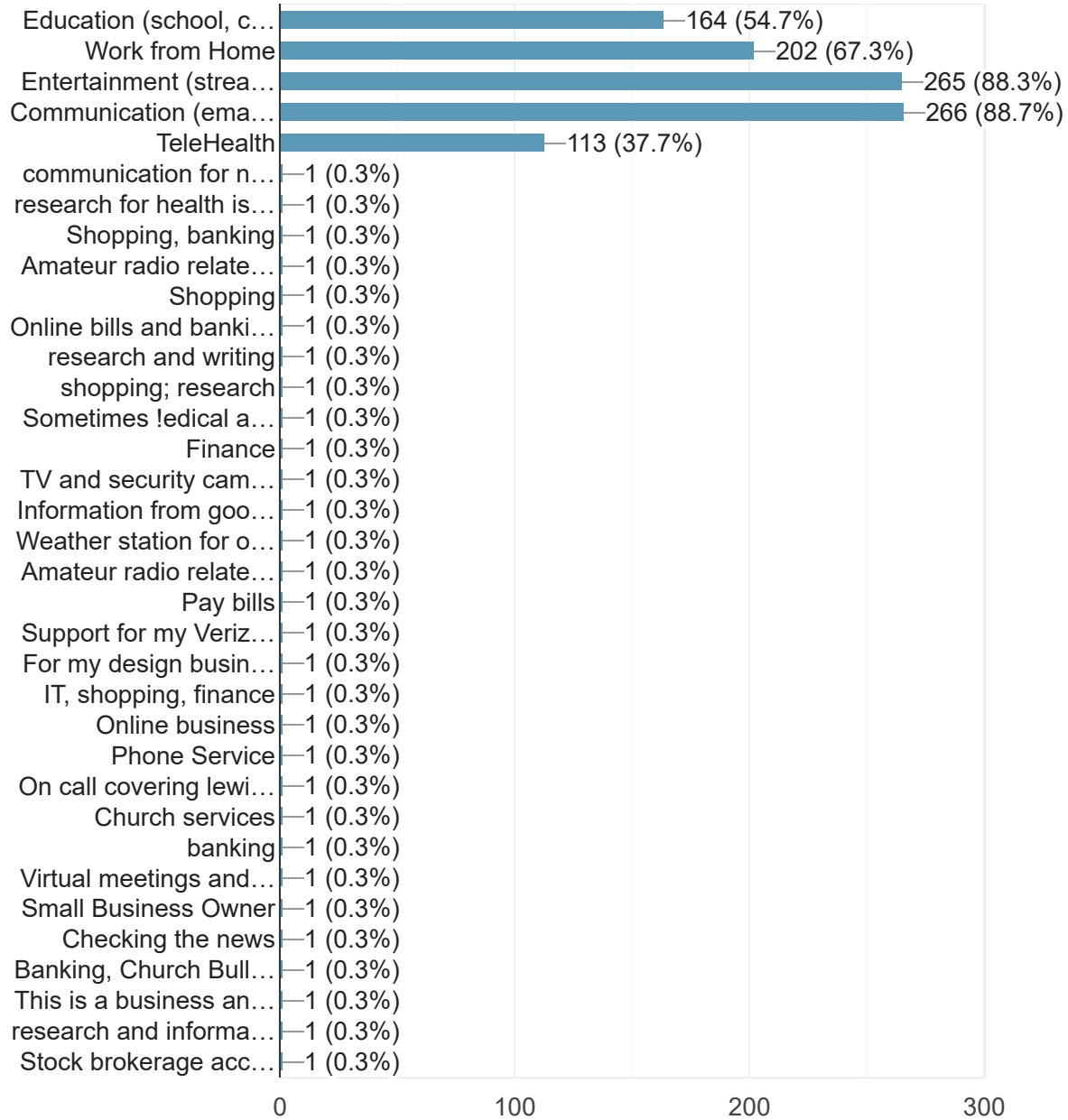
If yes, which service do you have?

300 responses



What do you use the Internet for? (check all that apply)

300 responses



Household information



Your Name:

309 responses

Anthony Nolen

PhillipLafon

Kristie Greenman

Jessica Gallimore

Virginia Klara

Katie

David Clarkson

Julie Harris

richard wimmer



Physical Address:

309 responses

187 Slusher Store Rd., Floyd, VA 24091

1705 Barberry rd se , Floyd va 24091

152 Alluring Acres In

248 Ivy Dr NE

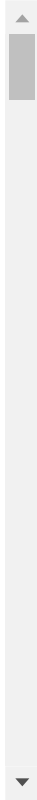
151 Circle Drive, Floyd, VA 24091

170 Greggs Lane

143 Soapstone Ridge Rd, Floyd VA

2210 Sowers Rd NE

1179 Bethlehem Church RD NE Floyd, VA 24091



Email address:

309 responses

rwimmer@swva.net

k2xx@swva.net

anol97@gmail.com

holt2005@swva.net

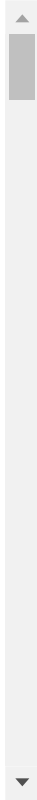
griffith734@swva.net

winginit@mail.com

greenman@swva.net

jessiegall@hotmail.com

virgklara@gmail.com



Best phone number:

309 responses

5406050267

5407456825

540.392.8548

5402393701

5405981624

5403927430

5403929480

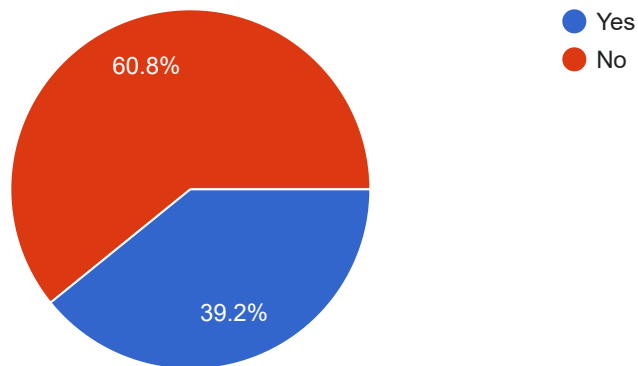
540-230-5852

5403535750



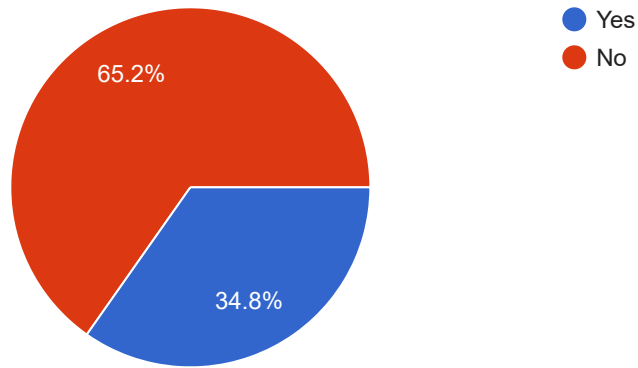
Do you own/run a business from your home?

309 responses



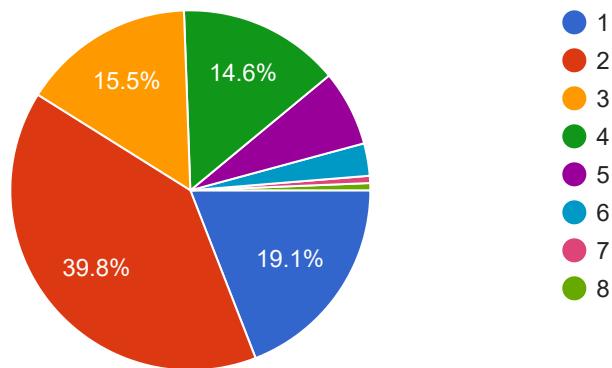
Is any member of your household age 18 or under?

305 responses



How many people live in your home?

309 responses

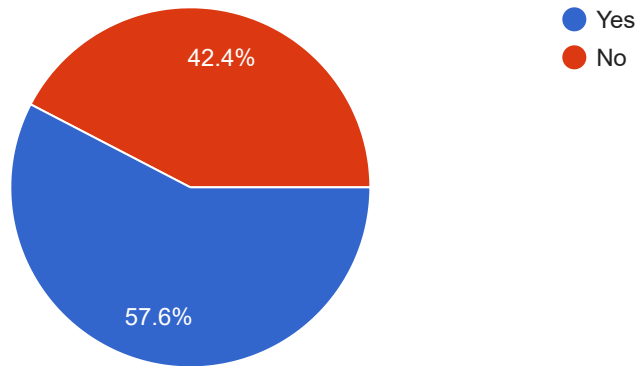


Based on your response, you have 1 person in your home.



Is your household income less than \$35,651 per year? So, less than \$686 per week before taxes.

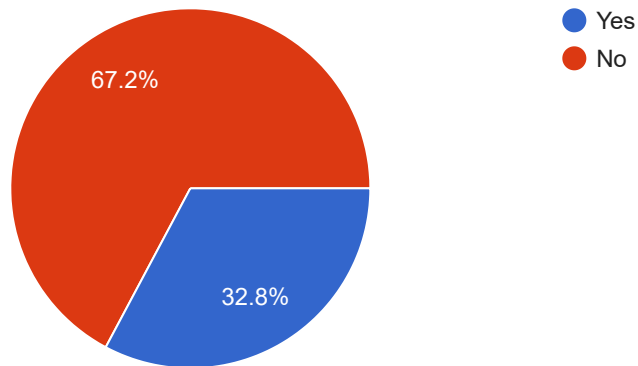
59 responses



Based on your response, you have 2 people in your home.

Is your household income less than \$40,751 per year? So less than \$783 per week before taxes.

122 responses

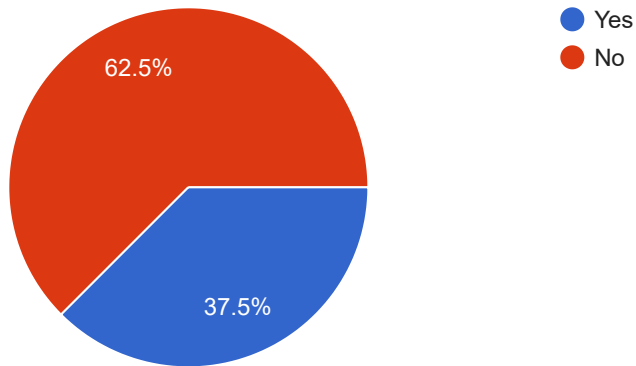


Based on your response, you have 3 people in your home.



Is your household income less than \$45,851 per year? So less than \$882 per week before taxes.

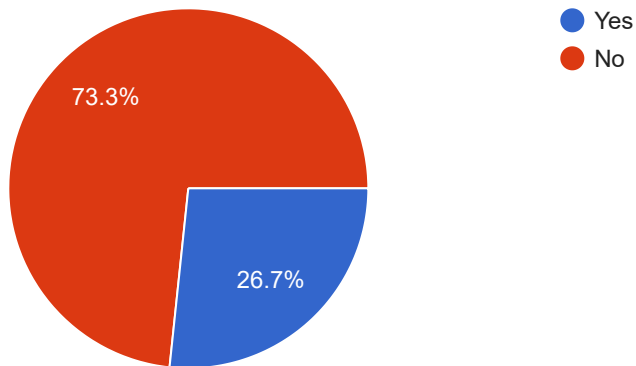
48 responses



Based on your response, you have 4 people in your home.

Is your household income less than \$50,901 per year? So less than \$979 per week before taxes.

45 responses

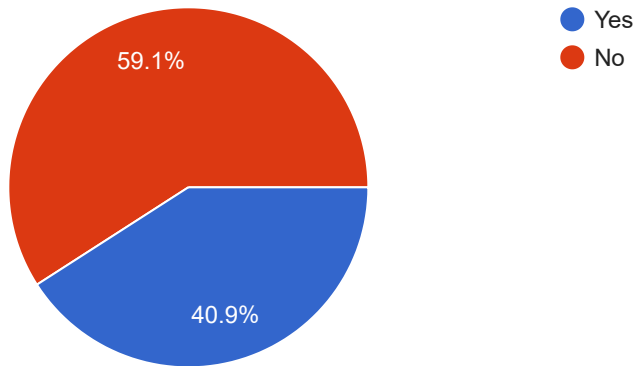


Based on your response, you have 5 people in your home.



Is your household income less than \$55,001 per year? So less than \$1,058 per week before taxes.

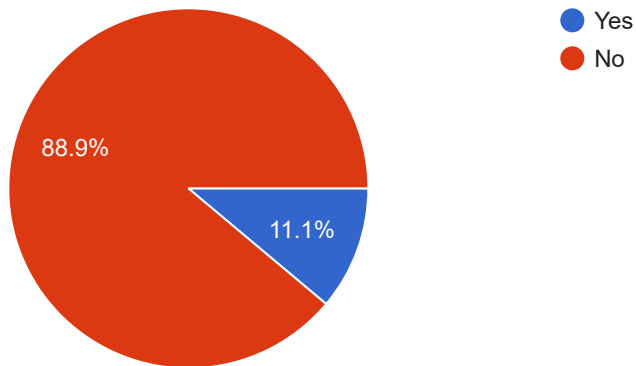
22 responses



Based on your response, you have 6 people in your home.

Is your household income less than \$59,051 per year? So less than \$1,136 per week before taxes.

9 responses

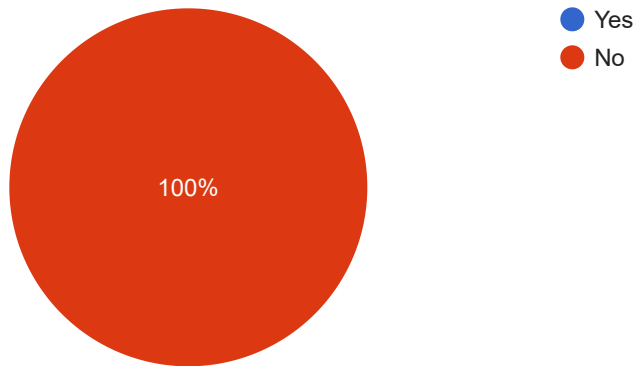


Based on your response, you have 7 people in your home.



Is your household income less than \$63,151 per year? That's \$1,214 per week before taxes.

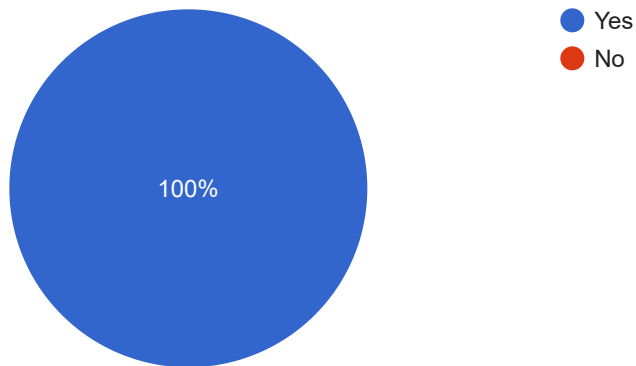
2 responses



Based on your response, you have 8 people in your home.

Is your household income less than \$67,201 per year? So less than \$1,292 per week before taxes.

2 responses

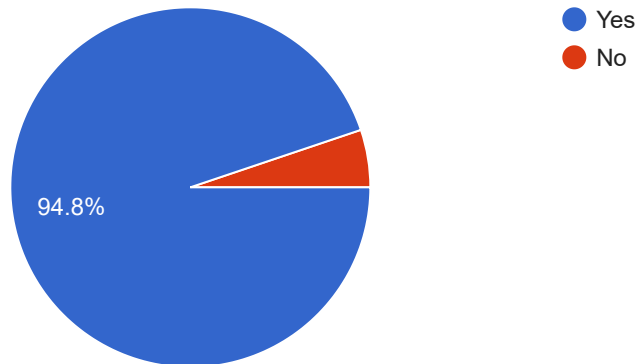


It appears you would be eligible for assistance that could extend Fiber to your home.



If we are awarded the grant and could extend Fiber to your home, would you want to sign up for CitiZip Gigabit broadband at your home?

116 responses



Please add any additional comment you would like to share with us:

41 responses

I am retired so my business is just selling my art craft occasionally. Not sure if that really should be classified as business. All of us on limited income would really appreciate the help THANKS !!!

If fiber not to expensive

I think Citizens may have already run the fiber wire up to our house from a box down closer to the road since our house was just built recently.

our internet is very slow

As long as that price isn't in addition to what we pay now.

This is a rental property. I am the owner & have Citizens internet currently set up for the tenants in my name. I have answered all the questions in this survey accurately for the tenants who actually live in the home.

Think I may be just over jurisdictional line where you are providing to, but FYI, more

Thank You!

This content is neither created nor endorsed by Google. [Report Abuse](#) - [Terms of Service](#) - [Privacy Policy](#)



Google Forms

