

# Application to DHCD Submitted through CAMS

Greene County

Greene County Broadband

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**Application ID:** 64508292019130711  
**Application Status:** Pending  
**Program Name:** Virginia Telecommunications Initiative 2020  
**Organization Name:** Greene County  
**Organization Address:**  
**Profile Manager Name:** Patti Vogt  
**Profile Manager Phone:** (434) 985-5207  
**Profile Manager Email:** pmvogt@gcva.us

**Project Name:** Greene County Broadband  
**Project Contact Name:** James Frydl  
**Project Contact Phone:** (434) 985-5282  
**Project Contact Email:** jfrydl@gcva.us  
**Project Location:** 40 Celt Road/ PO BOX 358  
Stanardsville, VA 22973-0358  
**Project Service Area:** Greene County

**Total Requested Amount:** \$142,500.00  
**Required Annual Audit Status:** Accepted

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## Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
<b>Telecommunications</b>	<b>\$142,500.00</b>	<b>\$332,500.00</b>	<b>\$475,000.00</b>
Other: ISP-Electronics	\$21,000.00	\$49,000.00	\$70,000.00
Other: OSP-Fiber	\$121,500.00	\$283,500.00	\$405,000.00
<b>Total:</b>	<b>\$142,500.00</b>	<b>\$332,500.00</b>	<b>\$475,000.00</b>

### Budget Narrative:

This project provides for the placement of two (2) FTTP/GPON switches, two (2) Fiber Distribution Huts, 140 Fiber Distribution Pedestals and approximately 12 miles of fiber cable in Greene County to bring fiber based broadband services to 320 residents. The total project cost is \$475,000. The total funding request from DHCD is for 30% of the total project cost, or \$142,500. The remaining \$332,500 of the project cost, or 70%, will be paid by CenturyLink.

## Questions and Responses:

### 1. Project Area

Explain 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 Greene County Broadband Committee conducted a survey to determine actual internet coverage within the county. The results identified areas that were both unserved and underserved. There were 1336 survey responses, 954 residences, and 219 businesses. The survey response map is included in Attachment 17 – Download Speed Survey Map. The responses represented 19% of occupied households. Greene County worked with our partner, Centurylink to determine a project area that would provide broadband coverage for areas that were identified by the survey as having no service or only options that provided <3 Mbps. This project provides for the placement of two (2) FTTP/GPON switches, two (2) Fiber Distribution Huts, 140 Fiber Distribution Pedestals and approximately 12 miles of fiber cable in Greene County to bring fiber-based broadband services to 320 residents. Customers will be able to get speeds up to 940Mb/s while uploading or downloading data in the Shady Grove and Greene Lake Road areas of our County where approximately 55% of them have no broadband service at all today and 100% have no access to speeds greater than 10M.

### 2.

Describe your outreach efforts to identify existing providers in the selected project area. Provide a detailed explanation of how this information was compiled and the source(s). Provide a map and list of all existing

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providers (fixed and wireless) and speeds offered within the project area. Label Map: Attachment 2 – Existing Provider Map; label documentation: Attachment 3 – Documentation on CAF Funding Area.

**Answer:**

The Greene County Broadband Committee conducted a survey to determine actual internet coverage within the county. The results identified areas that were both unserved and underserved. There were 1336 survey responses, 954 residences, and 219 businesses. The survey response map is included in Attachment 17 – Download Speed Survey Map. The responses represented 19% of occupied households. In addition, the Greene County Planning Director checked with other providers regarding their services and referred to the state broadband map. The Planning Director contacted Alex Phillips, CEO, of Rural Broadband Network Services, LLC and Jonathan Dowler, Director of Sales and Marketing for VA Broadband since their companies were shown as providing service in the proposed project area. Each provider reported that they do not provide service in the project area that meets the VATI broadband criteria and would not contest any application.

### 3. Project Need/Description

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 of 10 Mbps / 1 Mbps or less and with less than 10 percent service overlap within the project area. Describe any anticipated service overlap with current providers within the project area. Provide specific information as to how you determined the percentage overlap. Label Attachment: Attachment 4 – Documentation Unserved Area VATI Criteria.

**Answer:**

There is no anticipated overlap.

As stated in question 2, the Greene County Broadband Committee conducted a survey to determine actual internet coverage within the county. The results identified areas that were both unserved and underserved. There were 1336 survey responses, 954 residences, and 219 businesses. The survey response map is included in Attachment 17 – Download Speed Survey Map. The responses represented 19% of occupied households. In addition, the Greene County Planning Director checked with other providers regarding their services and referred to the state broadband map. As one of the optional attachments we've included a sampling of the recent broadband survey Attachment 17 – Download Speed Survey Map. The Planning Director contacted Alex Phillips, CEO, of Rural Broadband Network Services LLC and Jonathan Dowler, Director of Sales and Marketing for VA Broadband since their companies were shown as providing service in the proposed project area. Each provider reported that they do not provide service in the project area that meets the VATI broadband criteria and would not contest any application.

### 4. Provide the number of residential serviceable units in the project area(s). Describe the eligible premises that will be served by the proposed project and the basis for these projections.

**Answer:**

Attachment 16 contains a detailed chart showing each of the area in the total project area and the number of residential serviceable units contained in each area. The total number of residential serviceable units is 320.

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We know exactly how many residential serviceable units are in the area we have plotted the actual locations of the residences using the County and CenturyLink's GIS systems and we have planned and designed the proposed network to pass the actual residences we have identified. Each home passed will have access to the CenturyLink Fiber Gigabit service. The actual homes and fiber facilities are all within the project area boundaries shown in Attachment 1.

5. Indicate the numbers of businesses and community anchor institutions the proposed project will pass in the project area. Also indicate the number of home-based businesses. Provide specific information.

**Answer:**

There are three commercial businesses in the proposed project area, Mission Home Bake Shop, Faith Mission Assisted Living and Shady Lane Family Farm. There is one anchor institution, Faith Mission Fellowship Church and School. There are some home-based businesses, but the lack of broadband access has limited telecommuting and home business opportunities. It is difficult to provide an accurate number of home-based businesses because the business license records can only be searched by business name and do not allow for searching by address. A conservative estimate based upon county averages would be one home-based business per 50 households. Using this ratio, it is estimated that there are 6-7 home-based businesses in the proposed project area.

6. Understanding that projected take rates are an estimate, provide the anticipated take rate for the proposed service within one year of project completion and describe the basis for the estimate. Also detail all actions (e.g. marketing activities, outreach plan) to be implemented to reach the identified potential serviceable units within the project area.

**Answer:**

The projected take rate for this project area is 50%. The projection is based on CenturyLink's experience in providing broadband in localities across the Commonwealth, as well as our experience in other states. That projection is also supported by CenturyLink's experience in its prior VATI project with Albemarle County, where the overall take rate is 73%.

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

**Answer:**

Not applicable. This is not a wireless project.

8. Provide the proposed download and upload speeds for the project area. 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. Describe the Internet service offerings to be provided after completion of this project and your price structure for these services. The service offerings should include all relevant tiers.

**Answer:**

Speeds: All locations will have access to CenturyLink's Fiber Gigabit service, which provides a maximum of 940 Mbps download and 940 Mbps upload. Bandwidth is dedicated.

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**Technology:** The technology that will be used is “Fiber to the Home,” or “GPON.” GPON is a “Gigabit Passive Optical Network.” In a Fiber to the Home/GPON environment, voice and high-speed data (up to 1Gbps) are transported on a single fiber (one wavelength for transmitting, another wavelength for receive) from the office/remote electronics to the home or premises. The single fiber operates at a rate of 2.4Gbps downstream (to the home) and 1.2Gbps upstream (from the home). The CenturyLink deployment can share this bandwidth between 32 customers. The GPON infrastructure eliminates the need for active electronics (and the associated powering, real estate and maintenance costs) in the distribution plant, depending on the distance from the Central Office/Remote and available feeder fibers.

**Service offering:** Pricing for CenturyLink services is generally a nationwide price so that customers in rural Virginia pay the same rate as customers in urban areas in other states. CenturyLink also offers discounts for bundles services, which would include broadband and voice services. For purposes of this application, however, the highest rate that a customer would currently pay for CenturyLink's Fiber Gigabit service is currently \$65 per month on a promotion that does not have a set termination date and \$85 normally. For the last couple of years CenturyLink has offered a "price for life" service, where customers can lock in a monthly rate that does not change for as long as the customer keeps the service and there is no "early termination fee." Also, there is no required term contract for this program. Broadband service requires installation by a technician, but there is no installation charge. This rate does require a customer to subscribe to paperless billing and excludes taxes. Various slower services are available, including download/upload Mbps services at 500/500, 500/100, 200/40, 100/100, 100/10, 80/10 and 40/2. Prices vary depending on the download and upload speeds. For example, the price for the 40 Mbps download speed is \$45 per month.

9. 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. Also describe specific advantages of using this technology. Provide a detailed explanation on how this information was compiled and source(s). For wireless projects, provide a propagation map including the proposed project. Label Map: Attachment 5 – Propagation Map Wireless Project

**Answer:**

As described in response to question 8, the network design is “fiber to the home” or “GPON.” The components that would be added are optical fiber connections to residences. The twisted-pair copper lines would no longer be used. Additional components would be necessary to connect the fiber to existing CenturyLink facilities. The advantage of using a fiber-based solution is that it provides the fastest speeds available to consumers. Although copper-based solutions such as VDSL can provide speeds of 100 Mbps, fiber can provide speeds measured in Gigabits. Also, the fiber network does not have the same distance limitation of copper-based DSL technology. The source of these statements is CenturyLink's actual experience in providing fiber solutions to residences across the county, too many states, and federal government customers and to thousands of businesses across the United States and around the world.

This is not a wireless project, which is restated in Attachment 5

10. Project Readiness

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What is the current state of project development (e.g. planning, preliminary engineering, identifying easements/permits, final design, etc.)? Prepare a detailed project timeline or construction schedule which identifies specific tasks, staff, contractor(s) responsible, collection of data, etc., and estimated start and completion dates. Provide any Memorandums of Understanding (MOUs) or Memorandums of Agreement (MOAs) (drafts are allowable), letters of support, etc. The timeline should include all activities being completed within 12 months of contract execution with DHCD. Label Attachments: Attachment 6 – Timeline/Project Management Plan; Attachment 7 – Relationship between Applicant/Co-Applicant; Attachment 8 – Letters of Support;

- i. If the partnership is formalized in a written agreement, provide a copy of that agreement.
- ii. If the partnership has not been formalized, provide a short description of the project management role, financial commitment, or other contribution to the project for the applicant, co-applicant, and any additional partners.
- iii. If applicant is not a locality(s) in which the project will occur, please provide a letter of support from that locality.

**Answer:**

The project is currently in the planning stage, although most of the network planning has been completed. CenturyLink's map in Attachment 1 shows the actual location for all facilities and equipment needed to complete the project. All of the planning needed to submit this application has been completed and the remaining work would begin once an award is made. CenturyLink has attached as Attachment 6 a timeline of work from grant award to completion of the project. This project management plan is the standard plan that CenturyLink uses on similar projects around the country and is the same plan that was used in the prior VATI award project, where CenturyLink completed the work on time and within budget.

Attachment 7 addresses the current status of the relationship between the applicant and co-applicant.

Attachment 8 includes letters of support from the Board of Supervisors, School Superintendent, Emergency Services Director and the Economic Development Director.

11. Matching funds: Provide a description of the matching funds the applicant and co-applicant will invest in the proposed project (VATI funding cannot exceed 80 percent of total project cost). The Funding Sources Table must be completed. Label Attachments: Attachment 9 - Documentation of Match Funding; Attachment 10 – Funding Sources Table;
  - i. For each element of matching funds in the description, indicate the type of match (e.g. cash, salary expense, or in-kind contribution).
  - ii. Identify whether the applicant or co-applicant is responsible for providing each element of the proposed matching funds.

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iii. Include copies of vendor quotes or documented cost estimates supporting the proposed budget.

**Answer:**

The matching funds invested by CenturyLink are listed in Attachment 10, the Funding Sources Table. Those funds include all of the costs for the project, including all of the planning, engineering, materials, and labor for the installation of the fiber facilities necessary for this project. The matching funds also include the costs of identifying and acquiring any necessary easements.

12. Applicant and Co-Applicant: A description of the public-private partnership involved in the project. Detail the local government assistance: Local government co-applicants should demonstrate assistance to project that will lower overall cost and further assist in the timely completion of construction, including assistance with permits, rights of way, easements, and other issues that may hinder or delay timely construction and increase cost. Provide detail if this project includes additional partners such as municipal providers, middle-mile providers, or investor-owned utilities

**Answer:**

As stated in Attachment 7, at this time there is no formal agreement in place between the applicant and the co-applicant, although a formal agreement will be established if a grant is awarded. CenturyLink does not expect to seek assistance from the County regarding permits, rights of way or easements, as CenturyLink has processes in place to obtain the necessary rights and routinely obtains those rights in projects across the Commonwealth. As a public utility, CenturyLink also has statutory rights to acquire private property when necessary. As shown in Attachment 1, CenturyLink has already identified the location for fiber routes and equipment placement.

Greene County is very pleased to work cooperatively with CenturyLink to expand broadband to the unserved areas in Greene. The Broadband Committee is committed to supporting our partner to achieve a successful project outcome. The Planning Department is actively supporting the project and can expedite any permits that may be required.

Additionally, the County is able to provide the following assistance; we are working with citizens in the area to facilitate a seamless installation providing ample opportunity for public engagement while the project is progressing. The County will assist with conversations with VDOT and private land owners to make certain all installations are conducted safely and ahead of schedule.

13. Identify key individuals, including name and title, who will be responsible for the management of the project. Provide a concise description of their role and responsibilities for the project. Present this information in table format.

**Answer:**

The Table is attached.

Name	Title	Role and Responsibilities
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Dale Herring	Director of Technology Greene County Public Schools	Mr. Herring will be responsible for overall project management for the partnership. He will coordinate all activity with CenturyLink and manage administrative tasks
Jim Frydl	Planning Director Greene County	Mr. Frydl will update materials for CAMS entry and verify CenturyLink invoices for accuracy
Richard Schollmann	Director of Government Affairs CenturyLink	Mr. Schollmann will be responsible for overall coordination of the project with the County. He will provide all coordination with the planning, engineering, construction, and billing teams within CenturyLink.
Craig Hager	Director of Local Network NC/VA CenturyLink	Mr. Hager oversees all construction tasks and testing in NC and VA.
Bill Owens	Manager of Local Network VA CenturyLink	Mr. Owens has direct responsibility for managing construction and testing for this project.
Willie Thompson	Construction Supervisor VA CenturyLink	Mr. Thompson will direct all crews for the construction and installation of fiber and equipment for this project.
Glenn Butler	Network Planning Manager VA CenturyLink	Mr. Butler has been responsible for planning the network design for this project.

## 14. Project Budget and Cost Appropriateness

Applicants shall provide a detailed budget as to how the grant funds will be utilized, including an itemization of equipment and construction costs and a justification of proposed expenses. Expenses should be substantiated by clear cost estimates. Label Attachment: Attachment 11 – Derivation of Costs; Attachment 12 - Documentation of Supporting Costs; Attachment 13 – Supporting Documentation of Cost Estimates.

### Answer:

The budget for this project is \$70,000 in electronics and \$405,000 in fiber costs. The map included in Attachment 1 identifies the costs for the equipment as shown on the map and identifies the location and costs for the fiber that will be installed.

15. The cost benefit index is comprised of three factors: (i) state share for the total project cost, (ii) state cost per unit passed, and (iii) the internet speed. From these statistics, individual cost benefit scores are calculated. Finally, the three component scores are averaged together and converted to a 30-point scale to form a composite score. Please provide the following three pieces of information:

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provide the following three pieces of information:

- a. Total State funding requested / Total Project cost
- b. Number of serviceable units
- c. Highest residential speed available

**Answer:**

a. \$142,500/\$475,000

b. 320

c. CenturyLink Fiber Gigabit (940 Mbps)

16. A brief description of applicant and co-applicant's history or experience with managing grants and constructing broadband communication facilities in the Commonwealth of Virginia and elsewhere.

**Answer:**

CenturyLink has extensive experience with managing grants and constructing broadband facilities in the Commonwealth and across the country. In Virginia, CenturyLink and its predecessor companies have provided voice and data services to hundreds of thousands of Virginians for decades. All of those networks were constructed and managed by CenturyLink companies. CenturyLink currently serves approximately 13 million access lines in 37 states and about 6 million high-speed Internet customers using both DSL and "Fiber to the Home" solutions. CenturyLink's customer base ranges from rural residential customers to international Fortune 500 companies. CenturyLink is a global leader in managed hosting and cloud services and offers network and data systems management, big data analytics and IT consulting in the US and internationally.

CenturyLink also has extensive experience in managing grants. At the national level, for example, CenturyLink accepted about \$500 million in annual support from the federal Connect America Fund (CAF) to provide broadband to over 2.3 million customers in 33 states. In Virginia alone, CenturyLink accepted over \$15.7 million per year for 6 years to reach about 50,000 homes and businesses with broadband by 2020. The CAF program included annual targets, which CenturyLink has met each year in Virginia. CenturyLink also has extensive experience in state-level broadband grant programs. Beginning in 2008, CenturyLink participated in grant programs with Mid-Atlantic Broadband and the Tobacco Commission to build, operate and maintain broadband projects in some of the most rural locations in Virginia. CenturyLink participated in the grant program in 2009, 2010 and 2012, accepting about \$2M in grant funds and serving over 8,000 rural locations with broadband. All of those projects were completed on time and within budget. CenturyLink has also received a prior VATI award with Albemarle County as the applicant. That project was also completed on time and within budget.

Greene County as part of normal operations applies for and manages multiple grants every year. The Byrne Justice Grant, COPS Grant, DMV Online Grant, Victim Witness Grant, Item Conservation Grant, and Emergency Management Performances Grant are all good examples. Multiple department directors and the County Finance Director all have experience with grant management.

17. Commonwealth Priorities

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Additional points will be awarded to proposed projects that reflect Commonwealth priorities. Please describe if the project fits into a larger locality or regional universal broadband plan.

**Answer:**

The Greene County Board of Supervisors is committed to improving broadband access. Expanding broadband is an action item in the Greene County Strategic Plan. The action item listed below is in full alignment with the Commonwealth goals for expanding broadband access across Virginia, as outlined by Governor Northam in his December 2018 speech “Broadband internet is inarguably a necessity for participation in a 21st century economy, and many Virginians have been left without quality access for far too long,” said Governor Northam. “By ending this disconnect, we can better attract and support business and entrepreneurship, educate all Virginia students, expand access to cost-saving telehealth services, and more.”:

**INITIATIVE ONE: PROMOTE COMMUNITY AND ECONOMIC WELL-BEING.**

Capitalize on Greene County's assets, location, and heritage to diversify, grow and strengthen the community and economic well-being of citizens and businesses.

**ACTION AGENDA:**

1. Support local businesses and entrepreneurs by establishing a focused business appreciation and expansion program.
2. Expand wireless technology (broadband) throughout the county.

The Commonwealth goals for broadband expansion are clearly articulated “The Commonwealth of Virginia continues to work towards the goal of ubiquitous, affordable broadband access.” Greene County has established a Broadband Initiative Committee to identify opportunities and areas of need in order to support the goals of the Commonwealth as outlined in the Virginia Telecommunications Initiative (VATI). The goal of VATI is to enhance sustainability and competitive advantages of communities throughout the Commonwealth by preparing those communities to build, utilize, and capitalize on telecommunications infrastructure. The Broadband Initiative Committee’s activities and information are highlighted on a web page dedicated to the initiative. Highlights from the webpage are listed below:

Welcome to Greene County’s Broadband Initiative Website.

## History

In March of 2017, the Greene County Board of Supervisors identified the expansion of quality broadband access and service throughout the County as a high priority within the County’s overall strategic plan. In order to facilitate this needed expansion, with a goal of reaching all areas of our County, we have assembled an interagency committee charged with the task of addressing this most important issue to our citizens, students, visitors, and the business community.

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## Purpose

We all know the need for broadband access crosses many different paths in Greene County. Whether it be education, public safety, medical services, agriculture, business, tourism, or local government, to name a few, all of these sectors of our community must rely on a seamless, robust communications network to provide their valuable services.

## Community

And with these points in mind, we want to hear from our community about this most important issue. In order to do this, the committee will be hosting a series of community forums to discuss the broadband initiative and allow for our residents and businesses to share your valuable experience and perspective about the need for enhancements to broadband access in Greene County.

The Commonwealth Connect Coalition believes that every Virginian deserves access to quality broadband and the opportunity to fully participate in American life. From economic development to telemedicine to education, the internet touches nearly every aspect of modern life, and every corner of Virginia needs to have access to a reliable, high speed connection.

This need for improved broadband services is also identified in the Greene County Comprehensive Plan. It is listed as a Goals and Implementation Strategy in both the Economic Development chapter and the Law Enforcement and Emergency Services chapter as shown below:

- Provide appropriate utilities needed for economic growth
  - o Support rural broadband services in all portions of the county. Coordinate with other localities in the Thomas Jefferson Planning District to identify and secure funds necessary for county-wide service
- Ensure well-coordinated emergency response and disaster management planning
  - o Ensure law enforcement and emergency services personnel have county-wide broadband coverage

The Commonwealth's main goal is clear - "The Commonwealth of Virginia continues to work towards the goal of ubiquitous, affordable broadband access." Greene County recognizes the need to reduce barriers to increasing broadband coverage. The Commonwealth's effort toward helping counties leverage all available resources to support broadband expansion is led by the CIT (Center for Innovative Technology). In order to explore ways to achieve the Commonwealth and County goals of improving broadband access, Greene County worked with the CIT to identify opportunities. The CIT prepared a Community Broadband Assessment outlining current coverage, demand, assets, needs, a review of local policies and recommendations for next steps.

The Commonwealth Broadband Advisory Council made several recommendations to the Governor to address barriers and support broadband expansion. Recognizing that local efforts were required to seek Public-Private Partnerships and identify cost-effective solutions, the Greene County Board of Supervisors passed a resolution authorizing the Broadband Committee to seek opportunities, grants, and partnerships in order to expand broadband service in the county. The resolution is attached as Attachment 18 – Board of Supervisors Authorization.

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## 18. Additional Information

Any other equitable factor 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 – Copy of Public Notice
- c. Attachment 16 – XXXXXXXX
- d. Attachment 17 – XXXXXXXX
- e. Attachment 18 – XXXXXXXX
- f. Attachment 19 – XXXXXXXX

### **Answer:**

Additional supporting information is attached in:

Attachment 16 - CenturyLink Project Summary

Attachment 17 - Download Speed Survey Map

Attachment 18 - Board of Supervisors Authorization (Gives Broadband Initiative Committee authority to seek partners and opportunity to expand broadband)

### **Attachments:**

Map(s) of project area, including proposed infrastructure

Attachment1ProjectAreaMap93201924037.pdf

Map(s) or schematic of existing broadband providers (inventory of existing assets)

Attachment2ExistingProviderMap93201924056.pdf

Documentation that proposed project area is not designated for Connect America Funding (CAF)

Attachment3DocumentationonCAFFundingArea93201924141.pdf

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Documentation that proposed project area is unserved based on VATI criteria

Attachment4DocumentationUnservedAreaVATICriteria93201924153.pdf

Propagation Map if Wireless Project

Attachment5PropogationMapWirelessProject93201924956.pdf

Project Management Plan

Attachment6TimelineProjectManagementPlan93201925009.pdf

Documentation of relationship between applicant and co-applicant (formal or informal)

Attachment7RelationshipbetweenApplicantCoApplicant93201925022.pdf

Letters of Support

Attachment8LettersofSupport93201925031.pdf

Documentation for in-kind contributions, including value(s)

Attachment9DocumentationofMatchFunding93201925047.pdf

Funding Sources Table

Attachment10FundingSourcesTable93201925057.pdf

Derivation of Cost (Project Budget)

Attachment11DerivationofCosts93201925106.pdf

Documentation supporting project costs (i.e. vendor quotes)

Attachment12DocumentationofSupportingCosts93201925121.pdf

Supporting documentation for costs estimates

Attachment13SupportingDocumentationofCostEstimates93201925139.pdf

Two most recent Form 477 submitted to FCC

Attachment14TwomostrecentForm477submittedtotheFCCCorequivalent93201925216.pdf

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Copy of Public Notice

Attachment15CopyofPublicNotice93201930319.pdf

Optional

Attachment16CenturyLinkProjectSummary93201925435.pdf

Optional

Attachment17DownloadSpeedSurveyMap93201925447.pdf

Optional

Attachment18BoardofSupervisorsAuthorization93201925457.pdf

## **Notes:**

Greene County is a mountainous, rural county and lack of countywide broadband access has severely impacted economic development, access to educational support, property value and property sales. Greene County is working with our partner CenturyLink to expand broadband access and achieve the goal of ubiquitous, affordable broadband access for every citizen.

# Attachment 1 – Project Area Map

# Greene Lake (FTTH)

**201 – 1G**

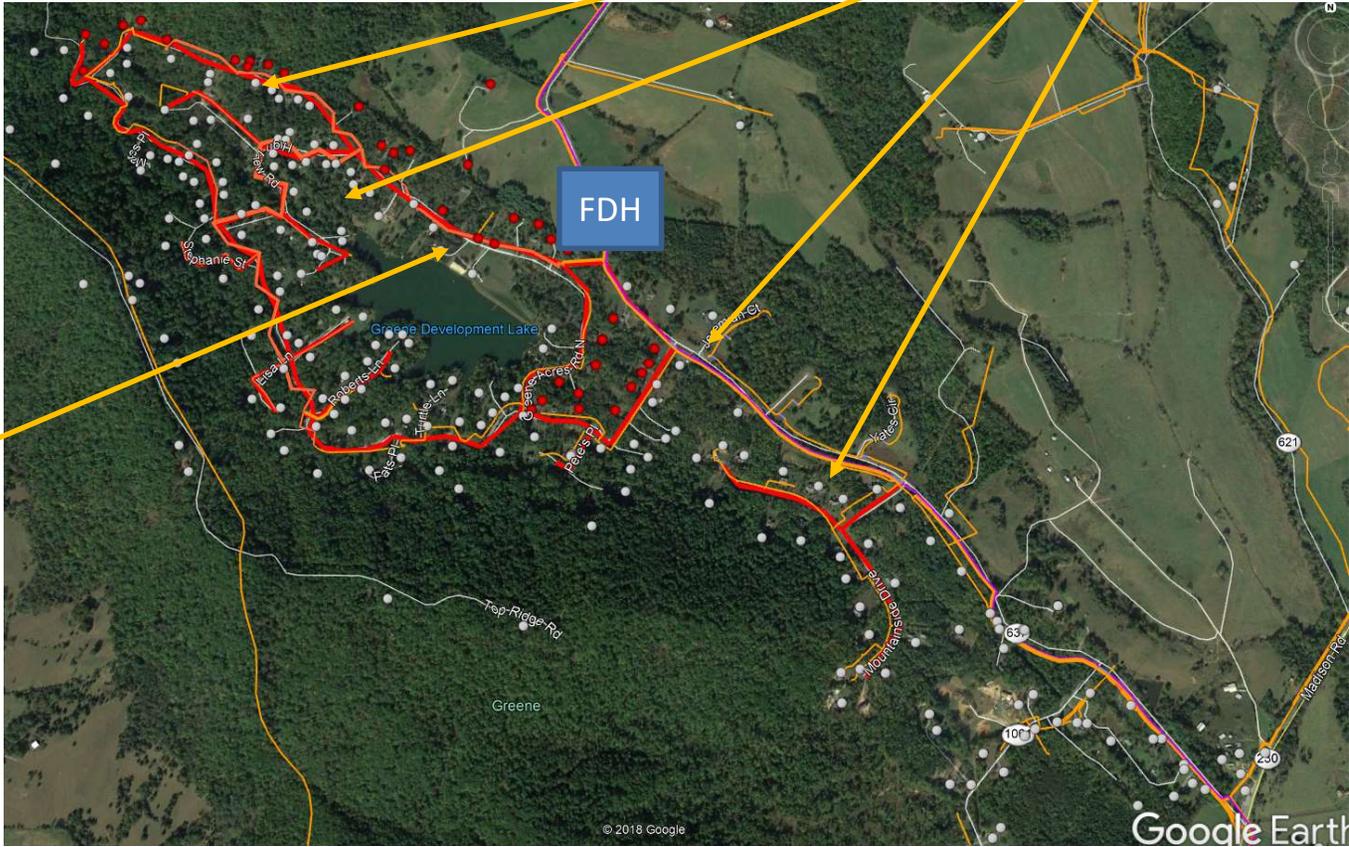
Estimate 160 drops < 650 Ft.;  
25 between 650 & 1,500;  
16 > 1,500 Feet

Place Spurs 2.5, 2.0 (2), 1.5 &  
1 (6) KFT, 48F, \$84K

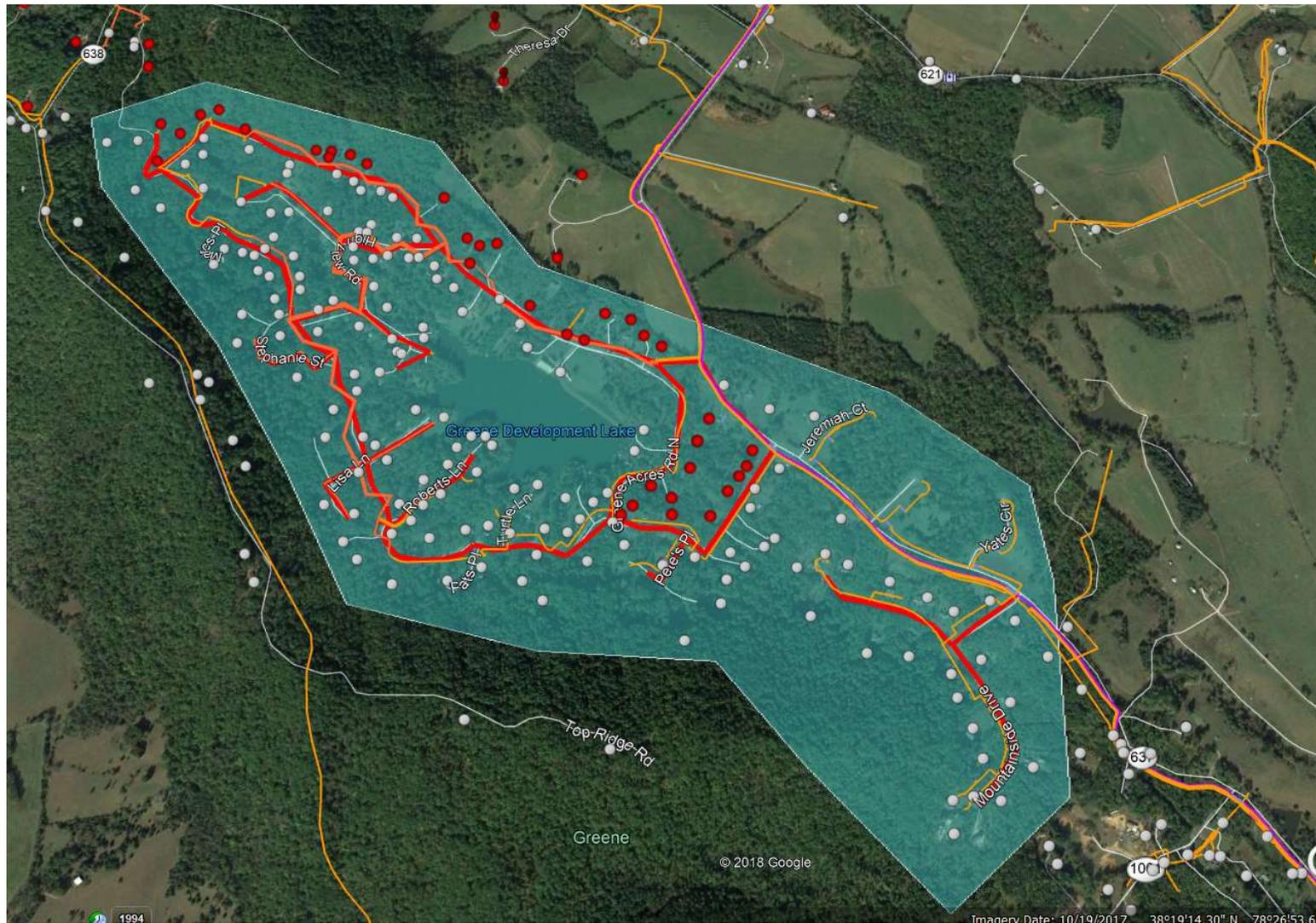
Place 15 KFT, 96F, \$80K

Place ODC-200  
E7 GPON \$50K

Place 1 FDH &  
70 MDTs, \$40K



# Greene Lake (FTTH)



# Shady Grove (FTTH)

## 119 – 1G

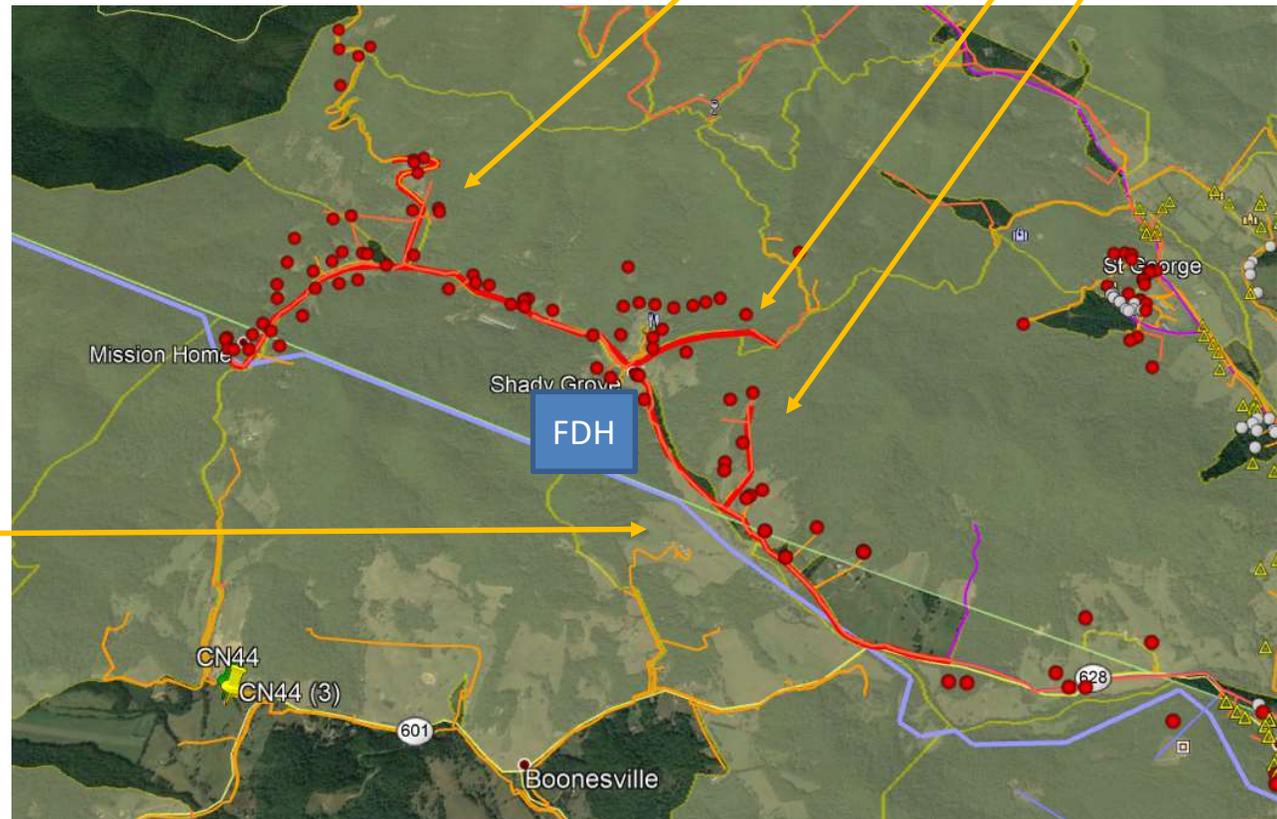
Estimate 70 drops < 650 Ft.;  
30 between 650 & 1,500;  
19 > 1,500 Feet

Place Spurs 2.5, 3.5 & 5 KFT, 48F,  
\$66K

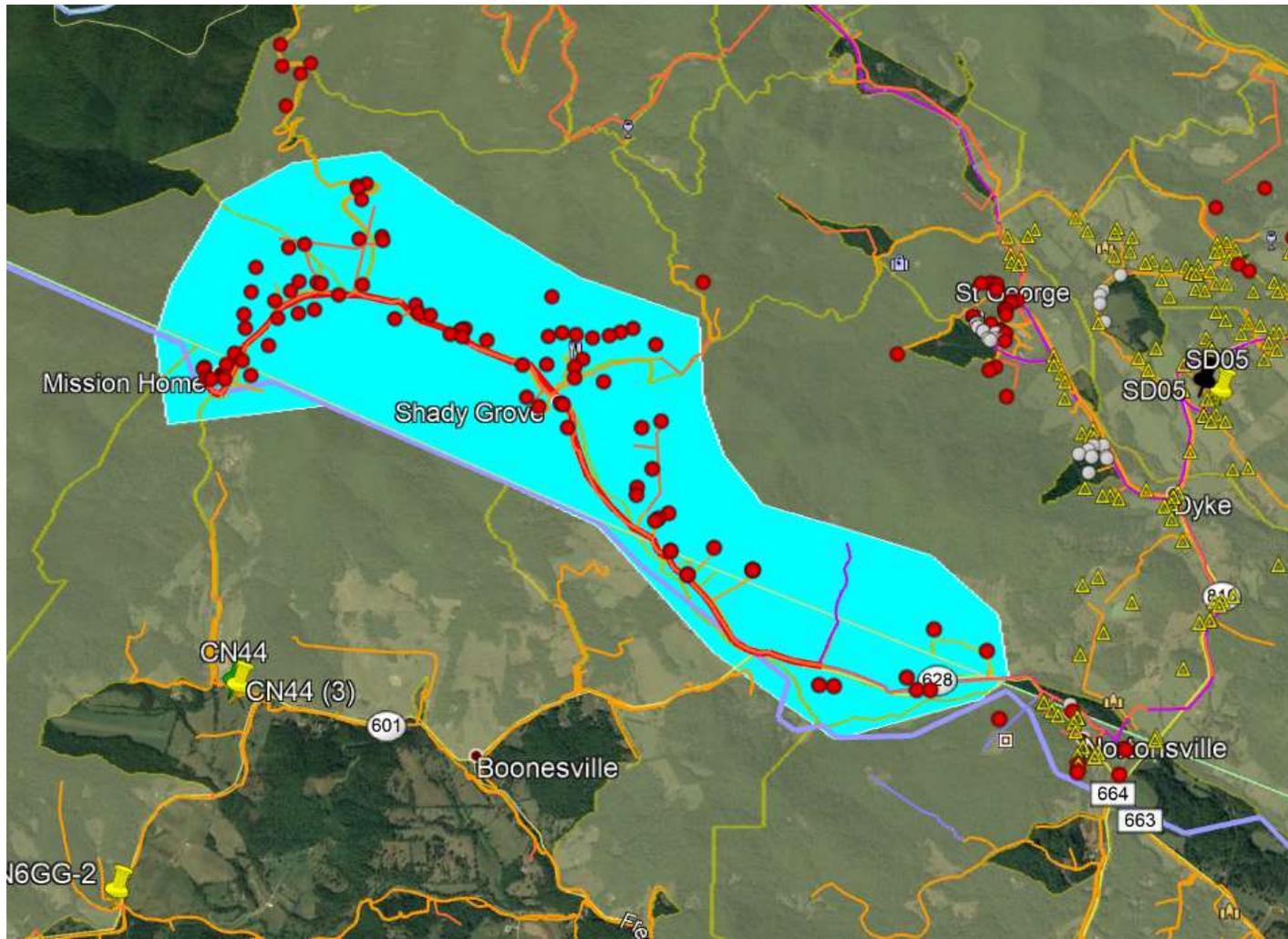
Place 22 KFT, 96F, \$95K

Place GPON in  
SD05 E7, \$20K

Place 1 FDH &  
70 MDTs, \$40K



# Shady Grove (FTTH)



## Attachment 2 – Existing Provider Map

Other than the co-applicant, CenturyLink, there are no other existing providers.

### Attachment 3 – Documentation on CAF Funding Area

None of the project areas have been awarded CAFII auction funding.

## Attachment 4 – Documentation Unserved Area VATI Criteria

There are no providers currently offering 10 Mbps/1Mbps or less broadband service within the project area.

## Attachment 5 – Propagation Map Wireless Project

This is not a wireless project so a map is not attached.



Attachment 6 – Timeline/Project Management Plan

Month	1				2				3				4				5				6				7			
Week	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Approval/Release Funding from VATI	█																											
Project Planning		█	█																									
Site Survey			█	█	█																							
Easement Research and Acquisition					█	█	█	█	█	█	█	█	█	█	█	█												
Design Engineering						█	█	█	█	█	█	█	█	█	█	█												
Permit Acquisition													█	█	█	█												
OSP Fiber Build													█	█	█	█	█	█	█	█								
Site Preparation																		█	█	█								
Commercial Power Activation																					█	█						
Equipment Installation & Turn-up																						█	█					
Cable Transfers																							█	█	█	█		
Market Launch																											█	█

*Richard Schollmann*

Richard Schollmann  
Director

## Attachment 7 – Relationship between Applicant/Co-Applicant

A partnership between the County and CenturyLink has not been formalized for this project at this time but the parties will be completing an agreement if the VATI grant is awarded. The agreement will cover CenturyLink's obligations to implement the Project Management Plan within the designated periods, to provide updates to the County on the status of the project, to notify the County if assistance is needed with issues where the County can provide assistance, to submit requests for payment as work is completed, to complete all work within the required timeframe, and to provide the County with information showing the locations where broadband has been enabled. We expect the agreement to also include obligations of the County to process requests for payment in a timely manner, review information provided by CenturyLink and submit requests for additional information in a timely manner, provide any necessary public rights of way and assist in contacting citizens and others when appropriate to assist in completing the project within the required timeframe.



## Greene County Public Schools

P.O. Box 1140, 40 Celt Road  
Stanardsville, Virginia 22973

Dr. Andrea Whitmarsh

Superintendent

Office: 434-939-9000

Fax: 434-985-4686

[www.greencountyschools.com](http://www.greencountyschools.com)

---

Every Child \* Every Chance \* Every Day

---

August 27, 2019

Jim Frydl  
Planning Director & Zoning Administrator  
Greene County, Virginia  
40 Celt Road  
Stanardsville, Virginia 22973

Dear Jim:

I am in full support Greene County's application for a Virginia Telecommunication Initiative grant to provide broadband to unserved homes in Greene County. Reliable communication access for everyone is vital to the success of a modern community. Further, lack of access creates an opportunity gap that may exist for a lifetime.

As Superintendent for the Greene County School District I recognize the need for students and teachers to have broadband availability. Broadband is an important tool to help educators, parents and students meet major challenges. The county's economic welfare and long-term success depend on improving learning for all students, and broadband-enabled solutions hold tremendous promise to help reverse patterns of low achievement. With broadband, students and teachers can expand instruction beyond the confines of the physical classroom and traditional school day. Broadband can also provide more customized learning opportunities for students to access high-quality, low-cost and personally relevant educational material. Broadband can improve the flow of educational information, allowing teachers, parents and organizations to make better decisions tied to each student's needs and abilities. Improved information flow can also make educational product and service markets more competitive by allowing school districts and other organizations to develop or purchase higher-quality educational products and services.

At Greene County Public Schools, our mission is to "Engage all students through learning that is innovative, personalized, and relevant". To accomplish this goal, all of our students require equal access to reliable communications. I strongly support the application in order to make sure every child In Greene has an equal opportunity to reach their full potential.

Sincerely,



Andrea E. Whitmarsh, EdD  
Superintendent of Schools

AEW:dlc



PLANNING COMMISSION

BOARD OF ZONING APPEALS

GREENE COUNTY PLANNING DEPARTMENT  
Post Office Box 358  
Stanardsville, Virginia 22973

Tel: 434-985-5282  
Fax: 434-985-1459

Website: [www.gcva.us](http://www.gcva.us)  
Email: [planning@gcva.us](mailto:planning@gcva.us)

Jim Frydl  
Greene County  
Broadband Committee  
40 Celt Rd  
Stanardsville, VA 22973

I am writing to support Greene County's application for a Virginia Telecommunication Initiative grant to provide broadband to unserved areas in Greene County. Reliable communications and access to high speed data are increasingly important for a modern, vibrant, successful community.

The Greene County Board of Supervisors believes that broadband is needed to support economic growth and education in an increasingly digitally connected world. Broadband is an important tool to help educators, students, health care providers, and small businesses meet the challenges of the 21<sup>st</sup> century. The county's economic welfare and long-term success depends on supporting business and entrepreneurial growth and broadband-enabled solutions hold tremendous promise in creating market access and new business opportunities. With broadband, students, teachers, health care providers and businesses can expand well beyond the confines of their physical location. Broadband can improve the flow of information, allowing employees and students to work and learn from home, making them more efficient while helping businesses to be more competitive.

Greene County has challenging terrain, which leaves many areas unserved. Greene has a strong tourism industry and is ideal for defense contractors and medical and health providers. Expanding broadband will provide opportunity that currently does not exist. I strongly support the application for the VATI grant.

Sincerely,

Bill Martin

Chairman, Greene County Board of Supervisors

# GREENE COUNTY OFFICE OF EMERGENCY SERVICES

Melissa G. Meador  
Director  
434-985-5232 Office  
434-985-3705 Fax  
Email: mmeador@gcva.us



Fire-Rescue  
Emergency Management  
Hazardous Materials  
40 Celt Road  
Stanardsville, VA 22973

August 26, 2019

Mr. James F. Frydl  
Greene County Planning Director  
40 Celt Road  
Stanardsville, VA 22973

Dear Mr. Frydl,

I am writing in my capacity as the Emergency Services Director for the County of Greene, Virginia to fully endorse and strongly support the grant proposal submitted by our locality to the Virginia Telecommunication Initiative.

Greene County has begun improving public safety and the safety of its emergency responders by planning an upgrade of our entire public safety radio system. This upgrade is designed to provide mission critical voice communications.

A dedicated public safety network would provide mobile access to large amounts of information in a secure method and would have the capability of adapting to new, everchanging technology using a method already familiar to today's first responders. A dedicated, secure network can provide an additional method of communication to serve as a back-up to the radio system that would have the capability of extending beyond the boundaries of the radio system coverage area. The network can provide regional, statewide, and national interoperability far beyond the capabilities of the radio system utilizing a more economical method.

The ability to send and receive large amounts of data is necessary for acquiring licensing data, vehicle registrations, wanted persons files, commercial business storage and floor plans, and many more uses not supported by the radio system.

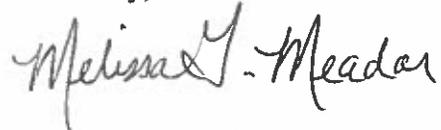
The Greene County Office of Emergency Services firmly believes this opportunity is unique and has the potential to enhance our overall public safety goals and objectives. Any initiative that can benefit our public safety agencies and our community is welcomed. If awarded, the project may become the initial groundwork for our community to develop a dedicated, secure network to our public safety radio system that would other-wise go unfunded.

*Greene County is an inclusive community where citizens and businesses benefit from a diversified economy, quality public services and a superior quality of life.*

On behalf of all public safety entities within Greene County, we appreciate your efforts regarding the proposal.

If you have any questions, concerns or require additional information, please feel free to contact me directly at (434) 985-5232.

Sincerely,

A handwritten signature in black ink that reads "Melissa G. Meador". The signature is written in a cursive style with a large initial 'M'.

Melissa G. Meador  
Emergency Services Director

###



August 28, 2019

To Whom It May Concern:

Please accept this letter as my full support for Greene County's Virginia Telecommunications Initiative grant request for unserved homes to access broadband.

Reliable and reasonable access rates are essential for a thriving community and a solid economic base. As Director of Economic Development and Tourism, I see on a daily basis the need to bring broadband to all parts of the county. Home businesses, individuals that telecommute, and rural businesses struggle to meet their communications needs. This hampers economic growth as potential businesses are not created or choose to locate in another community with broadband.

As a former educator and resident of the community, I see how the lack of broadband has put our students at a great disadvantage when they cannot access the internet. Not only does this impact our community on a personal note, it deters students from integrating into our community after graduating from public education, creating a great loss in potential entrepreneurs that could enhance our community.

Considering the economic impact on our community, I greatly appreciate your consideration for Greene's grant application. By awarding the grant, you will be investing in a community with great potential.

Most Sincerely,

A handwritten signature in black ink, appearing to read "Alan E. Yost", is written over a faint, larger version of the same signature.

Alan E. Yost  
Director of Economic Development and Tourism



## Attachment 9 – Documentation of Match Funding

CenturyLink will be providing all of the planning, engineering, materials and labor for the installation of the fiber facilities necessary for this project. The value of the CenturyLink contribution that is not reimbursed by VATI is \$332,500. CenturyLink has committed to provide that amount of match funding.

A handwritten signature in black ink, appearing to read "Richard Schollmann".

Richard Schollmann  
Director

Attachment 10 – Funding Sources Table

<b>SOURCE</b>	<b>AMOUNT</b>	<b>%</b>	<b>STATUS</b>
Requested VATI	\$142,500	30	Pending
CenturyLink	\$332,500	70	Secured
<b>TOTAL</b>	<b>\$475,000</b>	<b>100%</b>	

**Attachment 11 -- Derivation of Costs**

<b>Product</b>	<b>Total</b>	<b>VATI</b>	<b>Non-VATI</b>	<b>Source of Estimate</b>	<b>Date</b>
Electronics (See Attachment 1 map for specific locations and amounts)	\$ <b>70,000</b>	\$ <b>21,000</b>	\$ <b>49,000</b>	<b>CenturyLink</b>	<b>8/29/2019</b>
Fiber build (See Attachment 1 map for specific locations and amounts)	\$ <b>405,000</b>	\$ <b>121,500</b>	\$ <b>283,500</b>	<b>CenturyLink</b>	<b>8/29/2019</b>
Note that these costs include all of the planning, engineering, materials and labor for the installation of the fiber facilities necessary for this project, along with the equipment necessary to provide the broadband service and all easements required.	\$ -	\$ -	\$ -		



## Attachment 12 – Documentation of Supporting Costs

The costs for this project are \$70,000 in electronics and \$405,000 in fiber. The cost for this project includes all of the planning, engineering, materials and labor for the installation of the fiber facilities necessary for this project, along with the equipment necessary to provide the broadband service and all easements required. The cost estimates are based on CenturyLink's extensive experience in building these same systems throughout the country.

A handwritten signature in black ink, appearing to read "Richard Schollmann".

Richard Schollmann  
Director



## Attachment 13 – Supporting Documentation of Cost Estimates

The costs for this project are \$70,000 in electronics and \$405,000 in fiber. The cost for this project includes all of the planning, engineering, materials and labor for the installation of the fiber facilities necessary for this project, along with the equipment necessary to provide the broadband service and all easements required. The cost estimates are based on CenturyLink's extensive experience in building these same systems throughout the country.

A handwritten signature in black ink that reads "Richard Schollmann".

Richard Schollmann  
Director

Attachment 14 – Two most recent Form 477 submitted to the FCC or equivalent

CenturyLink's two most recent Form 477 data submissions are attached.



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OMB No. 3060-0816

FRN: 0018626853

**CenturyLink, Inc.**

Operations: ILEC | Data as of: Jun 30, 2018

Submission Status

Original - Submitted

Last Updated: Aug 31, 2018 09:37:48

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This filing has been submitted and is now read-only. To edit, go to the [Main Menu](#) and click [Revise](#).

Data Section	Status
<b>Filer Identification</b>	Data entered
<b>Fixed Services</b>	
Fixed Broadband Deployment	<a href="#">View file(s)</a> Data entered
Fixed Broadband Subscription	<a href="#">View file(s)</a> Data entered
Fixed Voice Subscription	<a href="#">View file(s)</a> Data entered
<b>Mobile Services</b>	
Mobile Broadband Deployment	No data for this section
Mobile Broadband Service Availability	No data for this section
Mobile Broadband Subscription	No data for this section
Mobile Voice Deployment	No data for this section
Mobile Voice Subscription	No data for this section
Explanations and Comments	Data entered

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FRN: 0018626853

**CenturyLink, Inc.**

Operations: ILEC | Data as of: Jun 30, 2018

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## Filer Identification

\* Indicates a required field. Please be sure you have all the required Filer Identification information before you begin. You will not be able to save your responses if required fields are incomplete.

FRN: 0018626853

\* Provider Name:

\* Holding Company/Common Control Name: ⓘ

[Change](#)

Operations:

 ILEC  Non-ILEC

Provider's Website Address:

\* Study Area Codes (SAC): ⓘ

\* Form 499 Filer IDs: ⓘ

## Emergency Operations Contact Information ⓘ

\* Name:

\* Phone Number:

### Emergency Operations Contact Information ⓘ

\* Name:

\* Phone Number:

Extension:

\* E-Mail:

### Form 477 Contact Information ⓘ

\* Name:

\* Phone Number:

Extension:

\* E-Mail:

### Certifying Official Contact Information ⓘ

\* Name:

\* Title:

\* Phone Number:

Extension:

\* E-Mail:

### Non-disclosures

Indicate whether you request non-disclosure of some or all of the subscription information in this submission because you believe that this information is privileged and confidential and public disclosure of such information would likely cause substantial harm to the competitive position of the filer.

Indicate whether you request non-disclosure of some or all of the mobile deployment spectrum and speed parameters information in this submission because you believe that this information is privileged and confidential and public disclosure of such information would likely cause substantial harm to the competitive position of the filer.



FRN: 0018626853

CenturyLink, Inc.

Operations: ILEC | Data as of: Jun 30, 2018

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### Local Exchange Telephone Subscription

For each state in which you have one or more customers,

1. allocate lines provided to other providers between Wholesale and UNE-L;
2. allocate lines provided to end users by (a) Services Sold, (b) Product Type, (c) Ownership and (d) Last-mile Medium; and
3. click Save Current State, then go to the next state using the menu at the left or click Finished ».

For more information about how to allocate your lines, click [here](#) . Every cell must contain a number. Blanks will cause an error. Save your work as you go and when you've entered data for each state, click Finished »

Each cell must contain a number, even if it's zero!

Subscriptions Listed By State

New Jersey
New Mexico
North Carolina
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
South Carolina
South Dakota
Tennessee
Texas
Utah

### Virginia

\* All fields are required

#### Lines provided to Unaffiliated Providers

Wholesale: ⓘ	UNE-L: ⓘ
<input type="text" value="3648"/>	<input type="text" value="1393"/>

#### Lines provided to End Users...

by Services Sold

Total: ⓘ	Voice with Internet: ⓘ	Voice without Internet:
<input type="text" value="166861"/>	<input type="text" value="90232"/>	<input type="text" value="76629"/>

#### by Product Type

Total: ⓘ	Consumer Total ⓘ	Business /Gov. Total ⓘ
<input type="text" value="166861"/>	<input type="text" value="121577"/>	<input type="text" value="45284"/>
	Consumer & No PIC: ⓘ	Business/Gov. & No PIC: ⓘ

South Carolina
South Dakota
Tennessee
Texas
Utah
Virginia
Washington
Wisconsin
Wyoming

## by Product Type

<b>Total:</b> ⓘ	<b>Consumer Total</b> ⓘ	<b>Business /Gov. Total</b> ⓘ
166861	121577	45284
	<b>Consumer &amp; No PIC:</b> ⓘ	<b>Business/Gov. &amp; No PIC:</b> ⓘ
	30909	20071
	<b>Consumer &amp; PIC:</b> ⓘ	<b>Business/Gov. &amp; PIC:</b> ⓘ
	90668	25213

## by Ownership

<b>Total:</b> ⓘ	<b>Owned:</b> ⓘ	<b>UNE-L:</b> ⓘ	<b>Resale:</b> ⓘ
166861	166861	0	0

## by Last-mile Medium

<b>Total:</b> ⓘ	<b>FTTP:</b> ⓘ	<b>Coaxial Cable:</b> ⓘ	<b>Fixed Wireless:</b> ⓘ	<b>Copper:</b> ⓘ
166861	230	0	0	166631

Cancel

Next State

Continue »

 For help or assistance please contact us at 1-877-480-3201 or 1-717-338-2824 (TTY) or you may submit requests online via [e-support](#).

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

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TTY: 1-888-835-5322  
Fax: 1-866-418-0232  
E-mail: [fccinfo@fcc.gov](mailto:fccinfo@fcc.gov)

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FRN: 0018626853

CenturyLink, Inc.

Operations: ILEC | Data as of: Jun 30, 2018

Submission Status

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Last Updated: Aug 31, 2018 09:37:48

## Interconnected VoIP Subscriptions

For each state in which you have one or more iVoIP subscribers,

1. allocate over-the-top iVoIP subscriptions, where you provide service to end users without also supplying last-mile facilities, between Consumer and Business / Government subscribers;
2. allocate all other iVoIP subscriptions, where you provide service to end users and also supply last-mile facilities, by (a) End User Type, (b) Services Sold, and (c) Last-mile Medium; and
3. click Save Current State, then go to the next state using the menu at the left or click Finished ».

For more information about how to allocate your lines, click [here](#).

Each cell must contain a number, even if it's zero! Blanks will cause an error.

Save your work as you go, and when you've entered data for each state, click Finished »

Subscriptions by State	Virginia	* All fields are required	
Michigan	<b>Grand Totals, by End-user Type</b>		
Minnesota	Total: ⓘ	Consumer: ⓘ	Business / Gov.:
Missouri	<input type="text" value="650"/>	<input type="text" value="0"/>	<input type="text" value="650"/>
Nebraska	<b>Over-the-top Subscriptions</b>		
Nevada	Service to End Users Provided Without also Supplying Last-mile Facilities		
New Mexico	Total: ⓘ	Consumer: ⓘ	Business / Gov.:
North Carolina	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
North Dakota	<b>All Other Subscriptions</b>		
Ohio	Service to End Users Provided over Last-mile Facilities Supplied by the Provider...		
Oregon	by End-user Type		
Pennsylvania	Total: ⓘ	Consumer: ⓘ	Business / Gov.:
Texas	<input type="text" value="650"/>	<input type="text" value="0"/>	<input type="text" value="650"/>

- Nevada
- New Mexico
- North Carolina
- North Dakota
- Ohio
- Oregon
- Pennsylvania
- Texas
- Utah
- Virginia
- Washington
- Wisconsin
- Wyoming

**Over-the-top Subscriptions**

Service to End Users Provided Without also Supplying Last-mile Facilities

Total: ⓘ	Consumer: ⓘ	Business / Gov.: ⓘ
<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

**All Other Subscriptions**

Service to End Users Provided over Last-mile Facilities Supplied by the Provider...  
by End-user Type

Total: ⓘ	Consumer: ⓘ	Business / Gov.: ⓘ
<input type="text" value="650"/>	<input type="text" value="0"/>	<input type="text" value="650"/>

by Services Sold

Total: ⓘ	Voice with Internet: ⓘ	Voice without Internet: ⓘ
<input type="text" value="650"/>	<input type="text" value="650"/>	<input type="text" value="0"/>

by Last-mile Medium

Total: ⓘ	FTTP: ⓘ	Coaxial Cable: ⓘ	Fixed Wireless & Satellite: ⓘ	Copper: ⓘ
<input type="text" value="650"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="650"/>

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Washington, DC 20554  
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FRN: 0018626853

CenturyLink, Inc.

Operations: ILEC | Data as of: Dec 31, 2018

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Last Updated: Mar 8, 2019 10:14:43

## Filer Identification

\* Indicates a required field. Please be sure you have all the required Filer Identification information before you begin.

You will not be able to save your responses if required fields are incomplete.

FRN: 0018626853

\* Company Name:

CenturyLink, Inc.

\* Holding Company/Common Control Name: ⓘ

CenturyLink, Inc.

[Change](#)

Operations:

 ILEC  Non-ILEC

Company's Website Address:

www.centurylink.com

\* Study Area Codes (SAC): ⓘ

160138

170209

190254

\* Form 499 Filer IDs: ⓘ

801408

802182

802263

## Emergency Operations Contact Information ⓘ

\* Name:

Richard Rousselot

\* Phone Number:

(913) 353-7066

### Emergency Operations Contact Information ⓘ

\* Name:

\* Phone Number:

Extension:

\* E-Mail:

### Form 477 Contact Information ⓘ

\* Name:

\* Phone Number:

Extension:

\* E-Mail:

### Certifying Official Contact Information ⓘ

\* Name:

\* Title:

\* Phone Number:

Extension:

\* E-Mail:

### Non-disclosures

Indicate whether you request non-disclosure of some or all of the subscription information in this submission because you believe that this information is privileged and confidential and public disclosure of such information would likely cause substantial harm to the competitive position of the filer.

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FRN: 0018626853

**CenturyLink, Inc.**

Operations: ILEC | Data as of: Dec 31, 2018

**Submission Status**

Original - Submitted

Last Updated: Mar 8, 2019 10:14:43

## Local Exchange Telephone Subscription

For each state in which you have one or more customers,

1. allocate lines provided to other providers between Wholesale and UNE-L;
2. allocate lines provided to end users by (a) Services Sold, (b) Product Type, (c) Ownership and (d) Last-mile Medium; and
3. click Save Current State, then go to the next state using the menu at the left or click Finished ».

For more information about how to allocate your lines, click [here](#) . Every cell must contain a number. Blanks will cause an error. Save your work as you go and when you've entered data for each state, click Finished »

Each cell must contain a number, even if it's zero!

Subscriptions Listed By State	Virginia	* All fields are required	
Nevada	<b>Lines provided to <u>Unaffiliated Providers</u></b>		
New Jersey	Wholesale: <input type="text" value="4233"/>	UNE-L: <input type="text" value="1269"/>	
New Mexico	<b>Lines provided to <u>End Users...</u></b>		
North Carolina	<b>by Services Sold</b>		
North Dakota	Total: <input type="text" value="155313"/>	Voice with Internet: <input type="text" value="82150"/>	Voice without Internet: <input type="text" value="73163"/>
Ohio	<b>by Product Type</b>		
Oklahoma	Total: <input type="text" value="155313"/>	Consumer Total: <input type="text" value="112222"/>	Business /Gov. Total: <input type="text" value="43091"/>
Oregon		Consumer & No PIC: <input type="text"/>	Business/Gov. & No PIC: <input type="text"/>
Pennsylvania			
South Carolina			
South Dakota			
Tennessee			
Texas			

- Pennsylvania
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Virginia
- Washington
- Wisconsin

**by Product Type**

<b>Total:</b> ⓘ	<b>Consumer Total</b> ⓘ	<b>Business /Gov. Total</b> ⓘ
<input type="text" value="155313"/>	<input type="text" value="112222"/>	<input type="text" value="43091"/>
	<b>Consumer &amp; No PIC:</b> ⓘ	<b>Business/Gov. &amp; No PIC:</b> ⓘ
	<input type="text" value="25635"/>	<input type="text" value="19326"/>
	<b>Consumer &amp; PIC:</b> ⓘ	<b>Business/Gov. &amp; PIC:</b> ⓘ
	<input type="text" value="86587"/>	<input type="text" value="23765"/>

**by Ownership**

<b>Total:</b> ⓘ	<b>Owned:</b> ⓘ	<b>UNE-L:</b> ⓘ	<b>Resale:</b> ⓘ
<input type="text" value="155313"/>	<input type="text" value="155313"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

**by Last-mile Medium**

<b>Total:</b> ⓘ	<b>FTTP:</b> ⓘ	<b>Coaxial Cable:</b> ⓘ	<b>Fixed Wireless:</b> ⓘ	<b>Copper:</b> ⓘ
<input type="text" value="155313"/>	<input type="text" value="210"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="155103"/>

Cancel

Next State

Continue »

For help or assistance please contact us at 1-877-480-3201 ⓘ or 1-717-338-2824 ⓘ (TTY) or you may submit requests online via [e-support](#).

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 Fax: 1-866-418-0232 ⓘ  
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FRN: 0018626853

CenturyLink, Inc.

Operations: ILEC | Data as of: Dec 31, 2018

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Last Updated: Mar 8, 2019 10:14:43

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For each state in which you have one or more iVoIP subscribers,

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2. allocate all other iVoIP subscriptions, where you provide service to end users and also supply last-mile facilities, by (a) End User Type, (b) Services Sold, and (c) Last-mile Medium; and
3. click Save Current State, then go to the next state using the menu at the left or click Finished ».

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Each cell must contain a number, even if it's zero! Blanks will cause an error.

Save your work as you go, and when you've entered data for each state, click Finished »

Subscriptions by State	Virginia																		
<ul style="list-style-type: none"> <li>Iowa</li> <li>Kansas</li> <li>Michigan</li> <li>Minnesota</li> <li>Missouri</li> <li>Nebraska</li> <li>Nevada</li> <li>New Mexico</li> <li>North Carolina</li> <li>Ohio</li> <li>Oregon</li> <li>Pennsylvania</li> </ul>	<p style="text-align: right;">* All fields are required</p> <h4>Grand Totals, by End-user Type</h4> <table border="0"> <tr> <td>Total: ⓘ</td> <td>Consumer: ⓘ</td> <td>Business / Gov.:</td> </tr> <tr> <td><input type="text" value="650"/></td> <td><input type="text" value="0"/></td> <td><input type="text" value="650"/></td> </tr> </table> <hr/> <h4>Over-the-top Subscriptions</h4> <p>Service to End Users Provided Without also Supplying Last-mile Facilities</p> <table border="0"> <tr> <td>Total: ⓘ</td> <td>Consumer: ⓘ</td> <td>Business / Gov.:</td> </tr> <tr> <td><input type="text" value="0"/></td> <td><input type="text" value="0"/></td> <td><input type="text" value="0"/></td> </tr> </table> <hr/> <h4>All Other Subscriptions</h4> <p>Service to End Users Provided over Last-mile Facilities Supplied by the Provider... by End-user Type</p> <table border="0"> <tr> <td>Total: ⓘ</td> <td>Consumer: ⓘ</td> <td>Business / Gov.:</td> </tr> <tr> <td><input type="text" value="650"/></td> <td><input type="text" value="0"/></td> <td><input type="text" value="650"/></td> </tr> </table>	Total: ⓘ	Consumer: ⓘ	Business / Gov.:	<input type="text" value="650"/>	<input type="text" value="0"/>	<input type="text" value="650"/>	Total: ⓘ	Consumer: ⓘ	Business / Gov.:	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	Total: ⓘ	Consumer: ⓘ	Business / Gov.:	<input type="text" value="650"/>	<input type="text" value="0"/>	<input type="text" value="650"/>
Total: ⓘ	Consumer: ⓘ	Business / Gov.:																	
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Total: ⓘ	Consumer: ⓘ	Business / Gov.:																	
<input type="text" value="650"/>	<input type="text" value="0"/>	<input type="text" value="650"/>																	

Missouri
Nebraska
Nevada
New Mexico
North Carolina
Ohio
Oregon
Pennsylvania
Texas
Utah
Virginia
Washington
Wisconsin

**Over-the-top Subscriptions**

Service to End Users Provided Without also Supplying Last-mile Facilities

Total:  Consumer:  Business / Gov.:

**All Other Subscriptions**Service to End Users Provided over Last-mile Facilities Supplied by the Provider...  
by End-user Type

Total:  Consumer:  Business / Gov.:

**by Services Sold**

Total:  Voice with Internet:  Voice without Internet:

**by Last-mile Medium**

Total:  FTTP:  Coaxial Cable:  Fixed Wireless & Satellite:  Copper:

Cancel

Next State

Finished »

For help or assistance please contact us at 1-877-480-3201 or 1-717-338-2824 (TTY) or you may submit requests online via [e-support](#).

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

Phone: 1-888-225-5322  
TTY: 1-888-235-5322

RSS  
Privacy Policy  
Moderation Policy  
Website Policies & Notices  
Required Browser & Plug-ins

FOIA  
No Fear Act Data  
Open Government Directive  
Plain Writing Act  
2009 Recovery and Reinvestment Act

PLANNING COMMISSION



BOARD OF ZONING APPEALS

GREENE COUNTY PLANNING DEPARTMENT  
Post Office Box 358  
Stanardsville, Virginia 22973

Tel: (434) 985-5282  
Fax: (434) 985-1459

Website: [www.gcva.us](http://www.gcva.us)  
Email: [planning@gcva.us](mailto:planning@gcva.us)

### **PUBLIC NOTICE**

The Greene County Administrator's Broadband Initiative Advisory Committee is planning on partnering with Broadband Service Providers to submit a VATI application to secure a grant to expand Broadband Internet services throughout the County in areas that are unserved and underserved and are not provided expansion of services through either Connect America Funds or other grant opportunities and efforts.

If you should have questions contact Jim Frydl, Director of Planning and Zoning either via telephone: 434-985-5282 or by email at [jfrydl@gcva.us](mailto:jfrydl@gcva.us).

# Appendix 16 – CenturyLink Project Summary

# Summary of Projects

Greene County VATI 2020												
Project		Capital Costs			70%	30%	Living Units		No	Existing Customers		
Title	Exchange	ISP	OSP	Total	CLINK	VATI	1G	Cost / LU	BBAND	< 10M	10M - 20M	> 20M
Greene Lake	Stanardsville	\$50,000	\$204,000	\$254,000	\$177,800	\$76,200	201	\$1,264	79	122		
Shady Grove	Stanardsville	\$20,000	\$201,000	\$221,000	\$154,700	\$66,300	119	\$1,857	97	22		
<b>Totals</b>		<b>\$70,000</b>	<b>\$405,000</b>	<b>\$475,000</b>	<b>\$332,500</b>	<b>\$142,500</b>	<b>320</b>	<b>\$1,484</b>	176	144	0	0
									55%	45%	0%	0%

# Greene Lake (FTTH)

**201 – 1G**

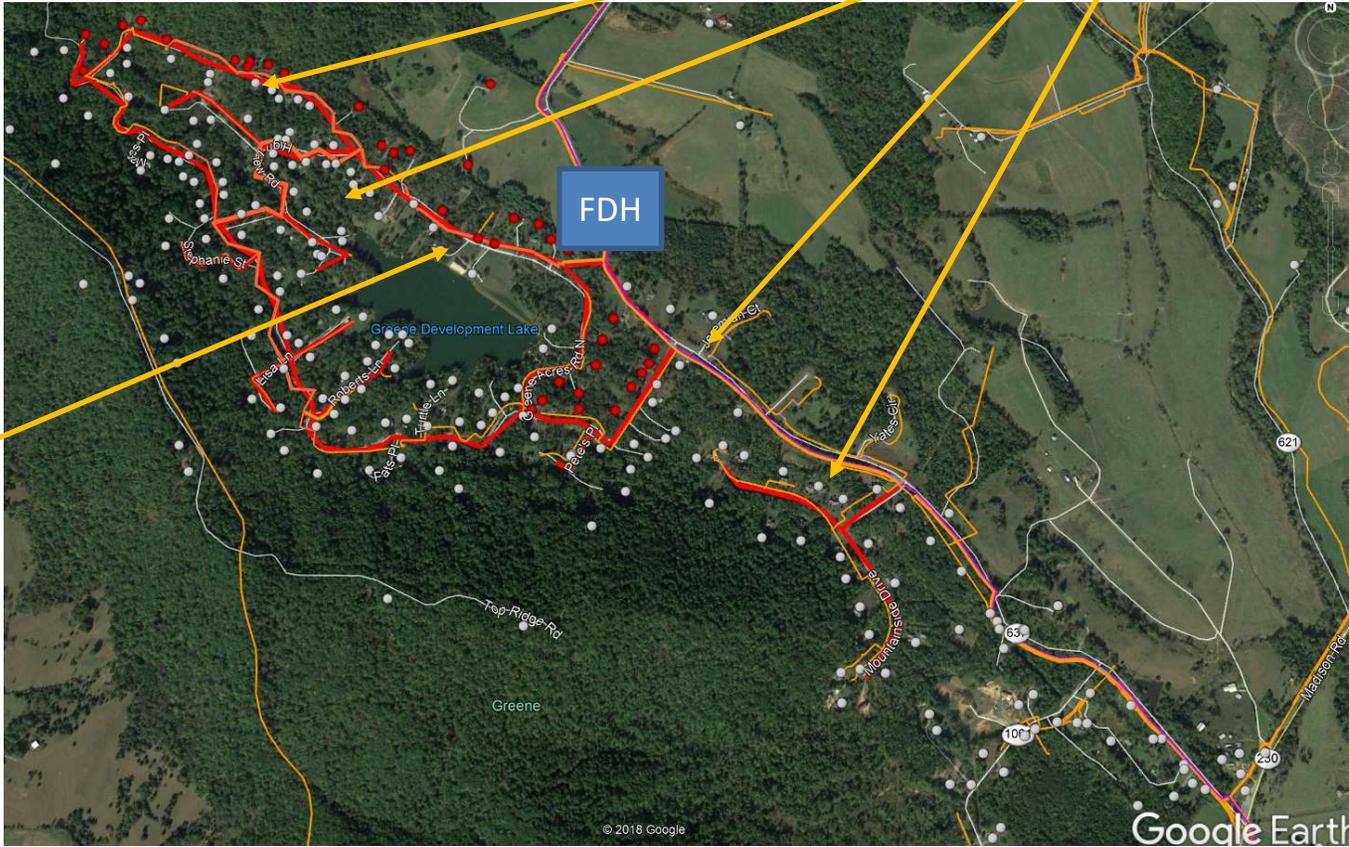
Estimate 160 drops < 650 Ft.;  
25 between 650 & 1,500;  
16 > 1,500 Feet

Place Spurs 2.5, 2.0 (2), 1.5 &  
1 (6) KFT, 48F, \$84K

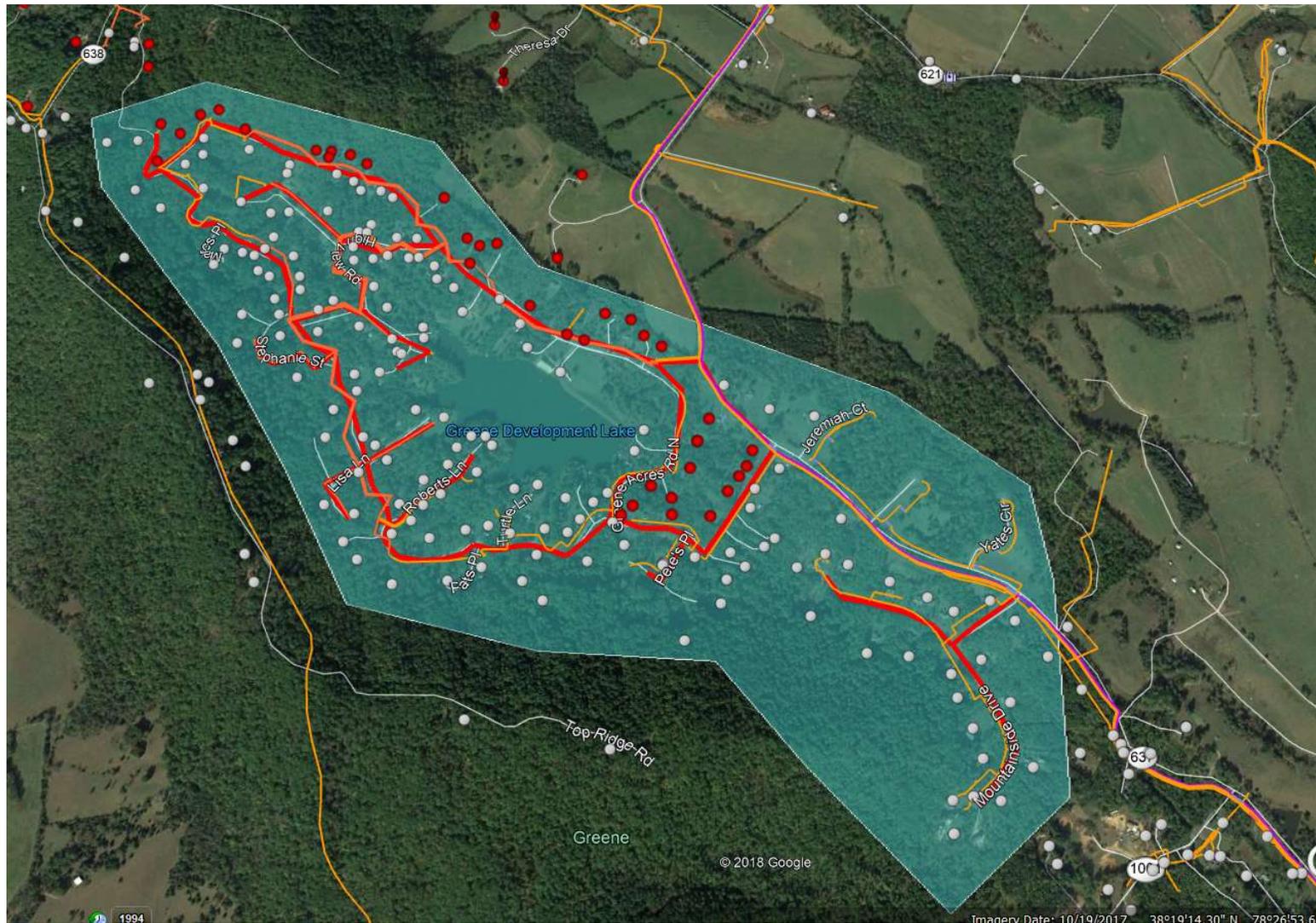
Place 15 KFT, 96F, \$80K

Place ODC-200  
E7 GPON \$50K

Place 1 FDH &  
70 MDTs, \$40K



# Greene Lake (FTTH)



# Shady Grove (FTTH)

## 119 – 1G

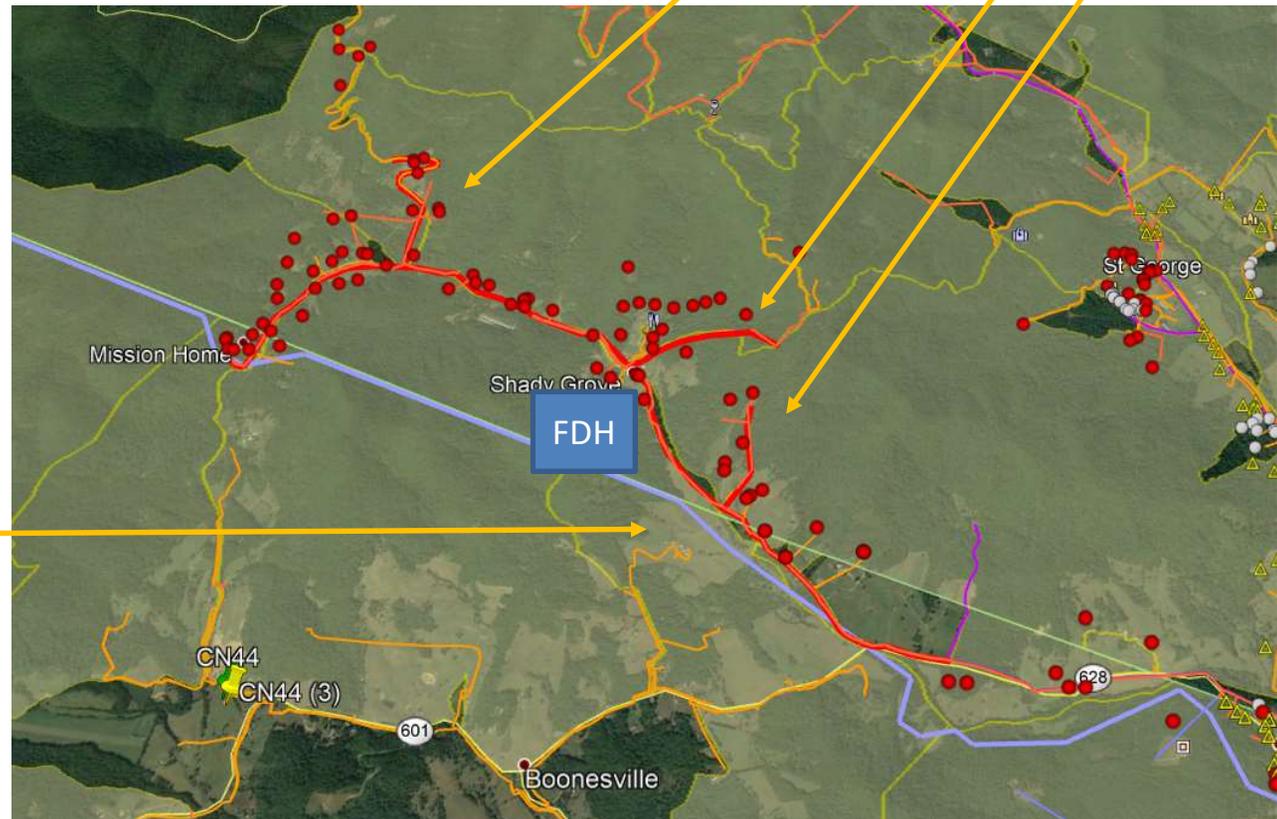
Estimate 70 drops < 650 Ft.;  
30 between 650 & 1,500;  
19 > 1,500 Feet

Place Spurs 2.5, 3.5 & 5 KFT, 48F,  
\$66K

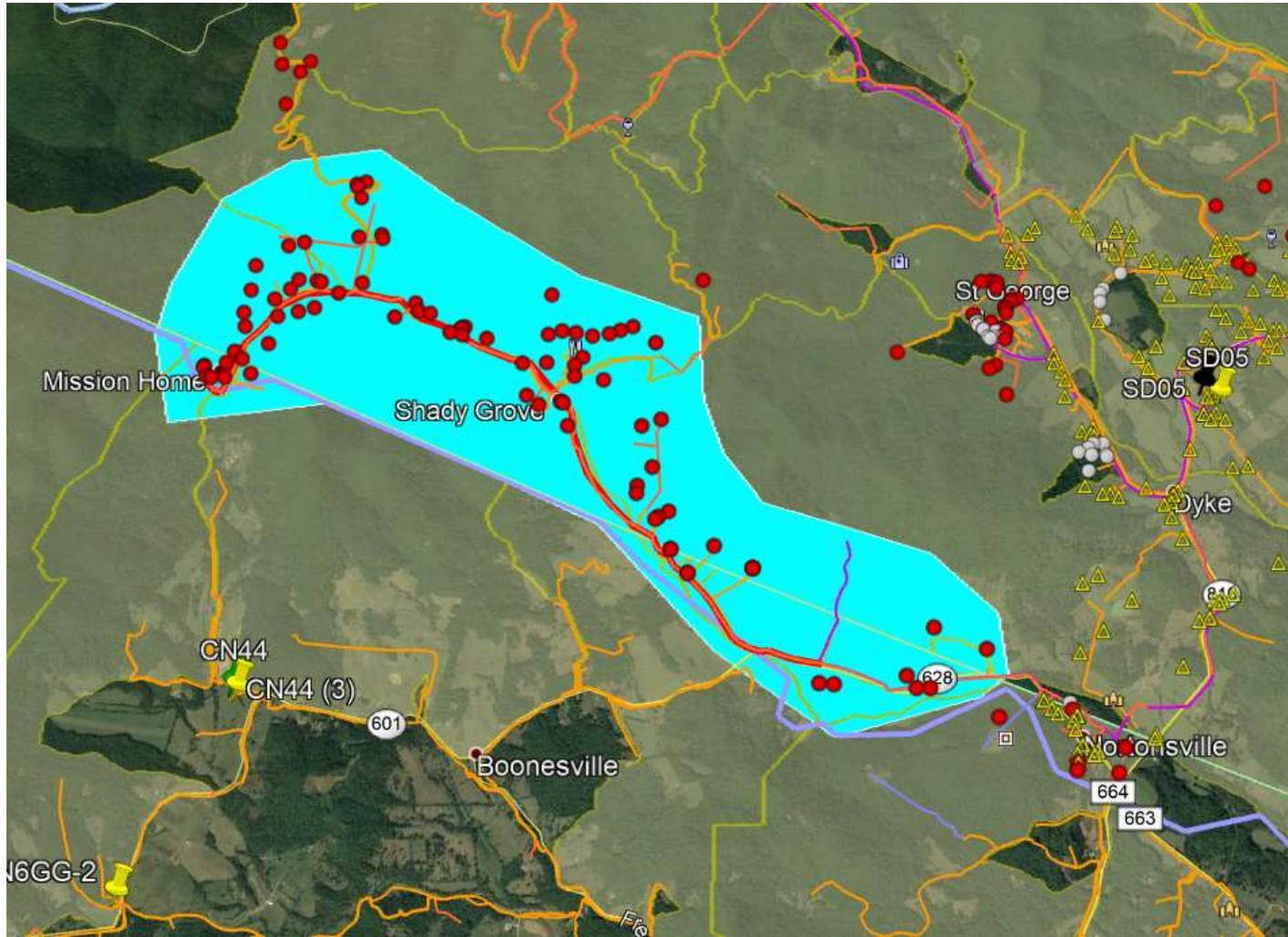
Place 22 KFT, 96F, \$95K

Place GPON in  
SD05 E7, \$20K

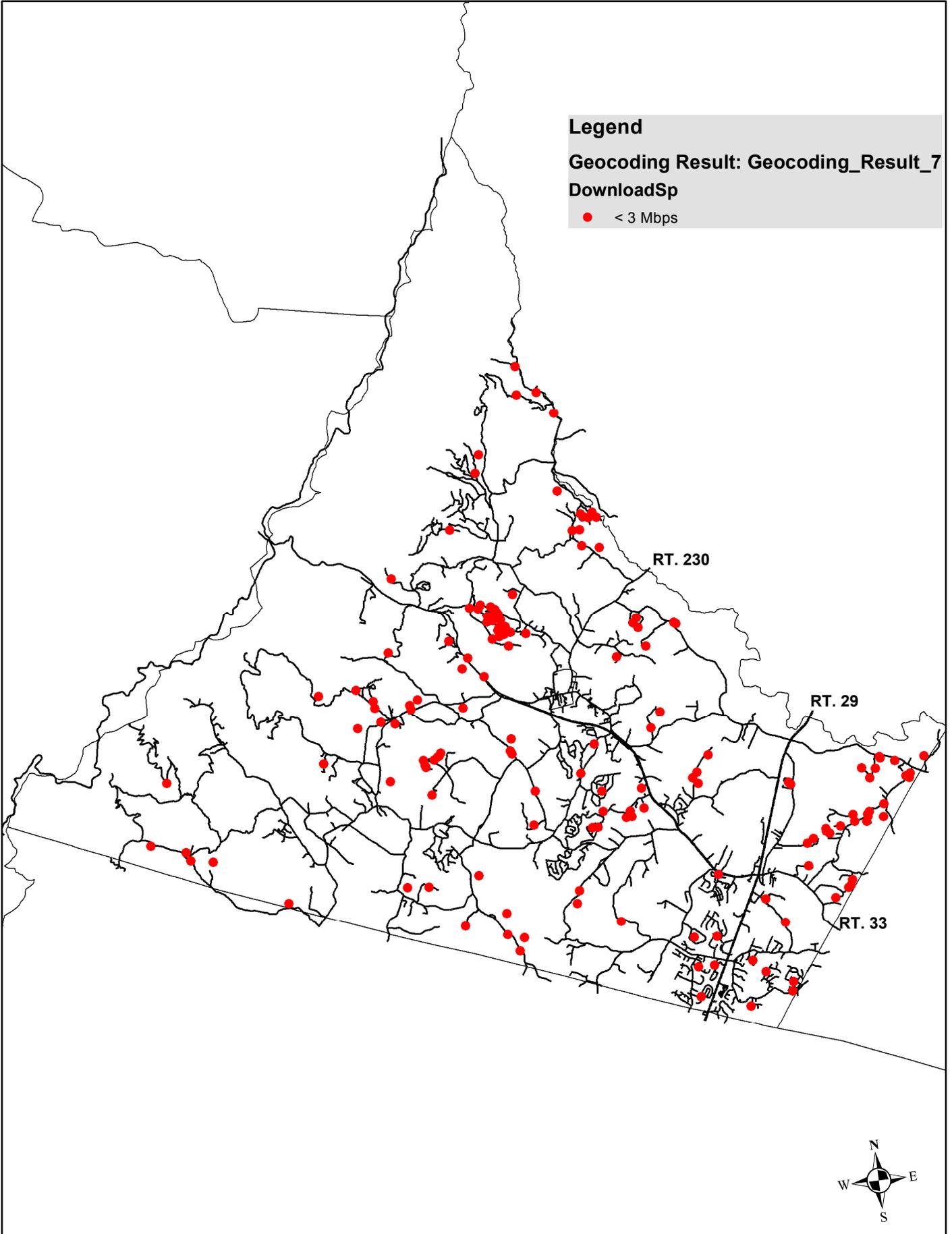
Place 1 FDH &  
70 MDTs, \$40K



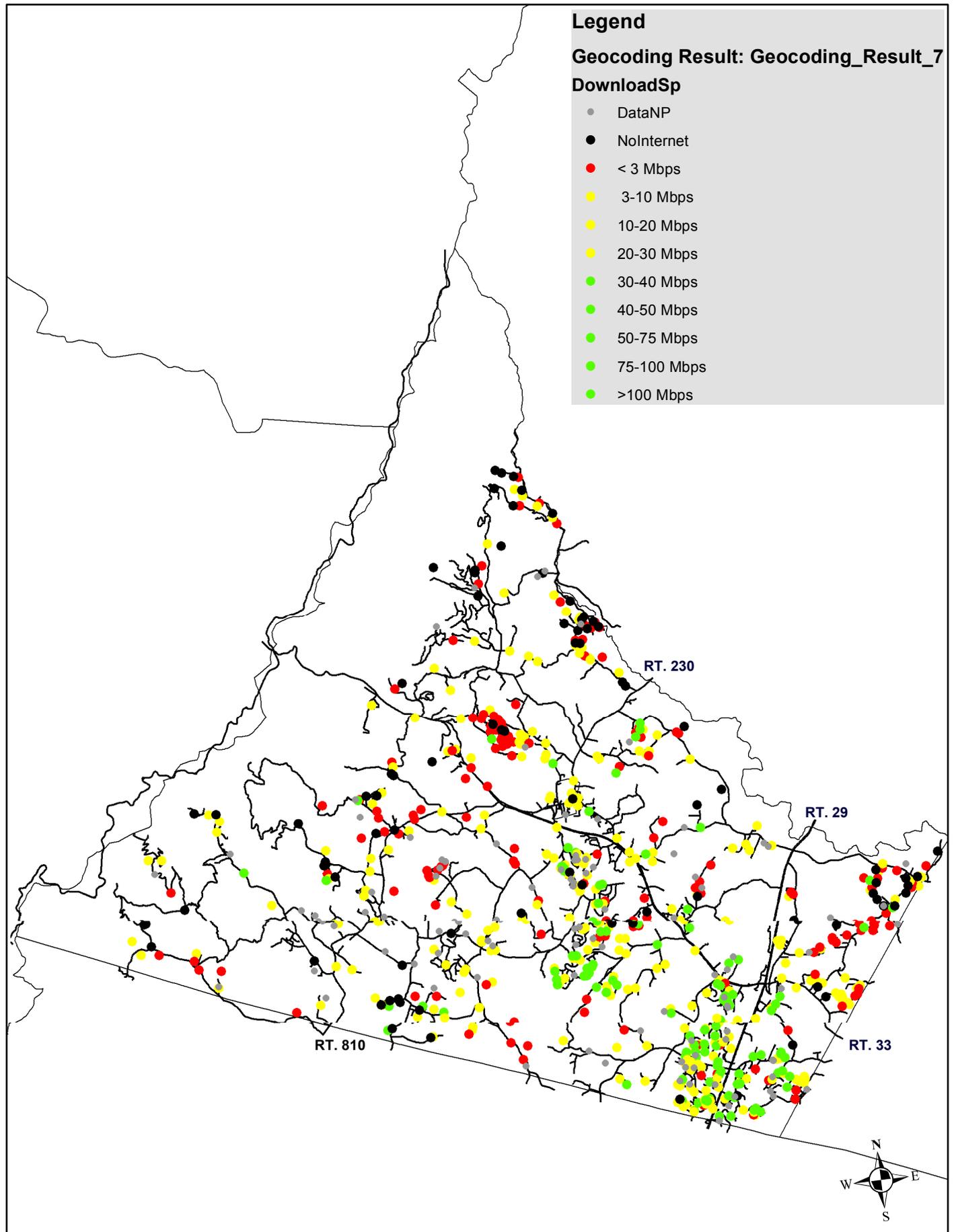
# Shady Grove (FTTH)



# Survey Results: Download Speed Less than 3Mbps



# Survey Results: Download Speed





OFFICE OF THE COUNTY ADMINISTRATOR  
POST OFFICE BOX 358  
STANARDSVILLE, VIRGINIA 22973  
434-985-5201  
FAX: 434-985-3705

**MEMORANDUM**

<b>TO:</b>	Greene County Board of Supervisors
<b>FROM:</b>	Brenda G. Garton, Interim County Administrator <i>Brenda Garton</i>
<b>SUBJECT:</b>	Resolution Approving Broadband Initiative Recommendations
<b>DATE:</b>	December 11, 2018

**Recommended Action:**

**Move to pass the resolution adopting the recommendations of the County Administrator's Broadband Initiative Advisory Committee.**

**Background:**

As you know, the County Administrator's Broadband Initiative Advisory Committee has been meeting, hearing presentations related to broadband initiatives in other localities, discussing options, and in general, formulating recommendations on how best to move forward in ensuring high speed internet access to Greene County Citizens.

As a result of this work, the County Administrator's Broadband Initiative Advisory Committee is seeking the Board's approval of its attached recommendations.

This item is presented for preliminary review and will be presented for action by the Board at the January 8 Board meeting.

cc: County Administrator's Broadband Initiative Advisory Committee

**RESOLUTION OF THE GREENE COUNTY BOARD OF SUPERVISORS  
AUTHORIZING ACTION ON THE RECOMMENDATIONS  
OF THE COUNTY ADMINISTRATOR'S  
BROADBAND INITIATIVE ADVISORY COMMITTEE**

**WHEREAS**, in March of 2017, the Greene County Board of Supervisors identified the expansion of quality broadband access and service throughout the County as a high priority with the County's overall strategic plan; and

**WHEREAS**, in response to the high priority, the County Administrator instituted the County Administrator's Broadband Initiative Advisory Committee to serve as an advisory body to the County Administrator on broadband development initiatives; and

**WHEREAS**, the County Administrator's Broadband Initiative Advisory Committee has explored the existing infrastructure and continues to study options and solutions on behalf of the Greene County citizens for internet accessibility and services in the most cost-effective manner; and

**WHEREAS**, the County Administrator's Broadband Initiative Advisory Committee has developed and is providing the Recommendations of the Committee for authorization by the Greene County Board of Supervisors;

**NOW, THEREFORE, BE IT RESOLVED** that the Greene County Board of Supervisors does hereby approve the recommendations of the County Administrator's Broadband Initiative Advisory Committee; and

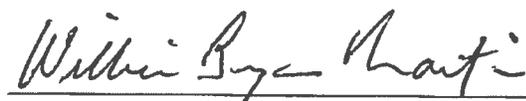
**BE IT FURTHER RESOLVED** that the Board does hereby authorize the County Administrator's Broadband Initiative Advisory Committee to continue its work and the County Administrator to act upon the recommendations thus approved.

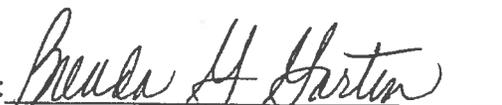
**ADOPTED BY THE GREENE COUNTY BOARD OF SUPERVISORS ON JANUARY 8, 2019.**

Motion: Michelle Flynn  
Second: Dale Herring

Recorded Vote:

Bill Martin	<u>Yes</u>
Michelle Flynn	<u>Yes</u>
David L. Cox	<u>Yes</u>
Marie C. Durrer	<u>Yes</u>
Dale R. Herring	<u>Yes</u>

  
\_\_\_\_\_  
William Bryan Martin, Chair  
Greene County Board of Supervisors

ATTEST:   
\_\_\_\_\_  
Brenda G. Garton, Clerk  
Greene County Board of Supervisors



## GREENE COUNTY BOARD OF SUPERVISORS BROADBAND INITIATIVE

### MISSION STATEMENT

The mission of the Greene County Broadband Initiative is to study, recommend, and support broadband development initiatives with the goal of bringing broadband access to all residents, students, businesses, and visitors in Greene County in the most cost-effective, equitable, minimum risk, high quality, and expedient manner possible.

### RECOMMENDATIONS

Develop a broadband implementation plan with specific attention to the County's anchor institutions such as schools, medical facilities, judicial and law enforcement agencies, and all government buildings.

In collaboration with Emergency Services Communication upgrades, utilize new and/or existing towers and fiber infrastructure to make improvements to the following priorities:

- Emergency Services Communication
- Third party ISP providers
- Third party Cellular providers

Encourage Internet Service Providers (ISP) to invest in providing all residents/businesses with at least 25 megabits of reliable, high-speed broadband access.

Review and update as needed the tower regulations in the Greene County Zoning Ordinance to allow a more streamlined process for situating towers while protecting the aesthetic view sheds.

Explore with and assist developers with plans to provide broadband infrastructure in all new residential and business developments.

Pursue grant and partnership opportunities to support broadband development initiatives