

# Application to DHCD Submitted through CAMS

Orange County, VA

Barboursville Service Area One

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**Application ID:** 64508032019170412  
**Application Status:** Pending  
**Program Name:** Virginia Telecommunications Initiative 2020  
**Organization Name:** Orange County, VA  
**Organization Address:** 112 W. Main St  
Orange, VA 22960  
**Profile Manager Name:** Lewis Foster  
**Profile Manager Phone:** (540) 661-5332  
**Profile Manager Email:** lfoster@orangecountyva.gov

**Project Name:** Barboursville Service Area One  
**Project Contact Name:** Lewis Foster  
**Project Contact Phone:** (540) 661-5332  
**Project Contact Email:** lfoster@orangecountyva.gov  
**Project Location:** 112 W. Main Street PO Box 111  
Orange, VA 22960-0000  
**Project Service Area:** Orange County

**Total Requested Amount:** \$1,452,385.00  
**Required Annual Audit Status:** Accepted

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## Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
<b>Telecommunications</b>	<b>\$1,452,385.00</b>	<b>\$588,434.00</b>	<b>\$2,040,819.00</b>
Construction	\$1,192,891.00	\$298,973.00	\$1,491,864.00
Construction Related Soft Costs	\$185,500.00	\$0.00	\$185,500.00
Other: Electronics	\$73,994.00	\$75,000.00	\$148,994.00
Other: Node Cabinet, Power, Generator	\$0.00	\$25,720.00	\$25,720.00
Other: Upgraded Infrastructure Tower	\$0.00	\$63,291.00	\$63,291.00
Other: Project Management OCBA	\$0.00	\$30,000.00	\$30,000.00
Other: Bandwidth Cost	\$0.00	\$95,450.00	\$95,450.00
<b>Total:</b>	<b>\$1,452,385.00</b>	<b>\$588,434.00</b>	<b>\$2,040,819.00</b>

## Budget Narrative:

The Barboursville Service Area One project will consist of constructing 22.25 miles of fiber in the public ROW including supporting handholes and/or pedestals, fiber drops to customers, node cabinet including generator and electronics to support this proposed project. Detail cost estimates from contractors, engineering and suppliers can be found in attachments that support these costs. The OCBA is in the process of investing an additional \$63,291.00 to this project by adding additional handholes and upgrading the fiber count to connect the Barboursville Tower Facility for the P25 Public Safety Radio System in anticipation of this proposed project while reducing future costs.. This additional infrastructure will be used to provide access to customers along the US33 route and to connect auxiliary roads along the route to provide service. In anticipation of the project scope and time line, County staff will assist with project management, fiscal management, permitting, and legal advice. The cost associated with these staff will be absorbed by the County. The County has calculated the average fully-loaded compensation rate for staff members expected to participate in this project to be \$60 per hour. During this project, it is anticipated that County staff in aggregate, will provide 500 hours of support for a value of \$30,000.00. OCBA will also provide connectivity to Equinix facility in Culpeper to connect to the Internet. The cost for this connectivity is \$95,450.00 and includes collocation space and transport cost to connect to the facility. OCBA plans to purchase a Node Cabinet includes DC Power plant and generator to support this proposed project for a cost of \$25,720.00.

## 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:

On May 22, 2019, Orange County Broadband Authority (OCBA) launched an on-line broadband availability

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survey to help determine where service is and isn't to improve internet service to our residents and businesses in Orange County.

As of August 22, 2019, 139 people have weighed in on this service area and 99% say they are dissatisfied with their current connection. Only about 1% of people have internet speeds of greater than 25 megabits per second, and 37% say they do not have any internet at all. Based on these survey results, this service area was selected.

In the proposed project area, OCBA has also reached out to numerous home owners, home businesses, business owners and realtors to obtain additional information on this area of the county to make sure we understand the limited to non-existent broadband access in the service area.

The proposed broadband project will consist of the construction of a fiber to the premise (FTTP) network within the following areas of Orange County, Virginia:

Albano Road - SR657	Harvest Lane
Angus Road	Poplar Meadow Lane
Blue West One	Ridge Road – SR644
Burnley Road – SR644	Scuffletown Road – SR609
Dogwood Lane	Spotswood Trail – US33 (Eheart to Woodroof RD)
Douglas Road – SR659	Taylorville Road
Evergreen Avenue	Tisdale Road – SR731
Governor Barber Street – SR 678	Vineyard Lane
Hamm Road – SR658	Wilhoits Mill Road (Approx. 1,000 feet from SR609)
Haney Drive (Approx. 1,000 feet from US33)	Woodroof RD – SR652 (US33 to Carey Town PL)

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 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:**

During our initial review to determine existing service providers and speeds offered in our proposed service area, we used the following websites as a source of information.

<https://broadbandmap.fcc.gov/#/>

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<https://broadband.cgit.vt.edu/IntegratedToolbox/#about>

Based on the initial review, OCBA identified the following service providers and technology used in proposed service area.

Company	Technology	Service Speeds Down/up
Comcast Corporation	Cable	987/35
ViaSat	Satellite	30/3
Virginia Broadband, LLC	Fixed Wireless	25/10
DishNet Holdings, LLC	Satellite	25/3
Rural Broadband Network Services, LLC	Fixed Wireless	12/3
Verizon Communications, Inc.	ADSL	5/.768
VSAT Systems LLC	Satellite	2/1.3

OCBA e-mailed Comcast, Virginia Broadband and Rural Broadband Network Services requesting service information to reduce overlapping service coverage. Then OCBA staff rode the entire route multiple times to determine existing last mile service providers for the proposed service area. On August 20, 2019, OCBA received some information from Virginia Broadband. The information received was the same information obtained from above mention websites along with a map that contained dots severed on a map that OCBA couldn't tell the road names and/or addresses.

Below is list of service provider infrastructure found in the Rights-of-way (underground and on poles).

- Verizon Communications Inc. has copper "twisted pair" Digital Subscriber Lines (DSL) service.
- Comcast is located on two poles along Ridge Road to provide service only to a mobile home park. The Willard Mobile Home Park located at 14411 Ridge Road, Barboursville, Virginia. Comcast actual service area is approximately 600 feet inside the proposed service area.
- OCBA staff identified one fixed wireless access point on a silo located along Scuffletown Road.
- Located a Segra 24-count fiber cable connecting a cell tower near the proposed service area. The plan is to connect to this fiber to provide service to the proposed project area.

The attached map shows that the proposed service area is not receiving Connect America Funding (CAFII)

### 3. Project Need/Description

To be eligible for VATI, applicants must demonstrate that the proposed project area(s) is unserved. An unserved

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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:**

OCBA used an on-line survey and speed test to collect information to assist with determining broadband access and speeds in the proposed service area. While reviewing the speed test results, we noticed inconsistencies in our test results on the same road. OCBA staff reached out to the residents/businesses to obtain additional information. We found out the residents/businesses that had faster speeds were using a wireless cellular service hotspot or it was a very sunny day and using satellite service. OCBA has also received numerous e-mails and phone calls from the business and residents in the service area.

In reference to overlapping service, Comcast is located only on two poles along Ridge Road servicing a mobile home park at the edge of the proposed service area. Only one fixed wireless access point has been verified in the proposed service area. Based on this assessment, less than two (2) percent will be an overlap.

dishNet and ViaSat are satellite providers that have data caps and do not offer low latency required for real-time applications and Virtual Private Network connections. Our proposed fiber-based network will provide ultra-low latency with no data caps.

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:**

OCBA had our GIS department analyze the proposed fiber routes in the proposed service area using the following criteria, total number of homes, business, etc. within 250 of road center line. Based on this criteria, the number of serviceable units in the project area is 590.

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:**

Business Name	Business Address
ABC Auto Sales Inc.	3083 Spotswood Trail A, Barboursville, VA 22923
Amanda Chance	15228 Burnley Rd Barboursville Virginia 22923
Barboursville Community Park	5260 Governor Barbour Street, Barboursville, Virginia, 22923
Barboursville Ruritan Club	5259 Governor Barbour Street, Barboursville, Virginia, 22923

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Barboursville Volunteer Fire Company	5251 Spotswood Trail, Barboursville, Virginia, 22923
Bowen & Sons Trucking	15070 Albano Rd, Barboursville, VA 22923
Carpenters at Large	1448 Hillcrest Ln, Barboursville, VA 22923
Chestnut Grove Baptist Church	3510 Spotswood Trail, Barboursville, VA 22923
Colorado Linens	5295 Spotswood Trail, Barboursville, VA 22923
Colvin's Animal Damage Control	2000 Sb Rd, Barboursville, VA 22903
Compact Loader Services	3613 Spotswood Trail, Barboursville, VA 22923
Conservation & Forestry Services LLC	12505 Albano Road, Barboursville VA 22923
Edgewood Miller Farm	5291 Scuffletown Rd, , Barboursville, VA 22923
Four County Players, Inc.	5256 Governor Barbour Street, Barboursville, Virginia, 22923
Hannold Media Services	4645 Spotswood Trail, Barboursville VA 22923
High Speed Auto	5416 Spotswood Trl, Barboursville, Virginia, 22923
Hogsten Lawn and Land	6174 Scuffletown Road, Barboursville, VA 22923
Horton Vineyards	6399 Spotswood Trl Gordonsville VA 22942
Johnson Tire LLC	4422 Spotswood Trl, Barboursville, Virginia, 22923
KAT Associates Inc	4066 Hamm Rd, Barboursville, VA 22923
Lauren R Stafford Bruce	3311 Angus Road, Barboursville, VA 22923
Nichols Gallery and Studio	5420 Gov. Barbour St., Barboursville VA 22923
Reynard Florence Vineyard	16109 Burnley Rd, Barboursville, VA 22923
Ridge Pottery	16354 Burnley Road, Barboursville, VA 22923
Rivandale Farm	5290 Ridge Road, Somerset, VA 22972
Rose Hauling LLC	4330 Ridge Rd, Barboursville, VA 22923
Royal Market Gas Station	4201 Spotswood Trl, Barboursville, Virginia, 22923
Solid Rock Full Gospel	3580 Spotswood Trail, Barboursville, VA 22923
Spiffy	15609 Burnley Road, Barboursville, VA 22923
Stonefire Station	5361 Spotswood Trl, Barboursville, Virginia,

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	22923
Swan's Accounting Service	14041 Albano Rd, Barboursville, VA 22923
The Barboursville Inn	12421 Albano Rd, Barboursville, VA 22923
True-Cut Lawn Care	16441 Douglas Rd, Barboursville, VA 22923
Waverley Farm	13434 Waverley Farm Dr Somerset VA 22972

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:**

Based on the survey responses, phone calls and e-mails received from the residents and businesses, OCBA believes we will have a least a fifty (50) percent take rate.

Madison Gigabit Internet staff plans the following outreach plan in the service area to increase the take rate of the proposed project.

- Knock on doors
- Signs by the street
- Newspaper ads
- Mail postcards to homes
- Front-door flyers

OCBA plans to post information on the County website, provide presentations to local organizations and provide updated information to the local news media.

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:**

N/A

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.

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## Proposed Residential and Business Rates (PON)

The technology we plan to use to deliver broadband service is a Passive Optical Network (PON) network that will provide the next generation broadband access to our unserved areas of our community. Below are proposed Residential and Business (PON) Rates. If a customer desires a dedicated 10G broadband connection, we will be able to provide the service on a case by case basis.

Customer Type	Speed Tiers	Customer Retail Rate	Notes
Residential 1	25/10	\$35.00*	Shared network asymmetrical plus installation
Residential 1	100/100	\$75.00	Shared network symmetrical plus installation
Residential 1	500/500	\$150.00	Shared network symmetrical plus installation
Residential 1	1000/1000	\$175.00	Shared network symmetrical plus installation
Business	50/50	\$75.00	Shared network symmetrical plus installation
Business	100/100	\$150.00	Shared network symmetrical plus installation
Business	500/500	\$250.00	Shared network symmetrical plus installation
Business	1000/1000	\$300.00	Shared network symmetrical plus installation

\*Note Customer must show proof of financial hardship.

## Installation Cost

The installation cost of \$400.00 covers the cost of electronics including labor inside the business and residence.

Installation cost based on Agreement type

- No Agreement – Payment of \$400.00
- 3-month Agreement - Additional \$140.00 for three (3) months then monthly agreement
- 6-month Agreement – Additional \$70.00 for six (6) months then monthly agreement
- Annual Agreement – Additional \$35.00 for twelve (12) months then monthly agreement

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

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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:

Due to tree cover and terrain in the proposed service area, the plan is to implement a Fiber-to-the-premises (FTTP) PON network that will provide the next generation broadband access to our communities unserved areas in Orange County.

This network will provide the greatest capacity, reliability, and flexibility of all wireline solutions and is therefore the state-of-the-art wireline transport technology. Fiber itself provides a broad communications spectrum and has a capacity of hundreds of Gbps per fiber with off-the-shelf equipment; even low-priced equipment can provide 1 Gbps. Because it contains no metal components, fiber is not susceptible to interference from outside signals or to corrosion. Fiber installed over 25 years ago is still not physically or technologically obsolete, thus using making it the best long-term investment for our community. The technology can be upgraded by simply replacing and upgrading the network electronics at each end of the fiber connection.

The proposed service area will tie into our under-construction fiber backbone that will serve the Barboursville Tower Site. This tower site will be used for our Public Safety P25 Radio System for first responders. This construction will be completed by December 2019. We plan to also tap into this fiber cable along US 33 route to provide access to customers and connect roads along the route to provide service.

The proposed service area will be connected to the internet from two directions to provide redundant Internet connections and to reduce network outages. From the North-West, we plan to connect to a Segra fiber cable that is providing service to a cell tower close to the service area. From the South-East, we plan to transverse the OCBA network to connect to the Network Access Point (NAP) in Culpeper via Rappahannock Electric Cooperative (REC) dark fiber. REC is currently installing the fiber and will have this dark fiber available by end of December 2019. If REC doesn't meet this deadline, OCBA will lease fiber from Crown Castle to connect to the NAP in Culpeper.

## 10. Project Readiness

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.

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## Answer:

Preliminary service area fiber route design has been completed. Once we have been notified of the grant award, our engineers will start reviewing the draft design. After the review process, the engineers will then walk and ride the route reviewing the critical areas (ROW, existing utilities, creek/river crossings, and culverts, etc.) of construction then make necessary modifications to the preliminary plans. Within three months of the grant award notification, we will have all necessary drawings, permits and materials to start construction. Easements should not be necessary because our plan is to install the fiber infrastructure inside the public Rights of Way. If an easement is necessary, our County Attorney will expedite the process to move this forward and completed within 12 months of signed agreement.

During the construction phase of the project, OCBA will provide contracted professional engineering staff, construction contractors, project management and inspection services to oversee the construction phase of the project. OCBA will be responsible for procuring these professional services before the grant award in December 2019.

Orange County Broadband Authority (OCBA) and Madison Gigabit Internet, Inc. (MGI), is in the process of formalizing an agreement to provide Internet Service in the Barboursville Service Area One. OCBA will be responsible for payment of invoices and filing necessary reports for the grant. After the project has been completed, OCBA will own and manage the fiber infrastructure assets (locates, FTTP head end equipment, fiber splicing, etc.) to provide internet service to the customer. MGI will manage the customer and provide the premise equipment to provide internet services. MGI will pay OCBA a reasonable monthly fee per connection charge to provide service to the customer.

MGI will start connecting customers to the internet in May 2020 and will be completed by end of December 2020.

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.

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

## Answer:

Orange County Broadband Authority (OCBA) has committed \$298,973.00 in cash and MGI has committed \$75,000 in cash towards this project. In anticipation of this project, OCBA is in the process of investing an additional \$63,291.00 to upgrade the fiber infrastructure to connect the Barboursville Tower Site for the P25 Public Safety Radio System . The additional fiber infrastructure will be used to provide access to customers along the US33 route and connect auxiliary roads along the route to provide service.

OCBA will also provide connectivity to Equinix facility in Culpeper to connect to the Internet. The cost for this

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connectivity is \$95,450.00 and includes collocation space and transport cost to connect to the facility. OCBA plans to purchase a Node Cabinet includes DC Power plant and generator to support this proposed project for a cost of \$25,720.00.

In anticipation of the project scope and time line, County staff will assist with project management, fiscal management, permitting, and legal advice. The cost associated with these staff will be absorbed by the County. The County has calculated the average fully-loaded compensation rate for staff members expected to participate in this project to be \$60 per hour. During this project, it is anticipated that County staff in aggregate, will provide 500 hours of support. The additional in-kind contribution to this project is about \$30,000.00

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:**

A formal agreement between Orange County Broadband Authority and Madison Gigabit Internet, Inc. is currently under development.

As part of the agreement, OCBA has committed \$513,434 in cash and in-kind and MGI has committed \$75,000.00 in cash. OCBA will utilize our contracted service firms to design, inspect and construct the broadband infrastructure to expedite the construction process.

Orange County staff will also provide support to expedite permits, right of way access, easements and other support to reduce delays of project.

After the project has been completed, OCBA will own and manage the fiber infrastructure assets (locates, FTTP head end equipment, fiber splicing, etc.) to provide internet service to the customer. MGI will manage the customer and provide premise equipment to connect to the internet. MGI will pay OCBA a reasonable monthly fee per connection charge to utilize the fiber to provide service to the customer

The plan is to use Segra and Rappahannock Electric Cooperative (REC) dark fiber to connect to the internet to provide services. OCBA is in the process of working with these companies to obtain access before January 2020. OCBA plans to cover cost associated with these expenses.

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:**

Name	Title	Role and Responsibilities
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Lewis Foster	Broadband Program Manager  Orange County Broadband Authority	Overall Project Management  Coordinate planning and scheduling with Contracted Engineering and Inspection firm to oversee construction.  Assist with preparing quarterly and close out reports.  Updating Broadband Authority on project progress including schedules.
Clinton Hyde	President  Madison Gigabit Internet, Inc.	Scheduling and coordinating customer installations with Madison Gigabit Internet staff and contractors.  Responsible for Installing and configuring premise equipment in a timely manner.  Managing the customer including billing for services
Stephanie Straub	Director of Management Services  Orange County Virginia	Procuring professional services, materials and supplies quotes before grant is awarded for project.
Michelle Williams	Administrative Assistant  Orange County Virginia	Process Invoices and remittances to DHCD.  Preparing and submitting Quarterly Reports and close out report to DHCD  Invoice MGI for services provided by OCBA.
Jim Whipp	GIS Analyst  Orange County Virginia	Map and Inventory fiber infrastructure
Thomas E. Lacheney	County Attorney  Orange County Virginia	Will provide legal assistance to the 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.

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The project will consist of constructing 22.25 miles of fiber in the public ROW, supporting handholes and/or pedestals, fiber drops to customers, node cabinet including generator and electronics to support this proposed project. Detail cost estimates from contractors, engineering and suppliers can be found in attachments that support these cost.

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

**Answer:**

The total project cost is \$2,040,819.00 with a request of \$1,452,385.00 of state funding.

The number of serviceable units is 590.

The highest residential speed available is 10G upon request. We plan to initially advertise speeds up to 1GB in our service area.

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:**

Orange County has worked with numerous state and federal agencies on many types of grants.

Orange County Broadband Authority Program Manager has prior experience with managing broadband grant projects including startup experience in Georgia.

Below is a summary of experience.

- Developed BTOP application and received \$13.5 million BTOP grant from Department of Commerce on March 2, 2010.
- Acted as BTOP stimulus grant project manager, duties included planning, executing and finalizing project according to a strict deadline and within budget. This includes acquiring resources and coordinating the efforts of team members and third-party contractors and consultants to deliver project according to plan.
- Fiber Construction started on December 13, 2010 and network operations began on September 6, 2012.

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- Over two hundred miles of fiber and seven towers (5) BTOP funded, (2) County Funded, Point of Presence Facility (County Funded)
- Planned, directed, and coordinated the startup operation of the Broadband Utility department. Duties and responsibilities included formulating policies and procedures, hiring and developing staff, acquiring equipment and services, forecasting revenues and expenses, making operational changes as needed, and expanding the network.

Since May 2018, Madison Gigabit Inc. (MGI) has been in business providing wireless Internet services in Madison County. MGI is currently expanding their service area outside of Madison County. MGI also provides a secondary service of configuring and repairing computers so they can access internet service.

## 17. Commonwealth Priorities

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 Orange County Broadband Authority (OCBA) recognizes there is an increasing residential and commercial demand for affordable and reliable high-speed broadband as well as an inescapable need to use broadband to deliver efficient and effective local government services and promote economic development.

Orange County is predominately a rural community that has limited high-speed broadband availability. Currently private sector broadband companies are unable to provide affordable, high-speed broadband service due to large upfront capital expenses with a relatively small potential customer base to produce profitable revenue.

OCBA solution to our broadband problem is a multi-faceted. Leverage dark fiber connectivity assets to schools and public safety facilities by upsizing the fiber counts along with building multi-tenant towers to support first responders radio system. By significantly reducing capital expense barriers for private service providers, we will be able to recruit new Internet Service Providers (ISP) to our community to provide affordable, reliable high-speed broadband options for unserved and underserved Orange County's citizens and businesses.

OCBA has recently completed connecting all the Orange County Public Schools (OCPS) facilities with fiber for a Wide-Area Network (WAN). The WAN provides reliable and secure transmission of data, voice and video between each facility while reducing operating costs. The project connected nine facilities with 33 miles of fiber and was funded by E-Rate, OCPS and OCBA funds. Currently OCBA is constructing 22 miles of fiber to connect seven critical Public Safety facilities with fiber to transport radio traffic for the new Public Safety P25 Radio System. The fiber along with microwave communications will provide redundant connections for each site to reduce outages while being used to protect our first responders and citizens.

Based on our recent broadband survey results, OCBA has developed and approved 13 areas (see Master Service Area Map) that are unserved and/or underserved areas of Orange County. OCBA is in the process of prioritizing each service area, determining costs, funding sources and developing a master schedule.

This proposed project is critical to our future expansion into other areas of Orange County that are unserved and/or underserved by broadband access. This proposed Service Area One along with Service Area Six is critical to our

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master plan. The proximity to existing fiber assets (Segra Fiber US33) to obtain access to the outside world is near to this proposed service area. This connectivity will allow ISP's to connect to the OCBA network to provide services in the future. The proposed service area also stops at the Orange/Greene line in three different locations. Based on survey results and conversations with realtors there is a need for broadband in these areas outside of Orange County. OCBA will be glad to partner with ISP's to provide service to these areas in the future.

The proposed project will also include installation of wireless access points in Barboursville Community Park. This will allow our citizens and students access to the internet until we rollout services into their areas of Orange County

## 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:

Please find attached OCBA our recent survey information, OCBA Broadband Master Service Area map and our public comments.

### Attachments:

Map(s) of project area, including proposed infrastructure

BarboursvilleServiceArea827201972924.pdf

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

BarboursvilleServiceArea1ExistingProviderMap816201964054.pdf

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

BarboursvilleServiceArea1CAFIFundingAreas827201972948.pdf

# Application to DHCD Submitted through CAMS

Orange County, VA

Barboursville Service Area One

---

Documentation that proposed project area is unserved based on VATI criteria

BarboursvilleServiceArea1UnservedAreas816201955703.pdf

Project Management Plan

ServiceAreaOneBarboursvilleProjectManagementPlan816201985232.xlsx

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

RelationshipApplicantandCoapplicant8282019125448.pdf

Letters of Support

BarboursvilleLettersofSupport8302019111001.pdf

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

InKindDocumentationServiceAreaOne828201925603.pdf

Funding Sources Table

VATIFundingSourcesServiceAreaOneBarboursville827201973236.docx

Derivation of Cost (Project Budget)

ServiceAreaOneCostWorksheet829201961622.xlsx

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

SupportingCostsBarboursvilleServiceAreaOne8272019110428.pdf

Two most recent Form 477 submitted to FCC

63019Form477FCCMGI827201972611.pdf

Copy of Public Notice

NoticeonIntentiontoApplyforGrantApplicationMGI815201993903.pdf

Optional

ServiceAreasOverviewv3827201972655.pdf

# Application to DHCD Submitted through CAMS

Orange County, VA

Barboursville Service Area One

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Optional

SurveyResponsesMap20190822823201952133.pdf

Optional

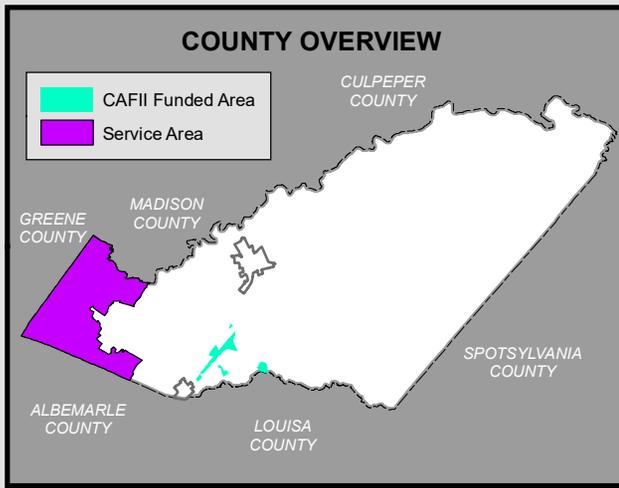
OCBASurveyResultsServiceAreaOneSummary8222019824201950803.pdf

Optional

BarboursvillePublicComment8302019111042.pdf

## Notes:

This project is very important to our community because the proposed service area is unserved and has a very high demand for broadband service based on our recent OCBA survey responses in the proposed service area. Without adequate broadband connectivity our students, farmers, businesses including home businesses, and healthcare providers are suffering from the lack of broadband service. On May 22, 2019, Orange County Broadband Authority (OCBA) launched an on-line broadband availability survey to help determine where service is and isn't to improve internet service to our residents and businesses in Orange County. As of August 22, 2019, over 600 people have weighed in and 88% say they are dissatisfied with their current connection. Only 12% of people have internet speeds of greater than 25 megabits per second and satisfied with service, and 25% say they do not have any internet at all. Below is a three-month summary of our survey results. Responded 645 Measurable Responses 608 Service Speed Percentage No Internet Access 25% 0-10 Mbps 38% 11-25 Mbps 16% >25Mbps and not satisfied with service 9% >25Mbps and satisfied with service 12% Based on our recent broadband survey results, OCBA has developed and approved 13 areas (see Master Service Area Map) that are unserved and/or underserved areas of Orange County. OCBA is in the process of prioritizing each service area, determining costs, funding sources and developing a master schedule.



### PROPOSED AREAS BEING SERVED

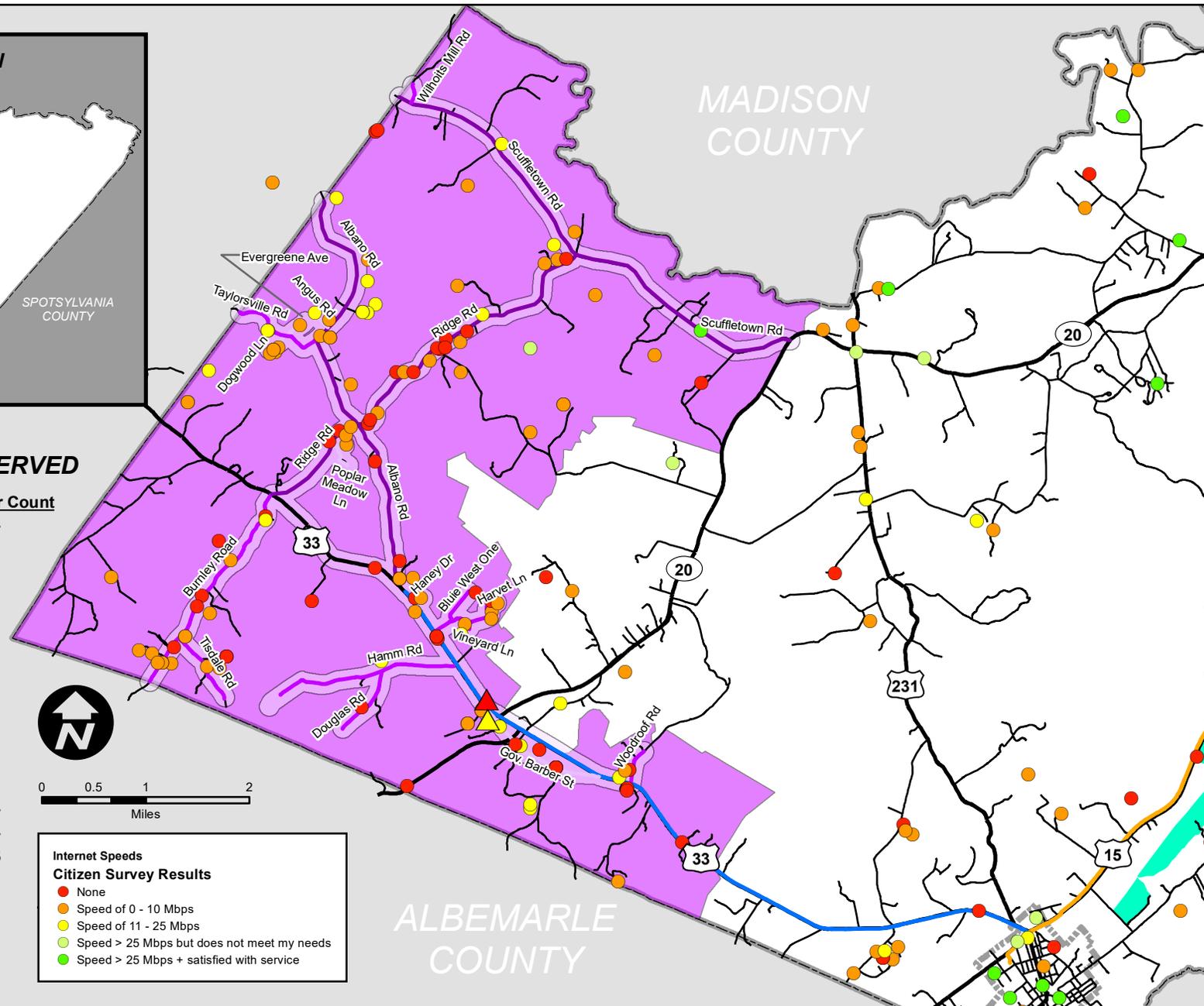
Road/Route Name	Fiber Count
Albano Road - SR657	144
Angus Road	24
Bluie West One	48
Burnley Road – SR644	48
Dogwood Lane	24
Douglas Road – SR659	48
Evergreen Avenue	24
Governor Barber Street - SR678	24
Hamm Road – SR658	48
Haney Drive	24
Harvest Lane	48
Poplar Meadow Lane	24
Ridge Road – SR644	144
Scuffletown Road – SR609	144
Spotswood Trail	288
Taylorville Road	48
Tisdale Road – SR731	48
Vineyard Lane	48
Wilhoits Mill Road	48
Woodroof RD – SR652	48



**Internet Speeds**

**Citizen Survey Results**

- None
- Speed of 0 - 10 Mbps
- Speed of 11 - 25 Mbps
- Speed > 25 Mbps but does not meet my needs
- Speed > 25 Mbps + satisfied with service



Orange County GIS

Gordon Building  
112 West Main Street  
P.O. Box 111  
Orange, VA 22960

## ORANGE COUNTY - BARBOURVILLE SERVICE AREA

COMMISSIONED LF  
DRAWN JHW  
DATE 08/22/19

Barbourville Community Park & Four County Players  
Barbourville Volunteer Fire Station

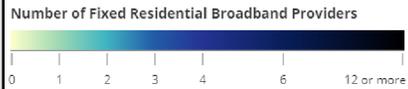
Service Area Fiber Count  
24 Strand  
48 Strand  
144 Strand

Fiber Phase  
Phase 1  
Phase 2

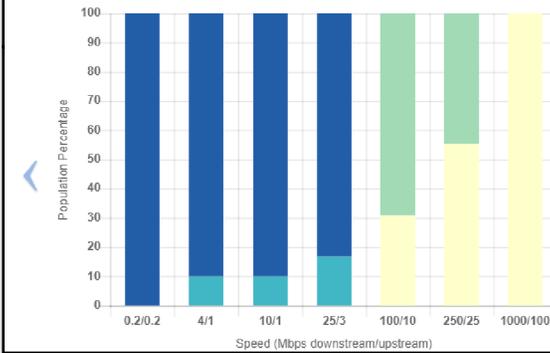
CAFII Funded Area  
250ft Service Area  
Proposed Service Area  
Town Boundaries

Serviceable Units:  
**590**

Orange County, VA



**Broadband**  
 Technology ADSL, Cable, Fiber, Fixed Wireless, Satellite, Other  
 Speed ≥ 100/10 Mbps  
 Date Dec. 2017 (latest public release)



Provider	Tech	Down (Mbps)	Up (Mbps)
Comcast Corporation COMCAST CABLE COMMUNICATIONS, LLC Comcast	Cable	987	35
Viasat, Inc.	Satellite	30	3
dishNET Holding, LLC HNS License Sub, LLC Hughesnet	Satellite	25	3
Rural Broadband Network Services LLC HighSpeedLink.net	Fixed Wireless	12	3
VSAT Systems, LLC Skycasters	Satellite	2	1.3

**PROPOSED AREAS BEING SERVED**

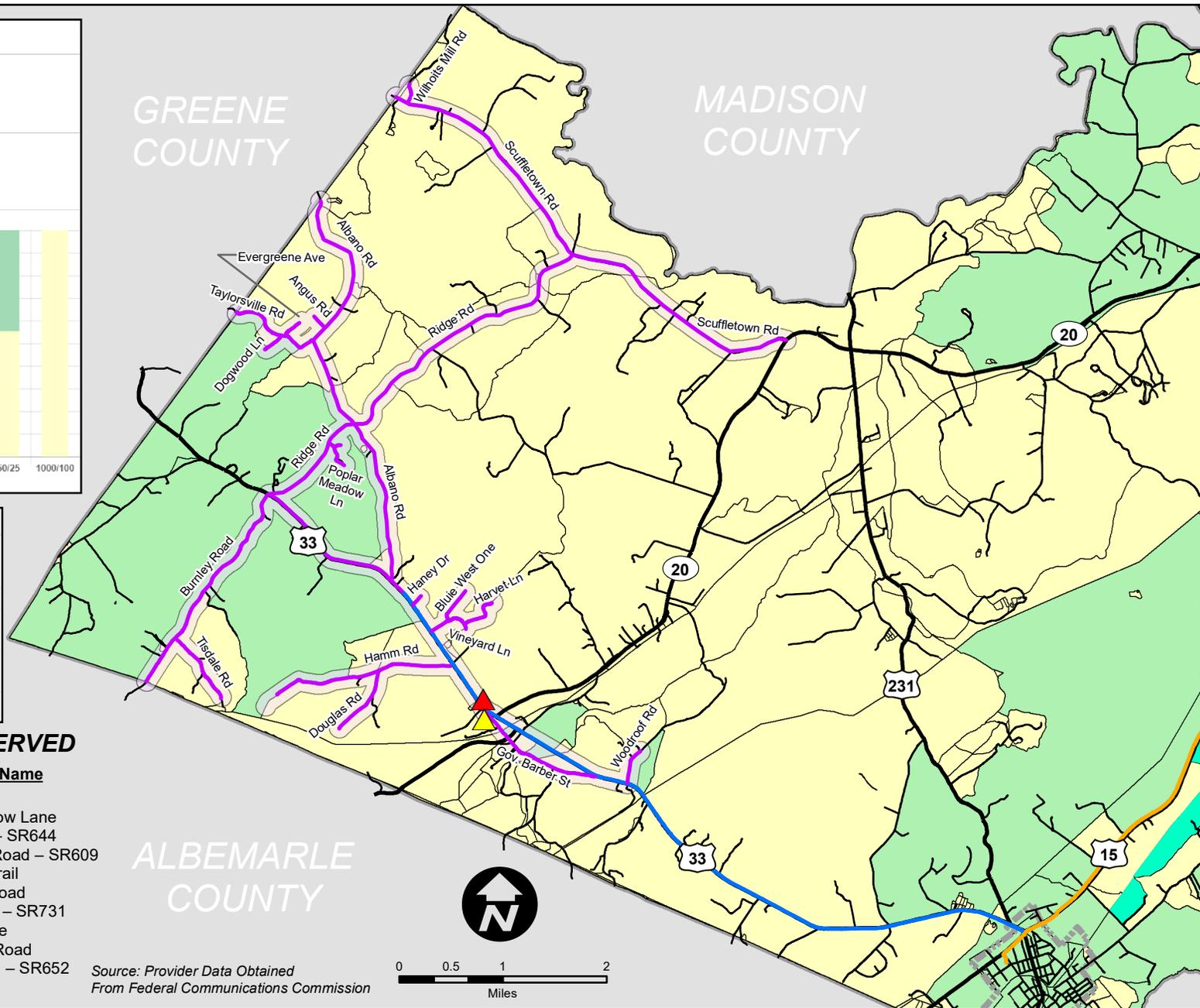
**Road/Route Name**

- Albano Road - SR657
- Angus Road
- Blue West One
- Burnley Road - SR644
- Dogwood Lane
- Douglas Road - SR659
- Evergreen Avenue
- Governor Barber Street - SR678
- Hamm Road - SR658
- Haney Drive

**Road/Route Name**

- Harvest Lane
- Poplar Meadow Lane
- Ridge Road - SR644
- Scuffletown Road - SR609
- Spotswood Trail
- Taylorville Road
- Tisdale Road - SR731
- Vineyard Lane
- Wilhoits Mill Road
- Woodroof RD - SR652

Source: Provider Data Obtained From Federal Communications Commission



Orange County GIS

Gordon Building  
 112 West Main Street  
 P.O. Box 111  
 Orange, VA 22960

**BARBOURVILLE SERVICE AREA - EXISTING PROVIDERS**

COMMISSIONED  
 DRAWN  
 DATE

LF  
 JHW  
 08/15/19

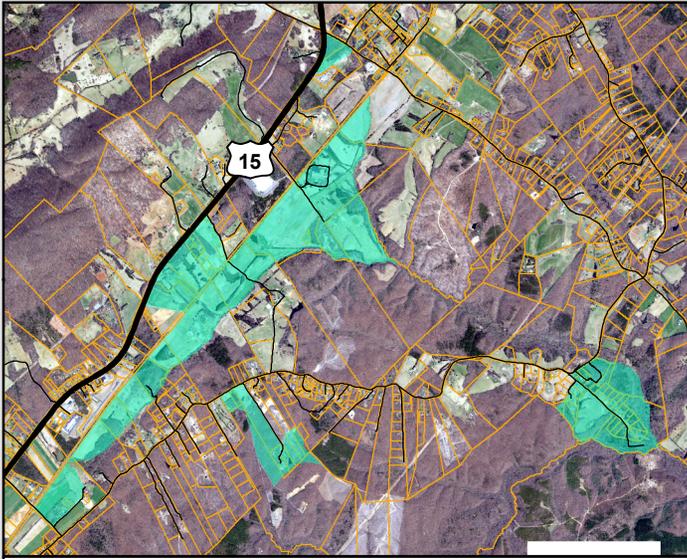
<ul style="list-style-type: none"> <li>Barbourville Community Park &amp; Four County Players</li> <li>Barbourville Volunteer Fire Station</li> </ul>	<p><b>Fiber</b></p> <ul style="list-style-type: none"> <li>Phase 1</li> <li>Phase 2</li> <li>Proposed Service Area Fiber</li> </ul>	<ul style="list-style-type: none"> <li>CAFII Funded Area</li> <li>Proposed Service Area</li> <li>Town Boundaries</li> </ul>	<p><b>Existing Providers Residential</b></p> <ul style="list-style-type: none"> <li>0</li> <li>1</li> </ul>
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Serviceable Units:  
**590**

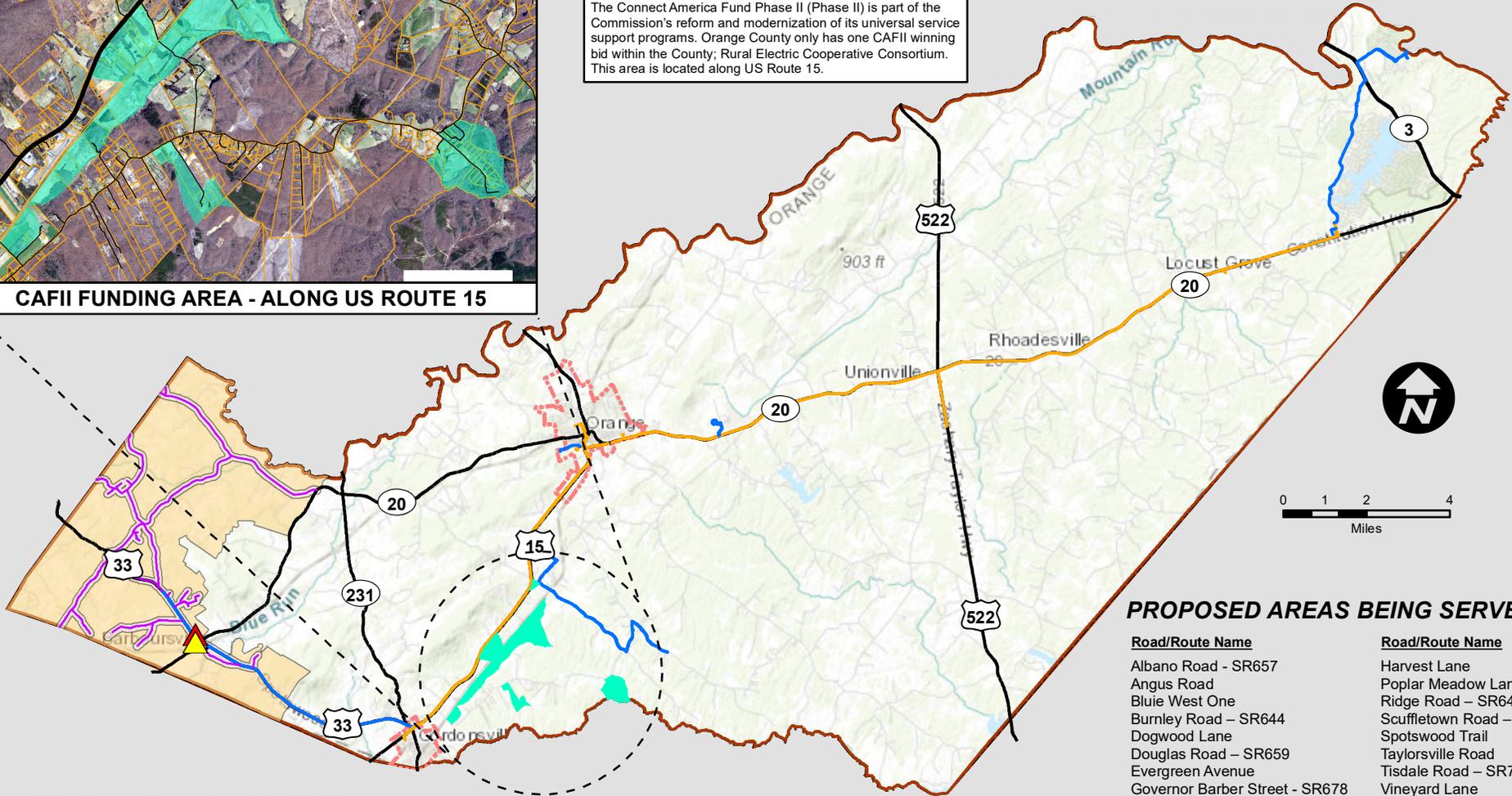
### Connect America Fund Phase II: Auction 903 Results

Bidder	Rural Electric Cooperative Consortium
Tier	Gigabit
Latency	Low

The Connect America Fund Phase II (Phase II) is part of the Commission's reform and modernization of its universal service support programs. Orange County only has one CAFII winning bid within the County, Rural Electric Cooperative Consortium. This area is located along US Route 15.



**CAFII FUNDING AREA - ALONG US ROUTE 15**



### PROPOSED AREAS BEING SERVED

Road/Route Name	Road/Route Name
Albano Road - SR657	Harvest Lane
Angus Road	Poplar Meadow Lane
Bluie West One	Ridge Road - SR644
Burnley Road - SR644	Scuffletown Road - SR609
Dogwood Lane	Spotswood Trail
Douglas Road - SR659	Taylorville Road
Evergreen Avenue	Tisdale Road - SR731
Governor Barber Street - SR678	Vineyard Lane
Hamm Road - SR658	Wilhoits Mill Road
Haney Drive	Woodroof RD - SR652

Source: Federal Communications Commission, Virginia Information Technologies Agency, Orange County VA Broadband Survey



### Orange County GIS

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112 West Main Street  
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Orange, VA 22960

## BARBOURSVILLE SERVICE AREA - NO CAF FUNDING AREAS PRESENT

COMMISSIONED LFW  
DRAWN JHW  
DATE 08/22/19

<p>Fiber</p> <ul style="list-style-type: none"> <li><span style="color: orange;">—</span> Phase 1</li> <li><span style="color: blue;">—</span> Phase 2</li> <li><span style="color: purple;">—</span> Proposed Service Area Fiber</li> </ul>	<ul style="list-style-type: none"> <li><span style="background-color: #00FF00; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> CAFII Funded Area</li> <li><span style="border: 1px solid black; border-radius: 50%; width: 15px; height: 10px; display: inline-block;"></span> 250ft Service Area</li> <li><span style="background-color: #FFD700; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Proposed Service Area</li> <li><span style="border: 2px dashed red; display: inline-block; width: 15px; height: 10px;"></span> Town Boundaries</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: orange;">▲</span> Barbourville Community Park &amp; Four County Players</li> <li><span style="color: red;">▲</span> Barbourville Volunteer Fire Station</li> </ul>
--	--	---

Serviceable Units:  
**590**

**Internet Speeds**

**Citizen Survey Results**

- None
- Speed of 0 - 10 Mbps
- Speed of 11 - 25 Mbps
- Speed > 25 Mbps but does not meet my needs
- Speed > 25 Mbps + satisfied with service

**PROPOSED AREAS BEING SERVED**

Road/Route Name

- Albano Road - SR657
- Angus Road
- Bluie West One
- Burnley Road - SR644
- Dogwood Lane
- Douglas Road - SR659
- Evergreen Avenue
- Governor Barber Street - SR678
- Hamm Road - SR658
- Haney Drive

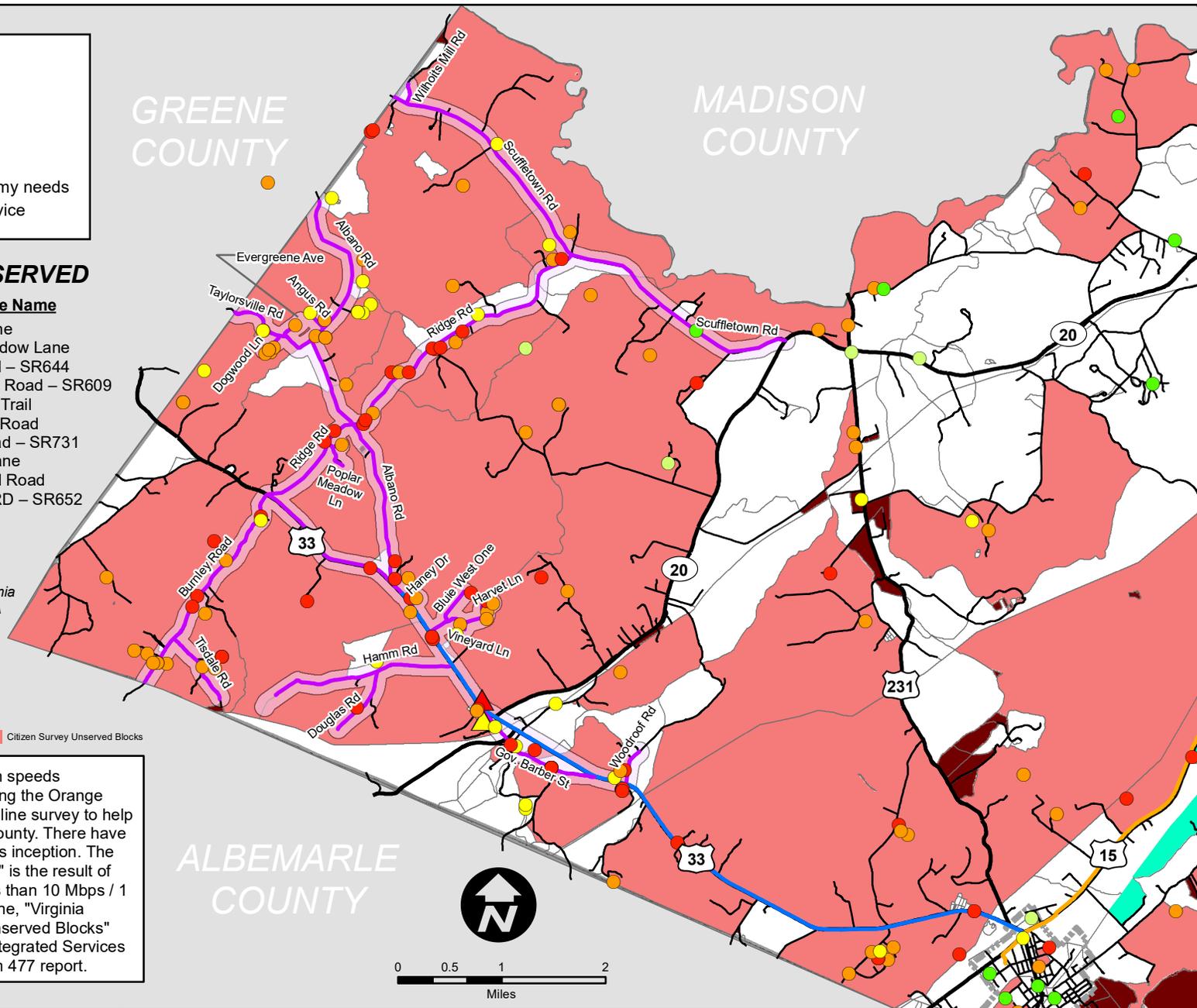
Road/Route Name

- Harvest Lane
- Poplar Meadow Lane
- Ridge Road - SR644
- Scuffletown Road - SR609
- Spotswood Trail
- Taylorsville Road
- Tisdale Road - SR731
- Vineyard Lane
- Wilhoits Mill Road
- Woodroof RD - SR652

Source: Federal Communications Commission, Virginia Information Technologies Agency, Orange County VA Broadband Survey

■ Virginia Information Technologies Agency Unserved Blocks    ■ Citizen Survey Unserved Blocks

An Unserved Area is defined as an area with speeds of 10 Mbps / 1 Mbps or less. Earlier this spring the Orange County Broadband Authority launched an online survey to help determine internet speeds throughout the County. There have been over 600 participants since the survey's inception. The data layer, "Citizen Survey Unserved Blocks" is the result of submissions that indicated the user had less than 10 Mbps / 1 Mbps intersected with the Census Blocks. The, "Virginia Information Technologies Agency" (VITA) Unserved Blocks" data layer comes directly from the State's Integrated Services Division which highlights the latest FCC form 477 report.



**Orange County GIS**

Gordon Building  
112 West Main Street  
P.O. Box 111  
Orange, VA 22960

**BARBOURVILLE SERVICE AREA - UNSERVED AREAS**

COMMISSIONED  
DRAWN  
DATE

LF  
JHW  
08/15/19

Fiber  
Phase 1  
Phase 2  
Proposed Service Area Fiber

▲ Barbourville Community Park & Four County Players  
CAFII Funded Area  
Proposed Service Area  
Town Boundaries

▲ Barbourville Volunteer Fire Station  
Census Blocks  
Citizen Survey Unserved Blocks  
VITA Unserved Blocks

Serviceable Units:  
**590**



# ORANGE COUNTY, VIRGINIA

## BROADBAND AUTHORITY

**S. LEWIS FOSTER**  
BROADBAND PROGRAM MANAGER

PHONE: (540) 661-5332



127 BELLEVIEW AVENUE  
LOWER LEVEL  
P. O. Box 111  
ORANGE, VIRGINIA 22960

[orangecountyva.gov](http://orangecountyva.gov)

August 27, 2019

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

RE: Virginia Telecommunications Initiative (VATI) 2020 - Barboursville Service Area One

Dear Dr. Holmes,

We are delighted to submit this VATI application for assistance to help provide service to over 590 homes and businesses with broadband connectivity in the Barboursville area of Orange County, Virginia. The purpose of this letter is to commit Orange County Broadband Authority (OCBA) in the form of cash and in-kind assistance to the proposed project and outline the shape and roles with our co-applicant, Madison Gigabit, Inc. (MGI) located in Madison, Virginia.

The roles will be as follows:

- OCBA and MGI will perform all work outlined in the VATI application including a follow-up agreement.
- OCBA will provide contracted professional engineering staff, construction contractors, project management and inspection services to oversee the construction phase of the project.
- OCBA staff will manage the overall project.
- OCBA will procure and own the electronic headend equipment for MGI to use and provide internet service.
- OCBA will own and manage the fiber infrastructure assets (locates, headend equipment, splicing, etc.) after construction is completed.
- MGI will manage the customer and provide customer premise equipment.
- MGI will pay OCBA a reasonable monthly fee per connection charge to utilize the fiber and provide service to the customer.
- OCBA staff will administer the grant including review of Co-applicants requests for reimbursement, setting up EFT with the funder, seeking funds and disbursements with MGI and preparing related information for auditors.
- All decisions on reimbursement will be made by the Grantor (DHCD). OCBA will not be responsible for any non-reimbursement expenses by MGI.
- Promotional outreach will be done by MGI and OCBA.

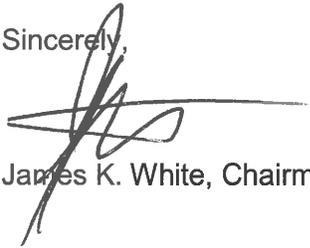
OCBA will commit \$513,434 to this project for the following items:

- Cash match of \$298,973.00.
- At least 500 hours of in-kind assistance, worth \$30,000.00.
- Upgraded fiber infrastructure to support additional customers in Service Area One, a value of \$63,291.00.
- Purchase of node cabinet, generator, and DC Power Plant \$25,720.00.
- Purchase bandwidth and colocation at Equinix in Culpeper \$95,450.00.

OCBA will sign a formal agreement with MGI for services and make sure we are prepared to act promptly to complete this project within twelve (12) months of award.

Thank you for your consideration and support.

Sincerely,

A handwritten signature in black ink, appearing to read 'James K. White', with a long horizontal line extending to the right.

James K. White, Chairman

## Relationship between Applicant and Co-Applicant.

A formal agreement between Orange County Broadband Authority (OCBA) and Madison Gigabit Internet, Inc. (MGI) is currently under development. OCBA approved submitting the VATI grant application with MGI on August 6, 2019.

As part of the agreement, OCBA has committed \$298,973.00 in cash and MGI has committed \$75,000.00 in cash. OCBA will utilize our contracted service firms to design, inspect and construct the broadband infrastructure to expedite the construction process.

Orange County staff will also provide support to expedite permits, right of way access, easements and other support to reduce delays of project.

After the project has been completed, OCBA will own and manage the fiber infrastructure assets (locates, FTTP head end equipment, fiber splicing, etc.) to provide internet service to the customer. MGI will manage the customer and provide premise equipment to connect to the internet. MGI will pay OCBA a reasonable monthly fee per connection charge to utilize the fiber to provide service to the customer

Madison Gigabit Internet, Inc.  
200 Washington Street  
Madison, Virginia 22727  
<http://www.madisongigabit.com/>



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

RE: Virginia Telecommunications Initiative (VATI) 2020 - "Barboursville Service Area One"

Dear Dr. Holmes,

I am writing to convey my support of the application submitted by the Orange County Broadband Authority, in partnership with Madison Gigabit Internet, Inc. The project, known as "Barboursville Service Area One," will allow installation of a fiber-to-the-premise (FTTP) network to provide broadband service in the unserved Barboursville and Eheart areas of Orange County. The project will serve 590 homes, home-based businesses, and traditional businesses in the service area. Additionally, the project will connect Barboursville Volunteer Fire Company, Barboursville Community Park, and the non-profit Four County Players organization.

Madison Gigabit will be serving as the private/commercial partner in this project. MGI exists because of the need to expand and improve internet access everywhere, and specifically near our home county of Madison. We are pleased and proud to have been selected by OCBA as their partner. MGI will be the service provider and customer-facing supporting organization, and because we believe in local operation and control, will operate a branch office locally in Orange County.

The goal of VATI is to create strong, competitive communities throughout the Commonwealth by preparing those communities to build, utilize, and capitalize on telecommunications infrastructure. This project is essential to our community by providing access to healthcare via telemedicine, increased educational opportunities through distance learning, and encouraging entrepreneurial economy where existing and start-up home-based and small business can compete globally.

Sincerely,

A handwritten signature in black ink, appearing to read 'Clinton Hyde', written in a cursive style.

Clinton Hyde, President



Rappahannock-Rapidan

REGIONAL COMMISSION

---

**OFFICERS**

August 28, 2019

**CHAIRMAN**

ROBERT COINER

Tamarah Holmes, Ph.D.

**VICE-CHAIRMAN**

MEAGHAN TAYLOR

Associate Director of Policy and Strategic Development

Virginia Department of Housing and Community Development

600 East Main Street, Suite 300

Richmond, VA 23219

**TREASURER**

JERRY WOOD

**SECRETARY &  
EXECUTIVE DIRECTOR**

PATRICK L. MAUNEY

Re: Virginia Telecommunication Initiative (VATI) 2020- Orange County Fiber to the Premise Project with Madison Gigabit, Inc.

**COMMISSIONERS**

**CULPEPER COUNTY**

JOHN EGERTSON

STEVE WALKER

Dr. Holmes,

On behalf of the Rappahannock-Rapidan Regional Commission, I am writing to convey support for the application submitted by Orange County in partnership with Madison Gigabit Inc. The project will allow construction of a fiber to the premise network in selected unserved areas of western Orange County. The project will serve public safety facilities, residents and businesses at service levels exceeding the VATI requirements.

**TOWN OF CULPEPER**

CHRIS HIVELY

MEAGHAN TAYLOR

**FAUQUIER COUNTY**

CHRISTOPHER T. BUTLER

PAUL S. McCULLA

The goal of VATI is to create strong, competitive communities throughout the Commonwealth by preparing those communities to build, utilize, and capitalize on telecommunications infrastructure. This project will help the Commonwealth achieve those goals and will enable citizens and businesses in Orange County to improve access to telemedicine, increase educational access, and enhance entrepreneurial opportunities.

**TOWN OF THE PLAINS**

CHRISTOPHER R. MALONE

**TOWN OF REMINGTON**

EVAN H. "SKEET" ASHBY

**TOWN OF WARRENTON**

BRANDIE SCHAEFFER

JERRY WOOD

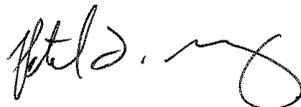
The Rappahannock-Rapidan Regional Commission will continue to support our local member jurisdictions as they seek innovative methods of enhancing and expanding broadband access and availability within the region and supports the above-referenced application from Orange County.

**MADISON COUNTY**

JACK HOBBS

CHARLOTTE HOFFMAN

Sincerely,



Patrick L. Mauney

Executive Director

**TOWN OF MADISON**

WILLIAM L. LAMAR

**ORANGE COUNTY**

JAMES CROZIER

R. BRYAN DAVID

**TOWN OF GORDONSVILLE**

ROBERT COINER

**TOWN OF ORANGE**

MARTHA B. ROBY

GREG WOODS

**RAPPAHANNOCK COUNTY**

GARREY W. CURRY, JR.

ROGER WELCH

**TOWN OF WASHINGTON**

FREDERIC CATLIN

As of April 2019

# SENATE OF VIRGINIA

**BRYCE E. REEVES**  
17TH SENATORIAL DISTRICT  
ALL OF ORANGE COUNTY; ALL OF THE  
CITY OF FREDERICKSBURG; AND PART OF  
ALBEMARLE, CULPEPER, LOUISA,  
AND SPOTSYLVANIA COUNTIES  
POST OFFICE BOX 7021  
FREDERICKSBURG, VIRGINIA 22404



August 28, 2019

COMMITTEE ASSIGNMENTS:  
REHABILITATION AND SOCIAL SERVICES, CHAIR  
COURTS OF JUSTICE  
GENERAL LAWS AND TECHNOLOGY  
PRIVILEGES AND ELECTIONS  
RULES

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

RE: Virginia Telecommunications Initiative (VATI)2020 - "Barboursville Service Area One"

Dear Dr. Holmes,

I am writing to convey my support of the application submitted by the Orange County Broadband Authority, in partnership with Madison Gigabit Internet, Inc. The project, known as "Barboursville Service Area One," will allow installation of a fiber-to-the-premise (FTTP) network to provide broadband service in the unserved Barboursville and Eheart areas of Orange County. The project will serve 590 homes, home-based businesses, and traditional businesses in the service area. Additionally, the project will connect Barboursville Volunteer Fire Company, Barboursville Community Park, and the non-profit Four County Players organization.

As I understand it, the goal of VATI is to create strong, competitive communities throughout the Commonwealth by preparing those communities to build, utilize, and capitalize on telecommunications infrastructure. This project is essential to our community by providing access to healthcare via telemedicine, increased educational opportunities through distance learning, and encouraging entrepreneurial economy where existing and start-up home-based and small business can compete globally.

Just in the past few weeks, in meetings with local elected officials and school representatives in my district, I have again heard the call for greater broadband service to their rural constituents who need access for employment, e-commerce, telemedicine, and educational opportunities for their children. I look forward to working together to expand this critical infrastructure in to those unserved and underserved areas.

In service to the Commonwealth,

A handwritten signature in black ink, appearing to read "Bryce E. Reeves".

The Honorable Bryce E. Reeves  
Senate of Virginia, 17<sup>th</sup> District



Barboursville Volunteer Fire Company  
Chief Wesley Sheler  
President Jeff Buck  
P. O. BOX 122  
5251 Spotswood Trail  
Barboursville Virginia 22923  
(540)-832-2312



August 25, 2019

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

RE: Virginia Telecommunications Initiative (VATI) 2020 – “Barboursville Service Area One”

Dear Dr. Holmes,

I am writing to convey my support of the application submitted by the Orange County Broadband Authority, in partnership with Madison Gigabit Internet, Inc. The project, known as “Barboursville Service Area One,” will allow installation of a fiber-to-the-premise (FTTP) network to provide broadband service in the unserved Barboursville and Eheart areas of Orange County. The project will serve 590 homes, home-based businesses, and traditional businesses in the service area. Additionally, the project will connect Barboursville Volunteer Fire Company, Barboursville Community Park, and the non-profit Four County Players organization.

As I understand it, the goal of VATI is to create strong, competitive communities throughout the Commonwealth by preparing those communities to build, utilize, and capitalize on telecommunications infrastructure. This project is essential to our community by providing access to healthcare via telemedicine, increased educational opportunities through distance learning, and encouraging entrepreneurial economy where existing and start-up home-based and small business can compete globally.

Currently, the Barboursville Volunteer Fire Company is operating on an inadequate internet for our day to day operations. We continue to have issues with speed and service as a whole. Lacking this service has required multiple members to have to travel for education/training instead of being able to attend it online within our building. At times we have had to take station work (entry of calls, research, etc.) to our personal homes or jobs to make sure it is completed with no issues. With the approval of the proposed application, the Barboursville Volunteer Fire Company will be brought up to speed and be able to introduce some of the new technologies that are offered.

Sincerely,  
  
Wes Sheler  
Chief, Barboursville Volunteer Fire Company



PO Box 146 – 111 Spicers Mill Rd., Ste. B - Orange VA 22960  
540.672.5216, Fax 540.672.2304  
[www.orangevachamber.com](http://www.orangevachamber.com)

August 20, 2019

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

RE: Virginia Telecommunications Initiative (VATI) 2020 – “Barboursville Service Area One”

Dear Dr. Holmes,

I am writing to convey my support of the application submitted by the Orange County Broadband Authority, in partnership with Madison Gigabit Internet, Inc. The project, known as “Barboursville Service Area One,” will allow installation of a fiber-to-the-premise (FTTP) network to provide broadband service in the unserved Barboursville and Eheart areas of Orange County. The project will serve 590 homes, home-based businesses, and traditional businesses in the service area. Additionally, the project will connect Barboursville Volunteer Fire Company, Barboursville Community Park, and the non-profit Four County Players organization.

It is my understanding that the goal of VATI is to create strong, competitive communities throughout the Commonwealth by preparing those communities to build, utilize, and capitalize on telecommunications infrastructure. This project is essential to our community by providing access to healthcare via telemedicine, increased educational opportunities through distance learning, and encouraging entrepreneurial economy where existing and start-up home-based and small business can compete globally.

As the Orange County Chamber of Commerce, it is our mission to promote business, enhance the economic environment, support community development, and act as a catalyst for improving the overall quality of life for our community and region.

This project aligns directly with our mission, ensuring that the businesses and organizations in the aforementioned areas will be better equipped to support our community with all the tools afforded by adequate broadband services. In addition, adequate broadband services will support future businesses and organizations and further enhance our County's economic vitality.

On behalf of the Orange County Chamber of Commerce, we fully support and endorse the efforts of the Orange County Broadband Authority for the Barboursville Service Area One. We appreciate your consideration of approval.

Sincerely,

A handwritten signature in black ink, consisting of stylized initials 'TC' with a flourish extending from the top of the 'C'.

Tammy L. Collins  
Executive Director

8/20/19

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

RE: Virginia Telecommunications Initiative (VATI) 2020 - "Barboursville Service Area One"

Dear Dr. Holmes,

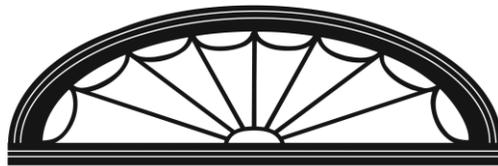
I am writing to convey my support of the application submitted by the Orange County Broadband Authority, in partnership with Madison Gigabit Internet, Inc. The project, known as "Barboursville Service Area One," will allow installation of a fiber-to-the-premise (FTTP) network to provide broadband service in the unserved Barboursville and Eheart areas of Orange County. The project will serve 590 homes, home-based businesses, and traditional businesses in the service area. Additionally, the project will connect Barboursville Volunteer Fire Company, Barboursville Community Park, and the non-profit Four County Players organization.

As I understand it, the goal of VATI is to create strong, competitive communities throughout the Commonwealth by preparing those communities to build, utilize, and capitalize on telecommunications infrastructure. This project is essential to our community by providing access to healthcare via telemedicine, increased educational opportunities through distance learning, and encouraging entrepreneurial economy where existing and start-up home-based and small business can compete globally.

My family has been waiting for over 13 years for decent broadband to our home. I have had to settle on satellite as it is our only option. It is very expensive for the average 3 Mb/s download speeds and 1.3 Mb/s upload. This has proven inadequate for my children to do their homework using the required online school rooms that Orange County HS and PHMS requires them to use. We need this upgrade and am looking forward to getting fiber to the house that would greatly enhance my children's ability to compete with other children in residential areas. Thank you for your support.

Sincerely,

WRIGHT.WILLIAM Digitally signed by  
WRIGHT.WILLIAM.C.1156162716  
Date: 2019.08.20 07:33:32 -04'00'  
M.C.1156162716  
William C. Wright  
16382 Douglas Rd  
Barboursville, VA 22923



## FOUR COUNTY PLAYERS

*Central Virginia's Longest Running Community Theater*

5256 Governor Barbour Street, Barboursville, Virginia, 22923

Theater and Box Office: 540-832-5355

[www.FourCP.org](http://www.FourCP.org)

August 25, 2019

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

RE: Virginia Telecommunications Initiative (VATI) 2020 - "Barboursville Service Area One"

Dear Dr. Holmes,

I am writing to convey my support of the application submitted by the Orange County Broadband Authority, in partnership with Madison Gigabit Internet, Inc. The project, known as "Barboursville Service Area One," will allow installation of a fiber-to-the-premise (FTTP) network to provide broadband service in the unserved Barboursville and Eheart areas of Orange County. The project will serve 590 homes, home-based businesses, and traditional businesses in the service area. Additionally, the project will connect Barboursville Volunteer Fire Company, Barboursville Community Park, and the non-profit Four County Players organization.

As I understand it, the goal of VATI is to create strong, competitive communities throughout the Commonwealth by preparing those communities to build, utilize, and capitalize on telecommunications infrastructure. This project is essential to our community by providing access to healthcare via telemedicine, increased educational opportunities through distance learning, and encouraging entrepreneurial economy where existing and start-up home-based and small business can compete globally.

As Central Virginia's longest-running community theatre, Four County Players is eagerly looking forward to the efficiency of operations that will come with broadband access. We currently rely on an expensive mobile hotspot for all internet access, including communications with membership and audiences, purchasing supplies for our facility and props for our productions, and management of our on-line ticketing system. The lack of broadband internet has kept us from upgrading the point-of-sale system in our bistro and installing flood monitoring devices in the lower level of our building.

We eagerly await the introduction of broadband internet throughout Orange County.

Sincerely,

Debbie Owen  
President

### FOUR COUNTY PLAYERS BOARD OF DIRECTORS

Debbie Owen, President – Tres Wells, Vice President of Arts – Wendy Novicoff, Treasurer – Linda Hogan, Secretary  
Scott Bates – Robert Eversberg – Elaine Fogliani – Anna Grey Hogan – Meg Hoover – Jim McConnell – Carl Schwaner  
Hannah Vidaver – Jeff Ward – Edward Warwick White – Gary Warwick White – Connor Wells  
Victoria Clement, Theater Operations Director

**THINK ORANGE VA**  
ORANGE COUNTY VA ECONOMIC DEVELOPMENT

PHIL GEER  
DIRECTOR  
Phone: (540) 672-1238  
Fax: (540) 672-4762  
Email: [pgeer@orangecountyva.gov](mailto:pgeer@orangecountyva.gov)

P. O. Box 111  
122 East Main Street  
Orange, Virginia 22960  
[thinkorangeva.com](http://thinkorangeva.com)

August 16, 2019

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

RE: Virginia Telecommunications Initiative (VATI) 2020 - "Barboursville Service Area One"

Dear Dr. Holmes,

I am writing to convey my support of the application submitted by the Orange County Broadband Authority, in partnership with Madison Gigabit Internet, Inc. The project, known as "Barboursville Service Area One," will allow installation of a fiber-to-the-premise (FTTP) network to provide broadband service in the unserved Barboursville and Eheart areas of Orange County. The project will serve 590 homes, home-based businesses, and traditional businesses in the service area. Additionally, the project will connect Barboursville Volunteer Fire Company, Barboursville Community Park, and the non-profit Four County Players organization.

As I understand it, the goal of VATI is to create strong, competitive communities throughout the Commonwealth by preparing those communities to build, utilize, and capitalize on telecommunications infrastructure. This project is essential to our community by providing access to healthcare via telemedicine, increased educational opportunities through distance learning, and encouraging entrepreneurial economy where existing and start-up home-based and small business can compete globally.

High speed internet is incredibly important to supporting our local economy. Almost all business functions are tied to the internet in some way, so having a reliable source of high-speed internet is a necessity for our existing and prospective businesses, including home-based entrepreneurs. This is also a need for our workforce development efforts. People will have access to online training programs that will prepare them for jobs of the future. Additionally, it would make Orange County a more desirable place to live, so we'll likely have a higher success rate of attracting talent to the area.

Sincerely,



Phil Geer  
Director of Economic Development

 Orange County Public Schools  
**Empowering Students**  
Achieving Dreams

August 28, 2019

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

RE: Virginia Telecommunications Initiative (VATI) 2020 - "Barboursville Service Area One"

Dear Dr. Holmes,

As School Board Chairman for Orange County Public Schools, I am writing to convey my support of the application submitted by the Orange County Broadband Authority, in partnership with Madison Gigabit Internet, Inc. The project, known as "Barboursville Service Area One," will allow installation of a fiber-to-the-premise (FTTP) network to provide broadband service in the unserved Barboursville and Eheart areas of Orange County. The project will serve 590 homes, home-based businesses, and traditional businesses in the service area. Additionally, the project will connect Barboursville Volunteer Fire Company, Barboursville Community Park, and the non-profit Four County Players organization.

As I understand it, the goal of VATI is to create strong, competitive communities throughout the Commonwealth by preparing those communities to build, utilize, and capitalize on telecommunications infrastructure. This project is essential to our community by providing access to healthcare via telemedicine, increased educational opportunities through distance learning, and encouraging entrepreneurial economy where existing and start-up home-based and small business can compete globally.

We are enthused to currently offer our students digitally connected opportunities. Increasing our broadband presence throughout the community will allow our students to consider staying or returning to Orange County to earn a decent living and raise their children in a community they love.

Sincerely,



Sherrie Page  
School Board Chairman for Orange County Public Schools

 Orange County Public Schools  
**Empowering Students**  
Achieving Dreams

August 28, 2019

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

RE: Virginia Telecommunications Initiative (VATI) 2020 - "Barboursville Service Area One"

Dear Dr. Holmes,

As the Superintendent for Orange County Public Schools that serves approximately 4,847 K-12 public school students, I am writing to convey my support of the application submitted by the Orange County Broadband Authority, in partnership with Madison Gigabit Internet, Inc. The project, known as "Barboursville Service Area One," will allow installation of a fiber-to-the-premise (FTTP) network to provide broadband service in the unserved Barboursville and Eheart areas of Orange County. The project will serve 590 homes, home-based businesses, and traditional businesses in the service area. Additionally, the project will connect Barboursville Volunteer Fire Company, Barboursville Community Park, and the non-profit Four County Players organization.

As I understand it, the goal of VATI is to create strong, competitive communities throughout the Commonwealth by preparing those communities to build, utilize, and capitalize on telecommunications infrastructure. This project is essential to our community by providing access to healthcare via telemedicine, increased educational opportunities through distance learning, and encouraging entrepreneurial economy where existing and start-up home-based and small business can compete globally.

The vision for Orange County Public Schools embraces equity for student learning. Our ultimate goal is to be a part of the ubiquitous computing solution for our Orange County students. We have a 1:1 student to device ratio for students within our schools. The next logical step is to create a methodology for students to take them out into the "real world." This project would be one step towards that realization in Orange County, especially since it will serve 590 homes, home-based businesses, and traditional businesses.

Sincerely,



Cecil C. Snead, II, Ed.D.  
Superintendent for Orange County Public Schools

## In Kind Information

The OCBA has invested an additional \$63,291.00 to this project by adding additional handholes and upgrading the fiber count to support additional customers in Service Area One along US33 route to connect auxiliary roads along the route to provide service.

Upgraded three miles of fiber from 24 strands to 288 strands to support proposed FTTP service area.

Construction cost of one (1) mile of 288 fiber \$66,264.00 (see attached quote)

Construction cost of one (1) mile of 24 count fiber \$45,167.00 (see attached quote)

Cost per mile difference \$21,097 x 3 miles = \$63,291.00

In anticipation of the project scope and time line, County staff will assist with project management, fiscal management, permitting, and legal advice. The cost associated with these staff will be absorbed by the County. The County has calculated the average fully-loaded compensation rate for staff members expected to participate in this project to be \$60 per hour. During this project, it is anticipated that County staff in aggregate, will provide 500 hours of support. The additional in-kind contribution to this project is about \$30,000.00

Please see letter from Orange County Broadband Authority Chairman.

Computer Cabling & Technology Service

3445 Lake Pointe Drive  
Harrisonburg, VA 22801

# Sales Order

Date	S.O. No.
3/28/2019	18405

Name / Address
Oranger County Broadband Authority Orange, VA

Ship To

P.O. No.	Project

Item	Description	Ordered	Rate	Amount
	install one mile- (typical)			
	24 Strand			
Job Design/Drawings	Job Drawings	1	1,000.00	1,000.00
Job Design/Drawings	Job VDOT Permits	1	600.00	600.00
Job Design/Drawings	Job VDOT Bonds	0	0.00	0.00
PG243624 T15	Vault 24 x 36 x 36 Tier 15 ( 22,500)	5	800.00	4,000.00
200 Innerduct	2" 13.5 HDPE conduit- Orange	5,300	1.25	6,625.00
2" Alum Reverse Thread Coupli...	2" Alum reverse threaded Coupling for 13.5 HDPE Pipe	10	6.00	60.00
CLMU30-3072-0104	Carsonite 6ft fiber optic marker white / orange decal- VA miss utility numbers	5	35.00	175.00
decal 507FOC	Decal #507 FOC Fiber Optic	5	5.00	25.00
Telecove- Direct bore 2"	Directional Bore 2"	1,200	7.00	8,400.00
Telecove- Trench 36"	Plow 36" deep, cover and restoration	4,000	3.50	14,000.00
Wire Material- Misc.	seed, straw, restoration material	1	500.00	500.00
gen 24SM LT Armored	24 Strand Fiber			
MLI 4000- D	General 24 Strand SM LT Armored Fiber	5,600	0.65	3,640.00
MLI 3000-SSTA	Closures	1	375.00	375.00
lis F1102C-50	24 splice tray for starfighter 3000 ribbon fiber	1	35.00	35.00
LABOR Fiber	50 pack 60mm Fusion Shrink tubing	24	3.00	72.00
Labor / Field	LABOR Fiber Terminations/Splicing	24	15.00	360.00
	Field Technician- pull fiber - per foot	5,300	1.00	5,300.00
	excludes rock - billed additional			
	excludes traffic control, if required			
<b>Total</b>				<b>\$45,167.00</b>

Computer Cabling & Technology Service

3445 Lake Pointe Drive  
Harrisonburg, VA 22801

# Sales Order

Date	S.O. No.
4/4/2019	18419

Name / Address
Oranger County Broadband Authority Orange, VA

Ship To

P.O. No.	Project

Item	Description	Ordered	Rate	Amount
	Install one mile ( typical) 288 Strand			
Job Design/Drawings	Job Drawings	1	1,000.00	1,000.00
Job Design/Drawings	Job VDOT Permits	1	600.00	600.00
Job Design/Drawings	Job VDOT Bonds	0	0.00	0.00
PG243624 T15	Vault 24 x 36 x 36 Tier 15 ( 22,500)	5	800.00	4,000.00
200 Innerduct	2" 13.5 HDPE conduit- Orange	5,300	1.25	6,625.00
2" Alum Reverse Thread Coupli...	2" Alum reverse threaded Coupling for 13.5 HDPE Pipe	10	6.00	60.00
CLMU30-3072-0104	Carsonite 6ft fiber optic marker white / orange decal- VA miss utility numbers	5	35.00	175.00
decal 507FOC	Decal #507 FOC Fiber Optic	5	5.00	25.00
Telcove- Direct bore 2"	Directional Bore 2"	1,200	7.00	8,400.00
Telcove- Trench 36"	Plow 36" deep, cover and restoration	4,000	3.50	14,000.00
Wire Material- Misc.	seed, straw, restoration material	1	500.00	500.00
Gen 288 SM LT Armored	288 Strand Fiber			
MLI 4000- D	Gen 288 SM LT Armored	5,600	3.50	19,600.00
MLI 3000-SSTA	Closures	1	375.00	375.00
fis F1102C-50	24 splice tray for starfighter 3000 ribbon fiber	12	35.00	420.00
LABOR / Fiber	50 pack 60mm Fusion Shrink tubing	288	3.00	864.00
Labor / Field	LABOR Fiber Terminations/Splicing	288	15.00	4,320.00
	Field Technician- pull fiber - per foot	5,300	1.00	5,300.00
	excludes rock - billed additional			
	excludes traffic control, if required			
<b>Total</b>				\$66,264.00

# ORANGE COUNTY, VIRGINIA

## BROADBAND AUTHORITY

S. LEWIS FOSTER  
BROADBAND PROGRAM MANAGER

PHONE: (540) 661-5332



127 BELLEVIEW AVENUE  
LOWER LEVEL  
P. O. BOX 111  
ORANGE, VIRGINIA 22960

[orangecountyva.gov](http://orangecountyva.gov)

August 27, 2019

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

RE: Virginia Telecommunications Initiative (VATI) 2020 - Barboursville Service Area One

Dear Dr. Holmes,

We are delighted to submit this VATI application for assistance to help provide service to over 590 homes and businesses with broadband connectivity in the Barboursville area of Orange County, Virginia. The purpose of this letter is to commit Orange County Broadband Authority (OCBA) in the form of cash and in-kind assistance to the proposed project and outline the shape and roles with our co-applicant, Madison Gigabit, Inc. (MGI) located in Madison, Virginia.

The roles will be as follows:

- OCBA and MGI will perform all work outlined in the VATI application including a follow-up agreement.
- OCBA will provide contracted professional engineering staff, construction contractors, project management and inspection services to oversee the construction phase of the project.
- OCBA staff will manage the overall project.
- OCBA will procure and own the electronic headend equipment for MGI to use and provide internet service.
- OCBA will own and manage the fiber infrastructure assets (locates, headend equipment, splicing, etc.) after construction is completed.
- MGI will manage the customer and provide customer premise equipment.
- MGI will pay OCBA a reasonable monthly fee per connection charge to utilize the fiber and provide service to the customer.
- OCBA staff will administer the grant including review of Co-applicants requests for reimbursement, setting up EFT with the funder, seeking funds and disbursements with MGI and preparing related information for auditors.
- All decisions on reimbursement will be made by the Grantor (DHCD). OCBA will not be responsible for any non-reimbursement expenses by MGI.
- Promotional outreach will be done by MGI and OCBA.

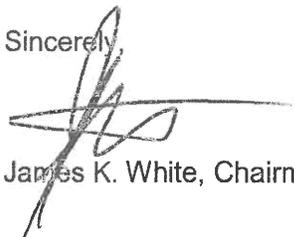
OCBA will commit \$513,434 to this project for the following items:

- Cash match of \$298,973.00.
- At least 500 hours of in-kind assistance, worth \$30,000.00.
- Upgraded fiber infrastructure to support additional customers in Service Area One, a value of \$63,291.00.
- Purchase of node cabinet, generator, and DC Power Plant \$25,720.00.
- Purchase bandwidth and colocation at Equinix in Culpeper \$95,450.00.

OCBA will sign a formal agreement with MGI for services and make sure we are prepared to act promptly to complete this project within twelve (12) months of award.

Thank you for your consideration and support.

Sincerely,

A handwritten signature in black ink, appearing to read 'James K. White', written over a horizontal line.

James K. White, Chairman

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	\$ 1,452,385	71.1%	PENDING
Orange County Broadband Authority	\$ 513,434	25.2%	SECURED
Madison Gigabit Internet, Inc.	\$ 75,000	3.7%	SECURED
	\$		
	\$		
	\$		
	\$		
<b>TOTAL</b>	<b>\$ 2,040,819</b>	<b>100 %</b>	

CDBG Derivation of Cost

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

30000

Product	Total	VATI	Non-VATI	Source of Estimate	Date
Cost of Construction .91 miles of 24 fiber laterals including permits	\$ 41,172	\$ 32,938	\$ 8,234.42	quote per mile from Computer Cabling & Technology Service	3/28/2019
Cost of Construction 6.74 miles of 48 fiber laterals including permits	\$ 316,892	\$ 253,513	\$ 63,378.32	quote per mile from Computer Cabling & Technology Service	3/28/2019
Cost of Construction 12.96 miles of 144 fiber laterals including permits	\$ 713,397	\$ 570,718	\$ 142,679.41	quote per mile from Computer Cabling & Technology Service	3/28/2019
Cost of Construction 1.67 miles of 288 fiber laterals including permits	\$ 110,653	\$ 88,523	\$ 22,130.67	quote per mile from Computer Cabling & Technology Service	4/4/2019
Average cost of Fiber drop to customer \$1,050.00 x 295 customers with average length of 250 from road	\$ 309,750	\$ 247,200	\$ 62,550.00	quotes per customer FTTP connection from Computer Cabling &	7/29/2019
Engineering	\$ 55,500	\$ 55,500	\$ -	Vantage Point	7/31/2019
Inspection	\$ 130,000	\$ 130,000	\$ -	Vantage Point	7/31/2019
Electronics	\$ 148,994	\$ 73,994	\$ 75,000	Walker and Associates	7/31/2019
Node Cabinet	\$ 7,293	\$ 0	\$ 7,293	Walker and Associates	7/17/2019
DC Power Plant	\$ 4,084	\$ 0	\$ 4,084	Diversitec	8/5/2019

CDBG Derivation of Cost

Node Cabinet Site Prep/Electrical including generator	\$ 8,367	\$ -	\$ 8,367	Jenkins Electric, LLC	8/19/2019
Propane Tank including installation for Generator	\$ 5,976	\$ (0)	\$ 5,976	Tiger Fuel	8/15/2019
Additional Handholes and Fiber Upgraded US 33 from 24 Count to 288 Count for 3 miles - <del>(\$21,007 per mile - \$63,291.00)</del>	\$ 63,291	\$ -	\$ 63,291	Cost added handholes and upgrade fiber from 24 to 288	7/31/2019
County Staff In-kind - Project Management, legal, permitting, administrative, etc.	\$ 30,000	\$ -	\$ 30,000	500 hours at \$60.00 per hour includes benefits.	8/13/2019
Bandwidth Cost - Collocation, Transport and Cross Connects January - December	\$ 95,450	\$ -	\$ 95,450	Quotes Equinix, Cogent and Crown Castle	6/17/2019, 7/23/2019, 8/21/2019
	\$ -	\$ -	\$ -		
	\$ -	\$ -	\$ -		
	\$ -	\$ -	\$ -		
<b>Total</b>	\$ 2,040,819	\$ 1,452,385	\$ 588,434		
<b>Percentage</b>		0.711667846	0.288332154		

Computer Cabling & Technology Service

3445 Lake Pointe Drive  
Harrisonburg, VA 22801

# Sales Order

Date	S.O. No.
3/28/2019	18405

Name / Address
Oranger County Broadband Authority Orange, VA

Ship To

P.O. No.	Project

Item	Description	Ordered	Rate	Amount
	install one mile- (typical)			
	24 Strand			
Job Design/Drawings	Job Drawings	1	1,000.00	1,000.00
Job Design/Drawings	Job VDOT Permits	1	600.00	600.00
Job Design/Drawings	Job VDOT Bonds	0	0.00	0.00
PG243624 T15	Vault 24 x 36 x 36 Tier 15 ( 22,500)	5	800.00	4,000.00
200 Innerduct	2" 13.5 HDPE conduit- Orange	5,300	1.25	6,625.00
2" Alum Reverse Thread Coupli...	2" Alum reverse threaded Coupling for 13.5 HDPE Pipe	10	6.00	60.00
CLMU30-3072-0104	Carsonite 6ft fiber optic marker white / orange decal- VA miss utility numbers	5	35.00	175.00
decal 507FOC	Decal #507 FOC Fiber Optic	5	5.00	25.00
Telcove- Direct bore 2"	Directional Bore 2"	1,200	7.00	8,400.00
Telcove- Trench 36"	Plow 36" deep, cover and restoration	4,000	3.50	14,000.00
Wire Material- Misc.	seed, straw, restoration material	1	500.00	500.00
	24 Strand Fiber			
gen 24SMLT Armored	General 24 Strand SMLT Armored Fiber	5,600	0.65	3,640.00
MLI 4000- D	Closures	1	375.00	375.00
MLI 3000-SSTA	24 splice tray for starfighter 3000 ribbon fiber	1	35.00	35.00
fts F1102C-50	50 pack 60mm Fusion Shrink tubing	24	3.00	72.00
LABOR / Fiber	LABOR Fiber Terminations/Splicing	24	15.00	360.00
Labor / Field	Field Technician- pull fiber - per foot	5,300	1.00	5,300.00
	excludes rock - billed additional			
	excludes traffic control, if required			

**Total** \$45,167.00

Computer Cabling & Technology Service

3445 Lake Pointe Drive  
Harrisonburg, VA 22801

# Sales Order

Date	S.O. No.
3/28/2019	18406

Name / Address
Oranger County Broadband Authority Orange, VA

Ship To
PSAP Airport

P.O. No.	Project

Item	Description	Ordered	Rate	Amount
	Install one mile ( typical) 48 Strand			
Job Design/Drawings	Job Drawings	1	1,000.00	1,000.00
Job Design/Drawings	Job VDOT Permits	1	600.00	600.00
Job Design/Drawings	Job VDOT Bonds	0	0.00	0.00
PG243624 T15	Vault 24 x 36 x 36 Tier 15 ( 22,500)	5	800.00	4,000.00
200 Innerduct	2" 13.5 HDPE conduit- Orange	5,300	1.25	6,625.00
2" Alum Reverse Thread Coupli...	2" Alum reverse threaded Coupling for 13.5 HDPE Pipe	10	6.00	60.00
CLMU30-3072-0104	Carsonite 6ft fiber optic marker white / orange decal- VA miss utility numbers	5	35.00	175.00
decal 507FOC	Decal #507 FOC Fiber Optic	5	5.00	25.00
Teleove- Direct bore 2"	Directional Bore 2"	1,200	7.00	8,400.00
Teleove- Trench 36"	Plow 36" deep, cover and restoration	4,000	3.50	14,000.00
Wire Material- Misc.	seed, straw, restoration material	1	500.00	500.00
	48 Strand Fiber			
GEN 48 SM LT Armored Fiber	48 Strand SM LT Armored Fiber	5,600	0.90	5,040.00
MLI 4000- D	Closures	5	375.00	375.00
MLI 3000-SSTA	24 splice tray for starfighter 3000 ribbon fiber	2	35.00	70.00
fis F1102C-50	50 pack 60mm Fusion Shrink tubing	48	3.00	144.00
LABOR / Fiber	LABOR Fiber Terminations/Splicing	48	15.00	720.00
Labor / Field	Field Technician- pull fiber - per foot excludes rock - billed additional excludes traffic control, if required	5,300	1.00	5,300.00
<b>Total</b>				\$47,034.00

Computer Cabling & Technology Service

3445 Lake Pointe Drive  
Harrisonburg, VA 22801

# Sales Order

Date	S.O. No.
3/28/2019	18404

Name / Address
Oranger County Broadband Authority Orange, VA

Ship To

P.O. No.	Project

Item	Description	Ordered	Rate	Amount
	Install one mile ( typical) 144 Strand			
Job Design/Drawings	Job Drawings	1	1,000.00	1,000.00
Job Design/Drawings	Job VDOT Permits	1	600.00	600.00
Job Design/Drawings	Job VDOT Bonds	0	0.00	0.00
PG243624 T15	Vault 24 x 36 x 36 Tier 15 ( 22,500)	5	800.00	4,000.00
200 Innerduct	2" 13.5 HDPE conduit- Orange	5,300	1.25	6,625.00
2" Alum Reverse Thread Coupli...	2" Alum reverse threaded Coupling for 13.5 HDPE Pipe	10	6.00	60.00
CLMU30-3072-0104	Carsonite 6ft fiber optic marker white / orange decal- VA miss utility numbers	5	35.00	175.00
decal 507FOC	Decal #507 FOC Fiber Optic	5	5.00	25.00
Telcove- Direct bore 2"	Directional Bore 2"	1,200	7.00	8,400.00
Telcove- Trench 36"	Plow 36" deep, cover and restoration	4,000	3.50	14,000.00
Wire Material- Misc.	seed, straw, restoration material	1	500.00	500.00
GEN 144F LT SM armor	144 Strand Fiber			
MLI 4000- D	General 144F SM LT armored fiber	5,600	2.00	11,200.00
MLI 3000-SSTA	Closures	1	375.00	375.00
fis F1102C-50	24 splice tray for startlighter 3000 ribbon fiber	6	35.00	210.00
LABOR / Fiber	50 pack 60mm Fusion Shrink tubing	144	3.00	432.00
Labor / Field	LABOR Fiber Terminations/Splicing	144	15.00	2,160.00
	Field Technician- pull fiber - per foot	5,300	1.00	5,300.00
	excludes rock - billed additional			
	excludes traffic control, if required			
<b>Total</b>				55,062.00

Computer Cabling & Technology Service

3445 Lake Pointe Drive  
Harrisonburg, VA 22801

# Sales Order

Date	S.O. No.
4/4/2019	18419

Name / Address
Oranger County Broadband Authority Orange, VA

Ship To

P.O. No.	Project

Item	Description	Ordered	Rate	Amount
	Install one mile ( typical) 288 Strand			
Job Design/Drawings	Job Drawings	1	1,000.00	1,000.00
Job Design/Drawings	Job VDOT Permits	1	600.00	600.00
Job Design/Drawings	Job VDOT Bonds	0	0.00	0.00
PG243624 T15	Vault 24 x 36 x 36 Tier 15 ( 22,500)	5	800.00	4,000.00
200 Innerduct	2" 13.5 HDPE conduit- Orange	5,300	1.25	6,625.00
2" Alum Reverse Thread Coupli...	2" Alum reverse threaded Coupling for 13.5 HDPE Pipe	10	6.00	60.00
CLMU30-3072-0104	Carsonite 6ft fiber optic marker white / orange decal- VA miss utility numbers	5	35.00	175.00
decal 507FOC	Decal #507 FOC Fiber Optic	5	5.00	25.00
Telcove- Direct bore 2"	Directional Bore 2"	1,200	7.00	8,400.00
Telcove- Trench 36"	Plow 36" deep, cover and restoration	4,000	3.50	14,000.00
Wire Material- Misc.	seed, straw, restoration material	1	500.00	500.00
Gen 288 SM LT Armored	288 Strand Fiber Gen 288 SM LT Armored	5,600	3.50	19,600.00
MLI 4000- D	Closures	1	375.00	375.00
MLI 3000-SSTA	24 splice tray for starfighter 3000 ribbon fiber	12	35.00	420.00
fis F1102C-50	50 pack 60mm Fusion Shrink tubing	288	3.00	864.00
LABOR / Fiber	LABOR Fiber Terminations/Splicing	288	15.00	4,320.00
Labor / Field	Field Technician- pull fiber - per foot excludes rock - billed additional excludes traffic control, if required	5,300	1.00	5,300.00
<b>Total</b>				\$66,264.00

Computer Cabling & Technology Service

3445 Lake Pointe Drive  
 Harrisonburg, VA 22801

# Sales Order

Date	S.O. No.
7/29/2019	18488

Name / Address
Oranger County Broadband Authority Orange, VA

Ship To

P.O. No.	Project

Item	Description	Ordered	Rate	Amount
Nelson- Burial of drop per foot	fiber drop to a residence			
gen 4 fiber drop	Install burial drop fiber and restoration - per foot	300	1.00	300.00
Nelson-Underground Drop	Gen 4 strand SM fiber w/ tracer wire	350	0.30	105.00
1 x 2 Splitter Pigtail w/ SC-AP	Underground drop to building Fusion Splicing, mount	1	400.00	400.00
CAR 15 x 20 x 18	ONT, install power, test and turn-up			
	1 x 2 Splitter Pigtail w/ SC-AP	1	29.00	29.00
	Carlson 15 x 20 x 18 hand box /w lid	1	66.00	66.00
		<b>Total</b>		\$900.00

Computer Cabling & Technology Service

3445 Lake Pointe Drive  
 Harrisonburg, VA 22801

# Sales Order

Date	S.O. No.
7/29/2019	18489

Name / Address
Oranger County Broadband Authority Orange, VA

Ship To

P.O. No.	Project

Item	Description	Ordered	Rate	Amount
Nelson- Burial of drop per foot	fiber drop to a residence w/ splice enclosure	300	1.00	300.00
gen 4 fiber drop	Install burial drop fiber and restoration - per foot	350	0.30	105.00
Nelson-Underground Drop	Gen 4 strand SM fiber w/ tracer wire	1	400.00	400.00
1 x 2 Splitter Pigtail w/ SC-AP	Underground drop to building Fusion Splicing, mount	1	29.00	29.00
CAR 15 x 20 x 18	ONT, install power, test and turn-up	1	66.00	66.00
coyote runt	1 x 2 Splitter Pigtail w/ SC-AP	1	200.00	200.00
Coyote 12 splice tray	Carlson 15 x 20 x 18 hand box /w lid	1	33.00	33.00
LABOR / Fiber	Coyote Runt 24 splice enclosure kit	1	67.00	67.00
	model 8006671 w/o trays			
	Coyote 12 splice tray -fusion model 80806033			
	LABOR Fiber Terminations/Splicing			
<b>Total</b>				\$1,200.00



07/31/2019

**Cost Estimate for VPS OSP Engineering Services – VATI Application 1**

**Prepared for:**

S. Lewis Foster  
 Broadband Program Manager  
 Orange County Broadband Authority  
 127 Belleview Avenue  
 P.O. Box 111  
 Orange, VA 22960

Description	Estimate
Engineering Cost (See Notes 1 & 3) Field Data Collection Kick-off Meeting Field Data Collection & Mapping – Town (0 miles @ \$1.35/ft) Field Data Collection & Mapping – Rural (22.25 miles @ \$0.43/ft)	 \$ 5,000 \$ - \$ 50,500
Drawings for VDOT and Town of Orange Permits	Drawings included in Engineering Cost. Permit applications and coordination is time and expense.
Inspection Cost of Construction (See Note 2) 1 Resident Estimated at 26 weeks; 5 work days per week; 11 hour work days	 \$ 130,000

**Notes:**

- (1) Field Data Collection Services Living expenses are included in the cost estimates.
- (2) Estimated inspection service living expenses are included in the cost estimates. Actual expenses will be passed through as incurred with no markup.
- (3) Pricing is based generic fielding sheets formats and software. Alternative formats and software may result in increased costs.
- (4) Make Ready Engineering and Pole Loading (Poles), if required
  - a. Make Ready Engineering (when Required) - \$30/pole
  - b. Pole Loading Analysis (when required) - \$55/pole
  - c. MRE and PLA (when required) - \$75/pole
- (5) The following additional items would be performed on a time and expense basis:
  - a. MRE Coordination
  - b. Project management



**Walker Quote# WB-0000888149**

Quote Date: 2019-07-31

**Contact Information**

<b>Requested By:</b> Lewis Foster	<b>Phone:</b> 540-661-5332	<b>Fax:</b>	<b>Company:</b> ORANGE COUNTY BROADBAND AUTHORITY
<b>Submitted By:</b> Dwayne Miller	<b>Phone:</b> 800-297-2293	<b>Fax:</b> 800-822-1058	<b>Email:</b> Dwayne.Miller@WalkerFirst.com

	<u>Part Number</u>	<u>Alias</u>	<u>UOM</u>	<u>Contract ID</u>	<u>Available</u>	<u>Qty</u>	<u>Unit Price</u>	<u>Ext Total</u>
1.	4187001G1HF		EA		STOCK	1	2,084.78	2,084.78
	Manufacturer: ADTRAN							
	Item Description: TA5000 CHASSIS KIT HIGH-FLOW							
2.	1187040F1		EA		STOCK	2	7,365.21	14,730.42
	Manufacturer: ADTRAN							
	Item Description: TA5000 SM40 4-10G NO RG							
3.	1187922E1		EA		STOCK	9	33.69	303.21
	Manufacturer: ADTRAN							
	Item Description: TA5000 ACCESS MODULE BLANK DUAL SLOT							
4.	1187923G1		EA		STOCK	10	8.69	86.90
	Manufacturer: ADTRAN							
	Item Description: TA5000 AMIO2 BLANK- REAR							
5.	1187503F2		EA			2	8,965.21	17,930.42
	Manufacturer: ADTRAN							
	Item Description: TA5000 GPON OLT 8-PORT GEN 2							
6.	1442530G1		EA		STOCK	16	860.86	13,773.76
	Manufacturer: ADTRAN							
	Item Description: SFP GPON 2.5G 1.25G 30KM							
7.	1442410G1		EA		STOCK	2	145.86	291.72
	Manufacturer: ADTRAN							
	Item Description: SFP+ 10G 1310NM SMF 10KM							
8.	1187925G1		EA		STOCK	1	14.14	14.14
	Manufacturer: ADTRAN							
	Item Description: TA5000 AMIO1 BLANK							

9.	1187921E1	EA	1	31.53	31.53
	Manufacturer: ADTRAN				
	Item Description: TA 5000 ACCESS MODULE BLANK				
10.	* 1287787F1	EA	300	98.64	29,592.00
	Manufacturer: ADTRAN				
	Item Description: TA411 1GE+POTS MICRO ONT				
11.	* FET1G-01RSA9	EA	300	19.75	5,925.00
	Manufacturer: TII Network				
	Item Description: FBR TERMINAL 169F 1 PORT PATCH SPLICE SC-APC 900UM PIGTAIL				
12.	* PS18L-U7	EA	300	67.22	20,166.00
	Manufacturer: Powertec Solutions Internation				
	Item Description: PSI MICRO VISON UPS				
13.	* 4906ADVRS7ATC03	EA	1	14,130.00	14,130.00
	Manufacturer: ADTRAN				
	Item Description: TOTAL NETWORK CARE- STARTER T3-5K				

**Quote Total: 119,059.88**

**OPTIONAL:**

14.	17600020F1	EA	300	99.78	29,934.00
	Manufacturer: ADTRAN				
	Item Description: ADTRAN-SMARTRG SR400AC				

**Quote Total: (including Optional Items): 148,993.88**

Thank you for allowing Walker and Associates to serve you!

**Standard Terms & Conditions apply which are available upon request and at [www.walkerfirst.com](http://www.walkerfirst.com).**

**These include:**

- ALL Parts marked with an asterisk (\*) are NON CANCELABLE and NON RETURNABLE.
  - Minimum order size \$500.00.
  - Should Walker and Assoc Inc choose to accept an order under the minimum order size, a \$20.00 minimum order fee will be applied to the order.
  - Credit card orders are subject to a 3% processing fee.
  - If Fiber Reel Lengths are specified other than current inventoried lengths, which require Walker to cut to length, a \$125 Cut Fee will be applied per cut.
  - Subject to credit approval, payment terms are net 30 days.
  - Appropriate state sales tax will be added unless Walker is provided a Sales Tax Certificate prior to shipment.
  - Shipping Charge is "FOB Shipping Point".
  - This quote is valid for 30 days, excluding Refurb which is subject to availability.
  - All shipments in the state of WA will be billed a Business Occupation fee.
  - Items are subject to Vendor expedite fees.
  - Availability of products provided by Seller, verbal or written, are approximate and subject to change. Information is based on current inventory and estimations of time periods required to obtain ordered goods from the manufacturer.
- 
- **Special Note: Please be aware that due to potential increases in import taxes associated with impacted products that are manufactured outside of the United States; all Customer orders processed with a ship date after the effective date of any such imposed tax increase may be subject to an additional tax charge.**

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Customer: ORANGE COUNTY BROADBAND AUTHORITY  
 Att: Lewis Foster  
 Ph: 540-661-5332  
 Email: LFOSTER@ORANGECOUNTYVA.GOV

Quote Number: WB-0000885059  
 Date: 2019-07-17

Prepared By: Walker and Associates, Inc.  
 ISE: Dwayne Miller  
 Ph: 800-297-2293  
 Email: Dwayne.Miller@WalkerFirst.com

Line	Part Number	Manufacturer	Description	UOM	Qty	Unit Price	Extended Total
* 1	M47P-4036-24/48RU	American Products LLC	PATRIOT ENCLOSURE 63"X 40" W X36"D Patriot Enclosure 63"x 40"x 36" overall dimensions, equipment chamber 47" tall. Enclosure finish is compliant to GR-487 paint specifications. Standard powder coating is light texture beige. Enclosure includes factory installed items below: - .125"(high strength to weight ratio) aluminum construction - Dual access doors with 3pt S/S door latch systems - S/S lift off door hinges - Door wind guard stops and door ground cables - 20 amp quad convenience receptacle - Dual sets of (2sets) of 19"/23" 24RU equipment rails - Horizontal cable management trays (when configured with 19"rack) - 16"tall isolated vented battery compartment - 32"T x 36"L x 10"D side access multifunction enclosure with plywood backboard - 12 slot aluminum ground strip - S/S hardware - S/S lifting brackets - Includes door latch tool	EA	1	\$ 4,386.33	\$ 4,386.33
* 2	AM-DLRM	American Products LLC	DOOR ALARM (1 SET)	EA	1	\$ 68.09	\$ 68.09
* 3	AMMFHEXIQ7400115HE	American Products LLC	HEAT EXCHANGER MOUNTED ON REAR DOOR	EA	1	\$ 1,780.97	\$ 1,780.97
* 4	AM-LTT-1615	American Products LLC	LAPTOP TRAY ASSY - TELCO MOUNTED ON FRONT DOOR	EA	1	\$ 97.14	\$ 97.14
* 5	AM-TBGB	American Products LLC	GROUND BAR KIT - SHIPS LOOSE	EA	1	\$ 123.20	\$ 123.20
* 6	AMP-LC	American Products LLC	100 AMP LOAD CENTER W/MAIN & 2 20AM MOUNTED ON RIGHT SIDE	EA	1	\$ 430.23	\$ 430.23
* 7	AM-GP	American Products LLC	30 AMP GENERATOR PLUG ASSEMBLY	EA	1	\$ 216.26	\$ 216.26
* 8	AMP-LIGHT-LED	American Products LLC	LED CABINET LIGHT BAR W/POWER SUPPLY	EA	1	\$ 191.16	\$ 191.16
<b>Quote Total:</b>							<b>\$ 7,293.38</b>



# Diversitec

We move information.

## Quotation

Date Aug 5, 2019	Page 1
Order Number QT020735	

14321 Somerville Ct.  
Suite #102  
Midlothian, VA 23113  
Phone: 804-379-6772

**Sold To:**

Orange County

**Ship To:**

Orange County

Reference 3 Node Locations (12AVR200	PO Number	Customer No. BLANK	Salesperson ADOB	Ship Via	Terms DUEREC
---	-----------	-----------------------	---------------------	----------	-----------------

Qty. Ord.	Item Number	Description	Unit Price	UOM	Extended Price
1	FPSJ60I-ANL-VC	FPS -48V, 19" REAR WIRE, 80AMP MAX, LVBD & SHUNT (	549.00	EACH	549.00
1	SPS-FPS100-A01-VV	SMARTPACK S CONTROLLER WITH A01 PROFILE	410.00	EACH	410.00
2	241122.125	FPS 48V/1800W HE RECTIFIER	355.00	EACH	710.00
1	331E00116500	FPS BLANK	15.25	EACH	15.25
1	CBB050E...	CBB050E 50 AMP BULLET BREAKER	21.00	EACH	21.00
2	CBB080E...	CBB080E 80AMP BREAKER	21.00	EACH	42.00
1	BLANK.....	326829 12AVR200ET (1 set of 4)	2,337.00	EACH	2,337.00

Comments:	<b>Tax Summary:</b>		Less	
	VA	0.00	Included Tax	0.00
			Order Discount	0.00
			Subtotal	4,084.25
			Total sales tax	0.00
		<b>Total order</b>	<b>4,084.25</b>	

*Jenkins Electric, LLC*

*8 /19 /2019*

*14351 Kenwood Lane*

*Orange, VA 22960*

*(540) 672-3975*

*jenkinselec@aol.com*

*Bid prepared by:*

*Larry Jenkins*

*Owner, Jenkins Electric, LLC*

*Location: three total sites on County of Orange VA maintained land*

*Scope: Provide labor and material to install a 16 KW generator and 100 amp service and line voltage connections to owner furnished equipment*

- 1. Electrical service will consist of 1 100 amp transfer switch service rated model N#RXSW100 A3 1- 20 space weather proof 100 amp single phase electrical panel mounted on a H channel frame with transfer switch.*
- 2. Generator Model N#7035 16 KW Generac LP gas unit air cooled will be mounted within 10' of meter and transfer location on concrete pad poured by contractor.*
- 3. Building permit if applicable shall be added to total cost (Orange Building department has all-inclusive permit and one should not be needed for separate trades).*
- 4. Gas work has not been included.*
- 5. All work shall be installed per NEC and any local codes.*
- 6. No excavating grading concrete etc. has been included.*

*Jenkins Electric LLC. Class A Electrical Contractor license N# 2710021686 submits a price valid for 30 days for a sum of \$8,367.00 for stated work.*





## Cost of Bandwidth

### Sources:

#### Equinix Colocation Culpeper:

1 rack, half powered = \$1000 / month

Incl power for 30amp circuits (P+R)

You can get a 10G connection on Equinix private fiber from Culpeper to Ashburn for \$750/month.

Cross connects are billed at \$350 / month.

#### Cogent Dedicated Internet Cost:

Below are the Gig and 10 Gig quotes at 18155 Technology Drive, Culpeper, VA

**1000Mbps – 1 Year**

**MRC: \$750**

**NRC: \$1250**

**10000Mbps – 1 Year**

**MRC: \$2250**

**NRC: \$1250**

#### Crown Castle Dark Fiber Connectivity to Culpeper:

Dark Fiber Pricing from Route 3 and Route 708 to Culpeper Equinix.

2 Fiber Option • 24, 36, and 60 Month Terms

2 Fiber 24 Months \$4,400 MRC

2 Fiber 36 Months \$3,900 MRC

2 Fiber 60 Months \$3,600 MRC

Description	NRC Cost	MRC Cost
Colocation Equinix including two cross connects	\$ .00	\$1,700.00
Dedicated Internet 10GB	\$1,250.00	\$2,250.00
Dark Fiber Lease 36 Months	\$ .00	\$3,900.00
Sub Total:	\$1,250.00	\$7,850.00
Total Bandwidth Cost January – December		\$95,450.00

## Lewis Foster

---

**From:** Todd Jeffery <tjeffery@equinix.com>  
**Sent:** Tuesday, July 23, 2019 3:39 PM  
**To:** Lewis Foster  
**Subject:** Equinix - follow up from our call today  
**Attachments:** Marketplace - Equinix Ashburn ISP.xlsx

Lewis – nice speaking to you. When should we next touch base?

There are 400 total NSP's in our Ashburn campus. Attached is an excel sheet of all the carriers who advertise a presence in Ashburn.

You can filter the list by column B.

There are 11 NSP's that advertise a presence in our Culpeper campus those names are listed below. I even got a quote for you for 10G internet.

### **COST EQUINIX CULPEPER:**

1 rack, half powered = \$1000 / month

Incl power for 30amp circuits (P+R)

You can get a 10G connection on Equinix private fiber from Culpeper to Ashburn for \$750/month.

Cross connects are billed at \$350 / month.

ISP's in Culpeper campus:

- Cogent – my contact said \$2k / month for 10G DIA
- AT&T
- Verizon
- Zayo
- Century Link
- West Corporation
- Crown Castle
- Cox Enterprises
- Telxius
- SummitIG LLC
- Brightstar Corp

### **Todd Jeffery**

Global Account Director

EQUINIX | 21731 Filigree Court, Ashburn, VA 20147

E [tjeffery@equinix.com](mailto:tjeffery@equinix.com) | M 203 981 4660 | T 703 840 5354

## Lewis Foster

---

**From:** Zaheer, Syed <szaheer@Cogentco.com>  
**Sent:** Monday, June 17, 2019 9:22 AM  
**To:** Lewis Foster  
**Subject:** Cogent - Gig and 10 gig Quote

Louis,

Per our conversation from last week, below are the Gig and 10 Gig quotes you had requested. Please let me know what the next steps should be and if there are any other questions.

**18155 Technology Drive, Culpeper, VA, 22701**

**1000Mbps – 1 Year**

**MRC: \$750**

**NRC: \$1250**

**10000Mbps – 1 Year**

**MRC: \$2250**

**NRC: \$1250**

Best,

**Syed Zaheer** | National Account Manager

**Cogent Communications** | Sterling, VA | [www.cogentco.com](http://www.cogentco.com)

office: 703-456-7919 | mobile: 703-989-0197 | [szaheer@Cogentco.com](mailto:szaheer@Cogentco.com)

**cogent**

*Like, Follow and Connect with Cogent*



*Cogent Communications Group, Inc. (NASDAQ: CCO!) is a multinational, Tier 1 facilities-based ISP, consistently ranked as one of the top five networks in the world. Cogent specializes in providing businesses with high speed Internet access, scalable Ethernet point-to-point transport, VPLS and colocation services. Cogent built one of the largest and highest capacity IP networks in existence. This network enables Cogent to offer large bandwidth connections at highly competitive prices.*

 Please consider the environment before printing this e-mail.

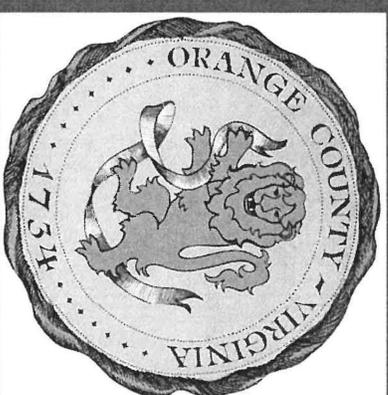


# Crown Castle Fiber

A Stable Partner you can trust

The right solution for your organization—today and tomorrow.

Bob Berrmpohl  
Sr. Account Executive  
Phone: 703-434-8439  
Email: [Robert.Berrmpohl@CrownCastle.com](mailto:Robert.Berrmpohl@CrownCastle.com)

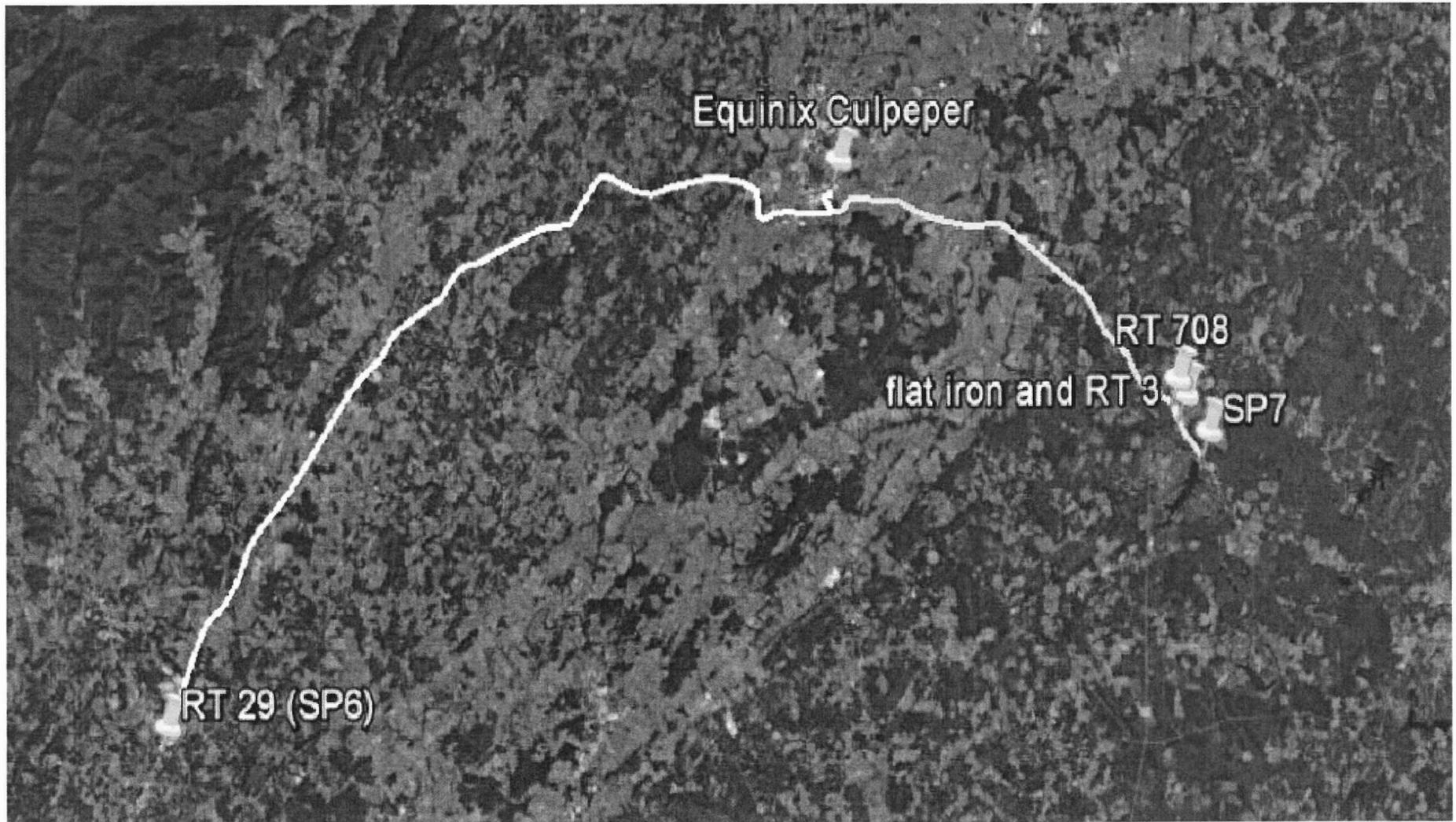


The pathway to possible.

# Orange County VA – Dark Fiber Requirements

- Dark Fiber Service
- 2 fiber configuration
- Location 1: Equinix, 18155 Technology Drive, Culpeper, VA
- Location 2:
  - Rte. 3 and Rte. 708
- 24, 36 and 60 Month Pricing

# Dark Fiber Routes – Rte. 3 and Rte. 29



# Budgetary Circuit Pricing

- **Dark Fiber Pricing**
  - Budgetary pending site visit and finalization.
- **2 Fiber Option**
- **24, 36 and 60 Month Terms**

	<b>2 Fiber 24 Mo</b>	<b>2 Fiber 36 Mo</b>	<b>2 Fiber 60 MO</b>
Rte 3 and Rte 708	\$4,400	\$3,900	\$3,600

Note: Quote does not include the cost of cross connects at Equinix, Culpeper



(RETAIN FOR YOUR RECORDS)  
Form 477 Filing Summary

FRN: 0027950716 | Data as of: Jun 30, 2019 | Operations: Non-ILEC | Submission Status: Original - Submitted | Last Updated: Aug 26, 2019 20:25:34

### Filer Identification

Section	Question	Response
<b>Filer Information</b>	Company Name	Madison Gigabit Internet
	Holding Company Name	Madison Gigabit Internet
	SAC ID	
	499 ID	
<b>Data Contact Information</b>	Data Contact Name	Clint Hyde
	Data Contact Phone Number	(703) 862-4056
	Data Contact E-mail	chyde@madisongigabit.com
<b>Emergency Operations Contact Information</b>	Emergency Operations Name	Clint Hyde
	Emergency Operations Phone Number	(703) 862-4056
	Emergency Operations E-mail	chyde@madisongigabit.com
<b>Certifying Official Contact Information</b>	Certifying Official Name	Clint Hyde
	Certifying Official Phone Number	(703) 862-4056
	Certifying Official E-mail	chyde@madisongigabit.com

### Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	FCC-477-list-deployment.csv	Aug 26, 2019 15:44:01	1006
Fixed Broadband Subscription	FCC-477-list-subscription-mar-19.csv	Aug 26, 2019 16:27:07	1

### Fixed Broadband Deployment

#### Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	Madison Gigabit Internet	Terrestrial Fixed Wireless	1006
<b>Total</b>			<b>1006</b>

## Fixed Broadband Subscription

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

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Virginia	Terrestrial Fixed Wireless	1	9	0	9
<b>Total</b>		<b>1</b>	<b>9</b>	<b>0</b>	<b>9</b>

### Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
100.000	100.000	9	0	9
<b>Total</b>		<b>9</b>	<b>0</b>	<b>9</b>

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

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
Terrestrial Fixed Wireless	100.000	100.000	9	0	9
<b>Total</b>			<b>9</b>	<b>0</b>	<b>9</b>

# PUBLIC NOTICE

## August 6, 2019

### Orange County Broadband Authority 2020 Virginia Telecommunications Initiative Grant Application

The Orange County Broadband Authority herewith gives notice of its intent to partner with **Madison Gigabit Internet, Inc.**, located in Madison, Virginia, to apply for a grant to the Virginia Department of Housing and Community Development (DHCD) for grant funding from the 2020 Virginia Telecommunications Initiative (VATI).

The purpose of the grant funding is to provide broadband service in the unserved areas of Orange County. The proposed broadband project will consist of the construction of a fiber to the premise (FTTP) network within the following areas of Orange County, Virginia:

Albano Road - SR657	Harvest Lane
Angus Road	Poplar Meadow Lane
Bluie West One	Ridge Road – SR644
Burnley Road – SR644	Scuffletown Road – SR609
Dogwood Lane	Spotswood Trail – US33 (Eheart to Woodroof RD)
Douglas Road – SR659	Taylorville Road
Evergreen Avenue	Tisdale Road – SR731
Governor Barber Street – SR 678	Vineyard Lane
Hamm Road – SR658	Wilhoits Mill Road (Approx. 1,000 feet from SR609)
Haney Drive (Approx. 1,000 feet from US33)	Woodroof RD – SR652 (US33 to Carey Town PL)

Broadband service will be provided through **Madison Gigabit Internet, Inc.** The project will meet and exceed the service level requirements established for the VATI program. The 2020 VATI grant application will be submitted to DHCD by the program's September 3, 2019 deadline.

The public is invited to submit written or oral comments and/or grievances on the proposed 2020 VATI Grant Application no later than August 30, 2019 to the Orange County Broadband Authority. The preferred methods of comment would be by email to [Lewis Foster](mailto:Lewis.Foster@ocba.org) or by letter sent to the Orange County Broadband Authority, Post Office Box 111, Orange, Virginia 22960. Comments will also be received by telephone at (540) 661-5332.



# ORANGE COUNTY BROADBAND AUTHORITY - FIBER SERVICE AREAS

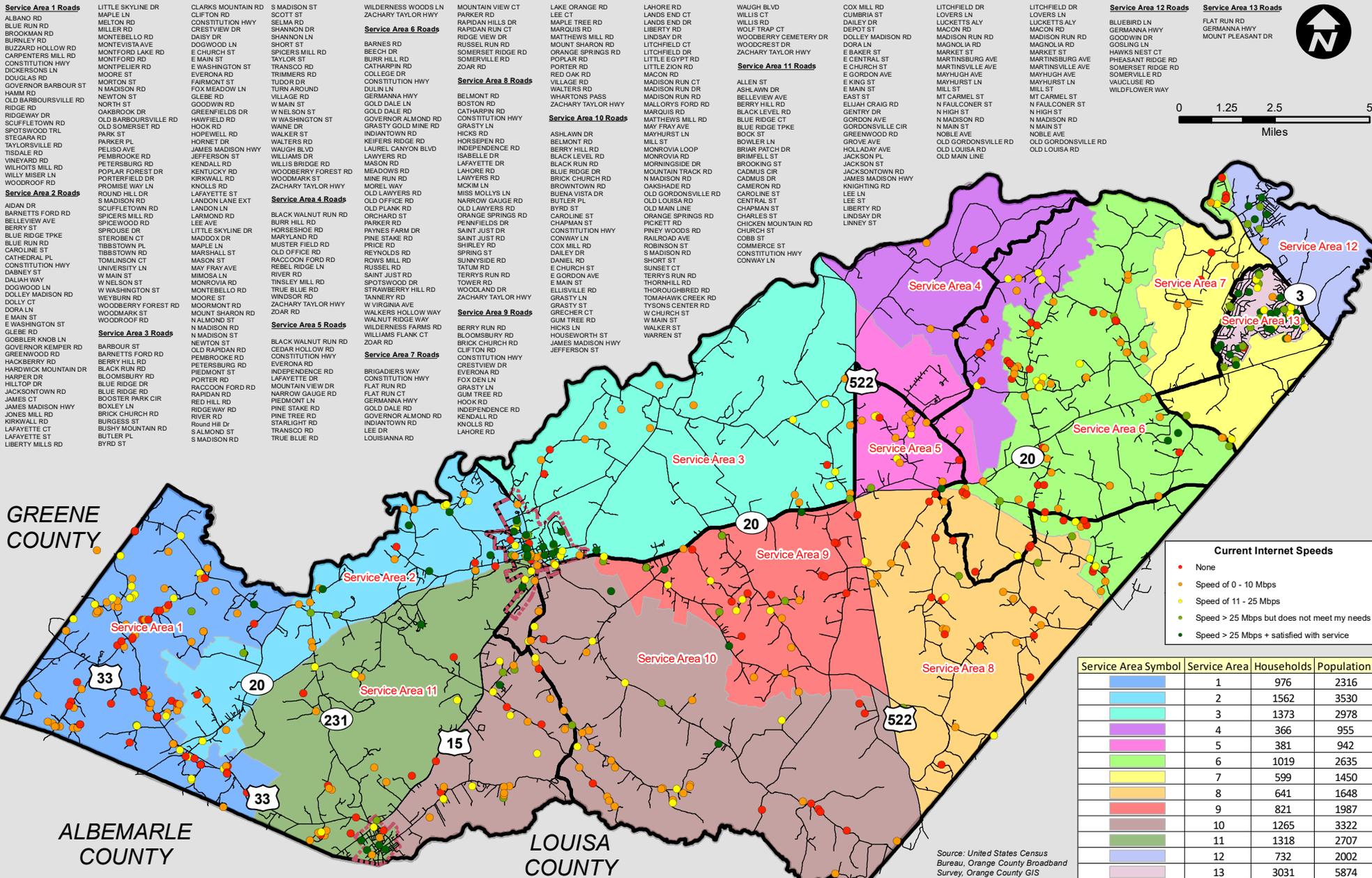
August 27, 2019

Orange County GIS

Gordon Building  
112 West Main Street  
P.O. Box 111  
Orange, VA 22960

COMMISSIONED LF, JW, MJ, SS  
DRAWN JHW  
DATE 08/22/19

**CONFIDENTIAL  
WORKING DRAFT**

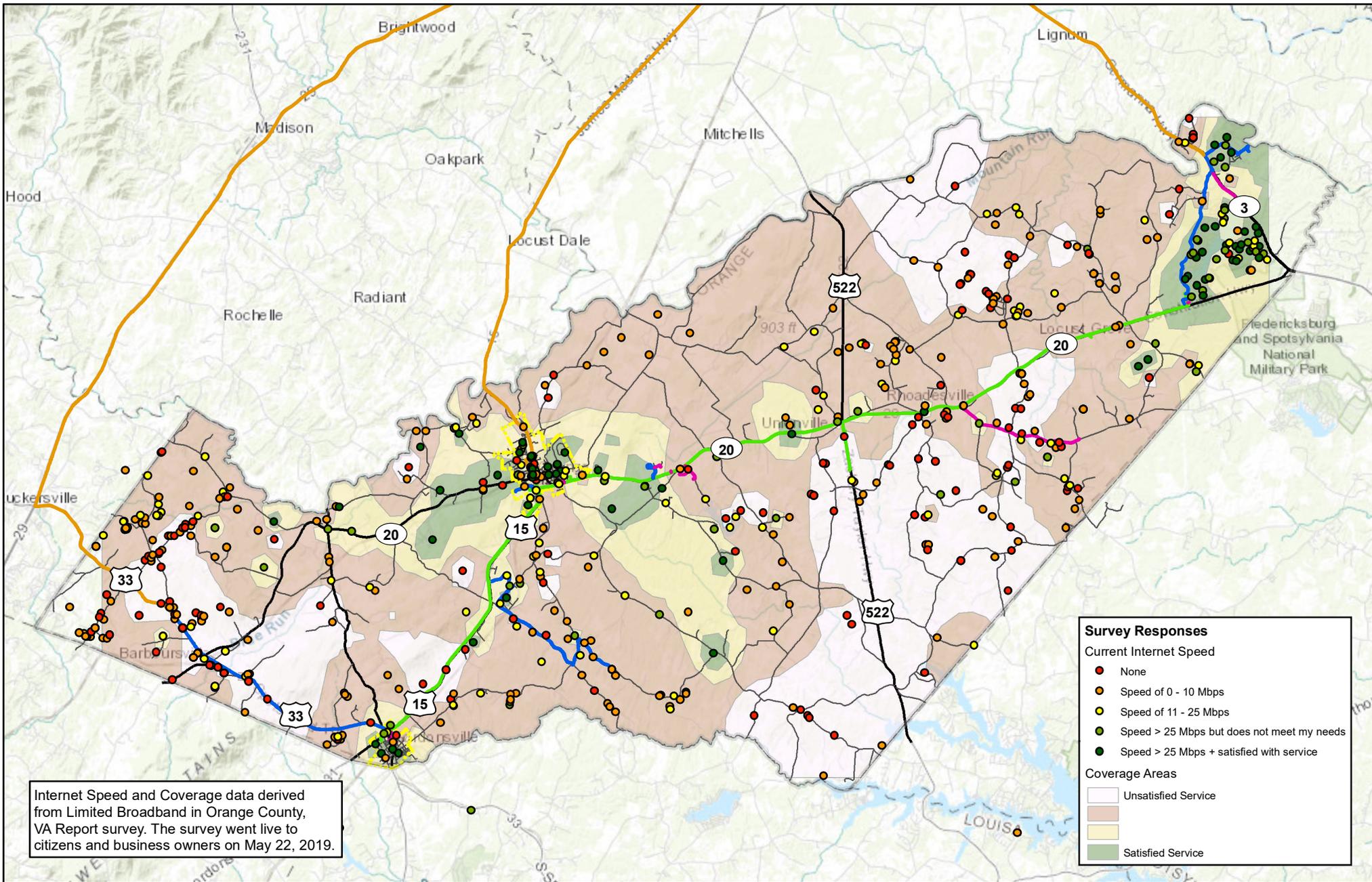


- Service Area 1 Roads**  
LITTLE SKYLINE DR  
ALBANO RD  
BLUE RUN RD  
BROOKMAN RD  
BURNLEY RD  
BUZZARD HOLLOW RD  
CARPENTERS MILL RD  
CONSTITUTION HWY  
DICHERSONS LN  
DOUGLAS RD  
GOVERNOR BARBOUR ST  
HAMM RD  
OLD BARBOURSVILLE RD  
RIDGE RD  
RIDGEWAY DR  
SCUFFLETOWN RD  
SPOTSWOOD TRL  
STEGARA RD  
TAYLORSVILLE RD  
TSDALE RD  
VINEYARD RD  
WILNOTTS MILL RD  
WILLY MISER LN  
WOODROOF RD
- Service Area 2 Roads**  
ADAN DR  
BARNETTS FORD RD  
BELLEVUE AVE  
BERRY ST  
BLUE RIDGE TPKE  
BLUE RUN RD  
CAROLINE ST  
CATHEDRAL PL  
TIBBSTOWN RD  
CONSTITUTION HWY  
DABNEY ST  
DALLAH WAY  
DOGWOOD LN  
DOLLEY MADISON RD  
DOLLY CT  
DORA LN  
E MAIN ST  
E WASHINGTON ST  
GLEBE RD  
GOBBLER KNOB LN  
GOVERNOR KEMPER RD  
GREENWOOD RD  
HACKBERRY RD  
HARDWICK MOUNTAIN DR  
HARPER DR  
HILLTOP DR  
JACKSONTOWN RD  
JAMES CT  
JAMES MADISON HWY  
JONES MILL RD  
KIRKWALL RD  
LAFAYETTE CT  
LAFAYETTE ST  
LIBERTY MILLS RD
- Service Area 3 Roads**  
BARBOUR ST  
BARNETTS FORD RD  
BERRY HILL RD  
BLACK RUN RD  
BLOOMSBURY RD  
BOOSTER PARK CIR  
BLUE RIDGE DR  
JAMES CT  
JAMES MADISON HWY  
JONES MILL RD  
KIRKWALL RD  
LAFAYETTE CT  
LAFAYETTE ST  
LIBERTY MILLS RD
- Service Area 4 Roads**  
BLACK WALNUT RUN RD  
BURR HILL RD  
LIE AVE  
HORSESHOE RD  
MARYLAND RD  
MUSTER FIELD RD  
OLD OFFICE RD  
RACCOON FORD RD  
REBEL RIDGE LN  
RIVER RD  
TINSLEY MILL RD  
TRUE BLUE RD  
WINDSOR RD  
ZACHARY TAYLOR HWY  
ZOAR RD
- Service Area 5 Roads**  
BLACK WALNUT RUN RD  
CEDAR HOLLOW RD  
CONSTITUTION HWY  
EVERONA RD  
INDEPENDENCE RD  
LAFAYETTE DR  
MOUNTAIN VIEW DR  
NARROW GAUGE RD  
PIEDMONT LN  
PINE STAKE RD  
PINE TREE RD  
STARLIGHT RD  
TRANSCO RD  
TRUE BLUE RD
- Service Area 6 Roads**  
BARNES RD  
BEECH DR  
BURR HILL RD  
CATHARTIN DR  
COLLEGE DR  
CONSTITUTION HWY  
DULL LN  
GERMANNA HWY  
GOLD DALE LN  
GOLD DALE RD  
GOVERNOR ALMOND RD  
GRASTY GOLD MINE RD  
INDIANTOWN RD  
KEIFERS RIDGE RD  
LAUREL CANYON BLVD  
LAWYERS RD  
MEADOWS RD  
MINE RUN RD  
MCKIM LN  
MISS MOLLYS LN  
NARROW GAUGE RD  
OLD PLANK RD  
ORCHARD ST  
PARKER DR  
PAYNES FARM DR  
PINE STAKE RD  
PRICE RD  
REYNOLDS RD  
ROWS MILL RD  
RUSSEL RD  
SAINT JUST RD  
SPRING ST  
SUNNYSIDE RD  
TATUM RD  
TERRYS RUN RD  
TOWER RD  
TATUM RD  
ZACHARY TAYLOR HWY  
ZOAR RD
- Service Area 7 Roads**  
BRIGADIERS WAY  
CONSTITUTION HWY  
CRESTVIEW DR  
EVERONA RD  
FOX DEN LN  
GRASTY LN  
GUM TREE RD  
HOOK RD  
INDEPENDENCE RD  
KENDALL RD  
KNOLLS RD  
LAHORE RD
- Service Area 8 Roads**  
ASHLAWN DR  
BELMONT RD  
BERRY HILL RD  
BLACK LEVEL RD  
BLACK RUN RD  
BLUE RIDGE DR  
BRICK CHURCH RD  
BROWNTOWN RD  
BUENA VISTA DR  
BUTLER PL  
BYRD ST  
CAROLINE ST  
CHAPMAN ST  
CONSTITUTION HWY  
CONWAY LN  
COX MILL RD  
DALEY DR  
DALLEY DR  
DANIEL RD  
E CHURCH ST  
E GORDON AVE  
E MAIN ST  
ELLSVILLE RD  
GRASTY LN  
GRECHER CT  
GUM TREE RD  
HICKS LN  
HOUSEWORTH ST  
JAMES MADISON HWY  
JEFFERSON ST
- Service Area 9 Roads**  
BERRY RUN RD  
BLOOMSBURY RD  
BRICK CHURCH RD  
CLIFTON RD  
CONSTITUTION HWY  
CRESTVIEW DR  
EVERONA RD  
FOX DEN LN  
GRASTY LN  
GUM TREE RD  
HOOK RD  
INDEPENDENCE RD  
KENDALL RD  
KNOLLS RD  
LAHORE RD
- Service Area 10 Roads**  
ASHLAWN DR  
BELMONT RD  
BERRY HILL RD  
BLACK LEVEL RD  
BLACK RUN RD  
BLUE RIDGE DR  
BRICK CHURCH RD  
BROWNTOWN RD  
BUENA VISTA DR  
BUTLER PL  
BYRD ST  
CAROLINE ST  
CHAPMAN ST  
CONSTITUTION HWY  
CONWAY LN  
COX MILL RD  
DALEY DR  
DALLEY DR  
DANIEL RD  
E CHURCH ST  
E GORDON AVE  
E MAIN ST  
ELLSVILLE RD  
GRASTY LN  
GRECHER CT  
GUM TREE RD  
HICKS LN  
HOUSEWORTH ST  
JAMES MADISON HWY  
JEFFERSON ST
- Service Area 11 Roads**  
ALLEN ST  
ASHLAWN DR  
BELLEVUE AVE  
BERRY HILL RD  
BLACK LEVEL RD  
BLUE RIDGE CT  
BLUE RIDGE TPKE  
BOOK ST  
BOWLER LN  
BRIAR PATCH DR  
BRINFELL ST  
MASON RD  
CADMUS CIR  
CADMUS DR  
CAMERON RD  
CAROLINE ST  
CENTRAL ST  
CHARLES ST  
CHICKEN MOUNTAIN RD  
CHURCH ST  
COBB ST  
COMMERCE ST  
CONSTITUTION HWY  
CONWAY LN
- Service Area 12 Roads**  
BLUEBIRD LN  
GERMANNA HWY  
GODWIN DR  
GOSLING LN  
HAWKS NEST CT  
PHEASANT RIDGE RD  
SOMERSET RIDGE RD  
SOMERVILLE RD  
VALCULUSE RD  
WILDFLOWER WAY
- Service Area 13 Roads**  
FLAT RUN RD  
GERMANNA HWY  
MOUNT PLEASANT DR

- Current Internet Speeds**
- None
  - Speed of 0 - 10 Mbps
  - Speed of 11 - 25 Mbps
  - Speed > 25 Mbps but does not meet my needs
  - Speed > 25 Mbps + satisfied with service

Service Area Symbol	Service Area	Households	Population
1	1	976	2316
2	2	1562	3530
3	3	1373	2978
4	4	366	955
5	5	381	942
6	6	1019	2635
7	7	599	1450
8	8	641	1648
9	9	821	1987
10	10	1265	3322
11	11	1318	2707
12	12	732	2002
13	13	3031	5874

Source: United States Census Bureau, Orange County Broadband Survey, Orange County GIS



## Orange County GIS

Gordon Building  
112 West Main Street  
P.O. Box 111  
Orange, VA 22960

# ORANGE COUNTY INTERNET SPEED COVERAGE MAP

DESIGNED  
DRAWN JHW  
DATE 08/22/19



1  
Mile

Phase 1 - Schools Main Route  
Phase 2 - Tower Laterals  
Phase 3 - Equinix Routes Proposed  
Phase 4 - County Facility Proposed

Primary Road  
Secondary Road  
County Boundary  
Town Boundaries

FIGURE  
1

# Orange County Broadband Authority

## Survey Results

May 22, 2019 – August 22, 2019

On May 22, 2019, Orange County Broadband Authority (OCBA) launched an on-line broadband availability survey to help determine where service is and isn't to improve internet service to our residents and businesses in Orange County.

As of August 22, 2019, over 600 people have weighed in and 88% say they are dissatisfied with their current connection. Only 12% of people have internet speeds of greater than 25 megabits per second and satisfied with service, and 25% say they do not have any internet at all.

**Below is a three-month summary of our survey results.**

**Responded**                      **645**  
**Measurable Responses**      **608**

<b>Service Speed</b>	<b>Percentage</b>
<b>No Internet Access</b>	<b>25%</b>
<b>0-10 Mbps</b>	<b>38%</b>
<b>11-25 Mbps</b>	<b>16%</b>
<b>&gt;25Mbps and not satisfied with service</b>	<b>9%</b>
<b>&gt;25Mbps and satisfied with service</b>	<b>12%</b>

**Barboursville Service Area One survey results.**

**Measurable Responses**      **139**

<b>Service Speed</b>	<b>Percentage</b>
<b>No Internet Access</b>	<b>37%</b>
<b>0-10 Mbps</b>	<b>44%</b>
<b>11-25 Mbps</b>	<b>17%</b>
<b>&gt;25Mbps and not satisfied with service</b>	<b>1%</b>
<b>&gt;25Mbps and satisfied with service</b>	<b>1%</b>

## Lewis Foster

---

**From:** bj.foreman <bj.foreman@yahoo.com>  
**Sent:** Wednesday, August 14, 2019 3:19 PM  
**To:** Lewis Foster  
**Subject:** Re: Information needed for Grant Application Home Business / telecommute

I used to have a home run company called Quark Industries Inc., incorporated in Delaware. I have recently been consulting on a DOD project. I have Hughes satellite service for internet, which is too slow to do home business.

BJ Foreman  
4497 Spotswood Trail  
Barboursville VA 22923  
540-406-7180

Sent via the Samsung Galaxy S8+, an AT&T 5G Evolution capable smartphone

----- Original message -----

**From:** Lewis Foster <lfoster@orangecountyva.gov>  
**Date:** 8/12/19 4:46 PM (GMT-05:00)  
**To:** Lewis Foster <lfoster@orangecountyva.gov>  
**Subject:** Information needed for Grant Application Home Business / telecommute

Good Afternoon,

I'm Lewis Foster the Broadband Program Manager for Orange County Broadband Authority. I would like to take this opportunity to thank you for participating in the Broadband Survey earlier this year. This information has been very useful in determining the areas in Orange County without broadband.

I'm not sure if you heard yet but Orange County Broadband Authority plans to apply for a grant to help cover the cost of construction to provide broadband service to your area. The grant application is very competitive and I need some additional information to improve our application.

I need to know how many home businesses or telecommuters in the service area. Currently I have no way of knowing without your assistance.

Please let me know if you or your next door neighbor operates a home business or telecommutes. If possible, please provide their business name and address.

## Lewis Foster

---

**From:** Tim Clemons <tclemons@Rapidan.org>  
**Sent:** Friday, August 23, 2019 7:54 AM  
**To:** Lewis Foster  
**Subject:** Orange County Broadband Initiative - VATI Grant Application with Madison Gigabit

Mr. Foster, as General Manager of the Rapidan Service Authority, I would like to provide comments regarding the above subject matter. RSA is a water and sewer provider in Orange County. As such, we always have a need for increased/improved communication ability. While we do not currently have any systems in this particular area at this time, we never know what the future might hold. We would certainly recommend that this project be approved.

Timothy L. Clemons  
General Manager  
Rapidan Service Authority  
(434) 985-7811  
[tclemons@rapidan.org](mailto:tclemons@rapidan.org)

## Lewis Foster

---

**From:** Rosson, Tina K (tr4n) <tr4n@virginia.edu>  
**Sent:** Wednesday, August 14, 2019 1:51 PM  
**To:** Lewis Foster  
**Subject:** RE: Information needed for Grant Application Home Business / telecommute

Dear Mr. Foster,

Thank you for your email and for taking the time to speak with me over the phone yesterday afternoon. I would like to advise **I do telecommute for work**. I currently work at UVA and we are allowed to work from home especially during inclement weather. Right now my only source to web access is a mobile hot spot which is very inconsistent in its availability.

I also took the liberty of completing the on-line survey for my parents who are my neighbors and would also very much like to have access to the internet as well.

Mr. Foster, I would like to thank you again for all your efforts in this project and welcome any challenges that I may be able to help with. Please feel free to reach out to me if I can be of any help.

With many thanks,  
Tina Rosson  
4614 Ridge Road  
Somerset (aka totally underserved area)  
Cell: 434-466-5904

**From:** Lewis Foster <lfoster@orangecountyva.gov>  
**Sent:** Monday, August 12, 2019 4:46 PM  
**To:** Lewis Foster <lfoster@orangecountyva.gov>  
**Subject:** Information needed for Grant Application Home Business / telecommute

Good Afternoon,

I'm Lewis Foster the Broadband Program Manager for Orange County Broadband Authority. I would like to take this opportunity to thank you for participating in the Broadband Survey earlier this year. This information has been very useful in determining the areas in Orange County without broadband.

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If your neighbor hasn't taken the survey yet, please encourage them to take the survey. The more survey results we are able to show the state it will make our grant application stronger

Survey Information to share.

## Lewis Foster

---

**From:** Kyleen Kendall <kyleenkendall@yahoo.com>  
**Sent:** Wednesday, August 14, 2019 8:46 AM  
**To:** Lewis Foster  
**Subject:** Re: Information needed for Grant Application Home Business / telecommute

Hi mr Foster,

One of my neighbors operates a hone business, stone Ridge Pottery. I'm afraid I'm not sure of her exact address, it isn't on her business card, but we are 16354 Burnley rd.

Hope that helps!

Kyleen kendall

Sent from my iPhone

On Aug 12, 2019, at 4:46 PM, Lewis Foster <[lfoster@orangecountyva.gov](mailto:lfoster@orangecountyva.gov)> wrote:

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Survey Information to share.

The Orange County Broadband Authority has launched an interactive survey to gather internet upload and download speeds in the County. All survey fields are voluntary. Information provided may be used by Orange County or the Orange County Broadband Authority for research and grant funding opportunities.

To complete the survey, click [here](#).

Grant Application Information to share.

Below is a link with additional information concerning the grant application for your area.

<http://www.orangecountyva.gov/index.aspx?NID=836>

## Lewis Foster

---

**From:** Melvin Gray <mmgray1021@gmail.com>  
**Sent:** Tuesday, August 13, 2019 7:50 PM  
**To:** Lewis Foster  
**Subject:** Broadband Internet Service

Best news I've had since moving here four years ago, will finally be joining the modern world. I am in full support of the plan.

Melvin Gray  
4144 Ridge Rd. Barboursville VA

## Lewis Foster

---

**From:** Alyson Sappington <arsappington@gmail.com>  
**Sent:** Tuesday, August 13, 2019 6:47 PM  
**To:** Lewis Foster  
**Subject:** Re: Information needed for Grant Application Home Business / telecommute

Thanks for the work you're doing! We replied to the survey when it first came out. We have a home business as do several neighbors on Albano Road! Please let me know if we can help in any way!  
Alyson Sappington

Sent from my iPhone

On Aug 12, 2019, at 4:46 PM, Lewis Foster <[lfoster@orangecountyva.gov](mailto:lfoster@orangecountyva.gov)> wrote:

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Grant Application Information to share.

Below is a link with additional information concerning the grant application for your area.

<http://www.orangecountyva.gov/index.aspx?NID=836>

Thanks  
Lewis

S. Lewis Foster

## Lewis Foster

---

**From:** Christopher Riley <cjriley20@gmail.com>  
**Sent:** Tuesday, August 13, 2019 3:58 PM  
**To:** Lewis Foster  
**Subject:** Re: Information needed for Grant Application Home Business / telecommute

I telecommute for Autodesk. Their main office is in San Francisco.

Thanks,  
Chris

On Mon, Aug 12, 2019 at 4:46 PM Lewis Foster <[lfoster@orangecountyva.gov](mailto:lfoster@orangecountyva.gov)> wrote:

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## Lewis Foster

---

**From:** mara.tynan <mara.tynan@protonmail.com>  
**Sent:** Tuesday, August 13, 2019 9:33 AM  
**To:** Lewis Foster  
**Subject:** RE: Information needed for Grant Application Home Business / telecommute

Spiffy.

My address is 15609 Burnley Road, Barboursville, VA 22923.

Please let me know if there is any other information I can provide.

Sincerely,  
Mara Tynan

Sent with [ProtonMail](#) Secure Email.

----- Original Message -----

On Tuesday, August 13, 2019 9:31 AM, Lewis Foster <lfoster@orangecountyva.gov> wrote:

I'm looking for just the address.

S. Lewis Foster

Broadband Program Manager

Orange County Broadband Authority

127 Belleview Avenue

P.O. Box 111

Orange, VA 22960

Office: 540.661.5332

Cell: 540.920.7623

**From:** mara.tynan <mara.tynan@protonmail.com>  
**Sent:** Tuesday, August 13, 2019 9:29 AM

**To:** Lewis Foster <lfoster@orangecountyva.gov>

**Subject:** Re: Information needed for Grant Application Home Business / telecommute

Good morning, Lewis

I am a telecommuter. The company I work for has no offices, so all employees work from home (or place of their choosing) when not at a client site. I don't run the business, so do you still need the business name? For address, are you looking for my home address again?

Thank you for the clarification.

Sincerely,

Mara Tynan

Sent with [ProtonMail](#) Secure Email.

----- Original Message -----

On Monday, August 12, 2019 4:46 PM, Lewis Foster <lfoster@orangecountyva.gov> wrote:

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## Lewis Foster

---

**From:** mara.tynan <mara.tynan@protonmail.com>  
**Sent:** Tuesday, August 13, 2019 9:29 AM  
**To:** Lewis Foster  
**Subject:** Re: Information needed for Grant Application Home Business / telecommute

Good morning, Lewis

I am a telecommuter. The company I work for has no offices, so all employees work from home (or place of their choosing) when not at a client site. I don't run the business, so do you still need the business name? For address, are you looking for my home address again?

Thank you for the clarification.

Sincerely,  
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Please let me know if you or your next door neighbor operates a home business or telecommutes. If possible, please provide their business name and address.

## Lewis Foster

---

**From:** Katherine Hogsten <khogsten@ocss-va.org>  
**Sent:** Monday, August 12, 2019 7:50 PM  
**To:** Lewis Foster  
**Subject:** Re: Information needed for Grant Application Home Business / telecommute

One home and one land scaling business. Hogsten lawn and land. Barboursville Va.

Sent by Kathy Hogsten!

On Aug 12, 2019, at 4:46 PM, Lewis Foster <[lfoster@orangecountyva.gov](mailto:lfoster@orangecountyva.gov)> wrote:

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Thanks  
Lewis

S. Lewis Foster  
Broadband Program Manager  
Orange County Broadband Authority

## Lewis Foster

---

**From:** Grant Schibilia <grant66s@gmail.com>  
**Sent:** Monday, August 12, 2019 5:17 PM  
**To:** Lewis Foster  
**Subject:** Re: Information needed for Grant Application Home Business / telecommute

Have no knowledge of any of my neighbors running a business from home here. Most who have computers use satellite dish since cable service is not available here.

On Mon, Aug 12, 2019, 4:46 PM Lewis Foster <[lfoster@orangecountyva.gov](mailto:lfoster@orangecountyva.gov)> wrote:

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## Lewis Foster

---

**From:** Andrea Bunce <ajbunce@gmail.com>  
**Sent:** Monday, August 12, 2019 5:14 PM  
**To:** Lewis Foster  
**Subject:** Re: Information needed for Grant Application Home Business / telecommute

Mr Foster,

At 1448 Hillcrest Ln, Barboursville there is 1 home based business: Carpenters at Large and 1 Telecommuter.

Thanks,

Andrea Bunce  
434-962-6251

On Mon, Aug 12, 2019 at 4:46 PM Lewis Foster <[lfoster@orangecountyva.gov](mailto:lfoster@orangecountyva.gov)> wrote:

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I'm Lewis Foster the Broadband Program Manager for Orange County Broadband Authority. I would like to take this opportunity to thank you for participating in the Broadband Survey earlier this year. This information has been very useful in determining the areas in Orange County without broadband.

I'm not sure if you heard yet but Orange County Broadband Authority plans to apply for a grant to help cover the cost of construction to provide broadband service to your area. The grant application is very competitive and I need some additional information to improve our application.

I need to know how many home businesses or telecommuters in the service area. Currently I have no way of knowing without your assistance.

Please let me know if you or your next door neighbor operates a home business or telecommutes. If possible, please provide their business name and address.

If your neighbor hasn't taken the survey yet, please encourage them to take the survey. The more survey results we are able to show the state it will make our grant application stronger

## Lewis Foster

---

**From:** Andrea Bunce <ajbunce@gmail.com>  
**Sent:** Tuesday, August 6, 2019 4:13 PM  
**To:** Lewis Foster  
**Subject:** VATI Grant Application with Madison Gigabit

I want to express my support for this process. I see on the county website that Burnley Rd (Rt 644) is part of this project. It is sorely needed. If the grant is awarded, is there a completion date in mind?

I do wonder what the plan is for those of us who do not live on the road - but have long driveways.

Thanks,

Andrea Bunce  
434-962-6251

## Lewis Foster

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**From:** Lauren Stafford Bruce <lauren@telecompute.com>  
**Sent:** Monday, August 5, 2019 2:04 PM  
**To:** Lewis Foster  
**Subject:** Re: Internet Survey

Hughes Net. I also took the survey on a very sunny and clear day (which is important to note as typically it is much slower.)

Thank you,  
Lauren R S Bruce  
Lauren@Telecompute.com (Best Contact Method)  
800-872-2489 (Normal Business Hours are 10 AM to 2 PM Monday - Friday)

On Mon, Aug 5, 2019 at 2:01 PM Lewis Foster <[lfoster@orangecountyva.gov](mailto:lfoster@orangecountyva.gov)> wrote:

Good Afternoon Lauren,

I have been reviewing the Broadband Survey results and I noticed your speed is faster than others around you. May I ask what service are you using?

Thanks

Lewis

S. Lewis Foster

Broadband Program Manager

Orange County Broadband Authority

127 Belleview Avenue

P.O. Box 111

Orange, VA 22960

Office: 540.661.5332

Cell: 540.920.7623

## Lewis Foster

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**From:** lettymac@aol.com  
**Sent:** Sunday, August 4, 2019 2:58 PM  
**To:** Lewis Foster  
**Subject:** Poor Connectivity - Help Desperately Needed

Hello Lewis Foster,

For the record, my husband and I would like you to add our names to your list of Orange County residents who have inadequate (sometimes, non-existent) broadband connectivity. For the limited, unsatisfactory connection we get, we pay a high price for a Verizon hotspot. Our smartphone can sometimes get its best signal if we go outdoors. Sometimes we hear via the grapevine that maybe in one year, two years, etc., there may be something coming near us. We have been hearing that for years. Anything you can do to expedite bringing us and other Orange County residents into the 21st century would be appreciated. It would be wonderful to hear - one month, two months.

Thank you for working to effect meaningful change.

Robert and Letty Macdonald  
13078 Albano Road  
Barboursville, VA 22923

540 832 5248

## Lewis Foster

---

**From:** Dale Hilton <dhilton@clevelandart.org>  
**Sent:** Thursday, July 25, 2019 10:24 AM  
**To:** Lewis Foster  
**Subject:** fiber in Barboursville

Greetings,

My husband and I own the following property: 5320 Old Barboursville Rd. Barboursville, Va. 22923 and were told by a neighbor that information is needed regarding acquiring fiber in the area. We would be glad to provide information and/or fill out a survey. Would you be able to send us a link to the survey? I apologize but was not able to find it on the Orange County website after a cursory search.

Very sincerely,  
Dale Hilton

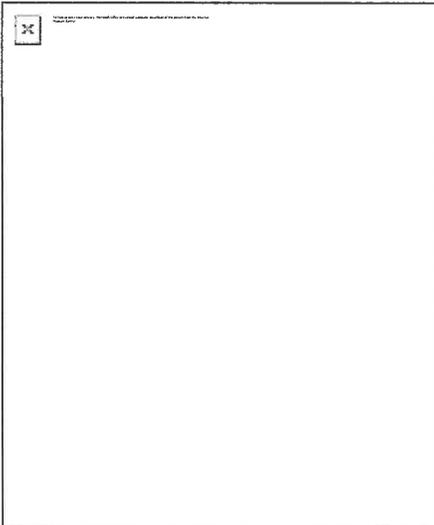
**Ms. Dale Hilton**

Department Director, Adult and Distance Learning  
Public and Academic Engagement  
The Cleveland Museum of Art  
11150 East Boulevard  
Cleveland, Ohio 44106-1797

T 216-707-2491

F 216-707-6679

[www.ClevelandArt.org/DistanceLearning](http://www.ClevelandArt.org/DistanceLearning)



## Lewis Foster

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**From:** Lauren Stafford Bruce <lauren@telecompute.com>  
**Sent:** Thursday, July 25, 2019 9:39 AM  
**To:** Lewis Foster  
**Subject:** Internet Coverage in Barboursville

Mr Lewis Foster,

A Miss Gail Weaver posted on NextDoor, a community website, you had requested folks email you to tell you about the serious lack of internet connectivity in our homes here in Barboursville, VA in Orange County and why it is imperative we get the necessary connectivity we deserve.

For me personally, the internet in my home at 3311 Angus Rd, Barboursville, VA 22923 is essential as I work from my home for a Corporation named Telecompute whose main office is in Washington, DC.

I am responsible for routing Toll Free Numbers and Local Line Numbers (DID's) for many different types of organizations across the United States including Crime Stopper Anonymous Tip Lines, Free Local Weatherlines throughout major cities in 49 of the 50 US states, charity organizations, and private companies. I also provide the billing and customer service support via phone and email.

In order to access my secure routing system it requires a higher speed internet than the satellite companies have to offer. No other companies service my home and I have called them all repeatedly over the years asking for service to my area to no avail. So instead, I am stuck with very slow speeds that cause my system to crash in the middle of routing path instruction input and other vital tasks. This causes problems for not only me, but my customers as well.

Furthermore, my Grandchildren visit from Spotsylvania county frequently and try to access their K-12 Online Private School website to do their work which includes watching instructional videos. These videos do not load or take very long pauses in streaming to buffer making it difficult for them to complete their school work.

While we do use our internet for entertainment purposes on occasion, we do not watch videos as is simply isn't possible. Games we try to play are often interrupted or crash due to the lack of service. If wind, rain, or snow storms approach or the area is too cloudy, I am unable to work or help my Grandchildren with their schooling because the satellite internet is out.

I am willing to sign a petition, a promise service agreement, or anything else you may need to get Comcast, Verizon, or whomever to come to our area and give us the service we so desperately need. I fully understand I live in a country home which comes with some disadvantages as well as advantages over other areas. Our family chose this area because it is beautiful in so many ways. We were also delivered the promise that soon

after moving in we were going to get service from Comcast, which, 8 years later, never came. To say we are disappointed is not nearly enough.

Please let me know that you've received my email and let me know if there is any more information I can provide to you to assist in getting high speed service for Barboursville, VA.

Thank you for your service to our county and your time,  
Lauren R S Bruce  
540-832-3187  
Lauren@Telecompute.com

## Lewis Foster

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**From:** Luke Grubb <lukegrubb2004@gmail.com>  
**Sent:** Thursday, July 25, 2019 8:40 AM  
**To:** Lewis Foster  
**Subject:** I don't have access to Internet

Luke and Courtney Grubb  
2335 Columbia Dr  
Barboursville VA.

My neighbors also are badly wanting internet.

## Lewis Foster

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**From:** Tabitha Reagan <tab1cville@icloud.com>  
**Sent:** Thursday, July 25, 2019 7:35 AM  
**To:** Lewis Foster  
**Subject:** Internet

No internet here at :  
2421 Tisdale Rd  
Barboursville, Va

We've lived here 4 years this October and we've tried the only service available to our location. It's truly terrible speed and overpriced service. We'd loved to be able to have access to a decent internet service like the rest of the world!

Thank you!  
Kind regards,  
Tabitha Reagan

## Lewis Foster

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**From:** Amanda Chance <astellchance@gmail.com>  
**Sent:** Wednesday, July 24, 2019 10:04 PM  
**To:** Lewis Foster  
**Subject:** Internet on Burnley Rd

Hi,

I was told that you wanted stories of Barboursville/Orange residents who are needing internet. I need internet because I work from home as a real estate investor. I actually am leaving this house and moving back to Charlottesville because we can't get internet. My kids can't watch Netflix on their very expensive iPads and it's a nuisance to daily life. I'm scared i will have a hard time selling this house when people find out there's no internet out here and I was too naive to look into it before I bought this property.

Our address is 15228 Burnley Rd, Barboursville Virginia 22923

Thanks,  
Amanda Chance

Sent from my iPhone

## Lewis Foster

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**From:** BHannold <bhannold@yahoo.com>  
**Sent:** Wednesday, July 24, 2019 3:52 PM  
**To:** Lewis Foster  
**Subject:** high speed internet

To Mr. Lewis Foster  
Broadband Program Manager  
Orange County

Dear Mr. Foster,

I am writing to urge Orange County to do whatever is necessary to provide all its residents with reliable high speed internet service. I live in the Barboursville area which is not serviced by either CenturyLink or Comcast. We have lived at this location since 2006. Over the course of those years, my neighbors and I have repeatedly contacted these companies to request service, to no avail. Many other neighborhoods have done the same, also with no results.

I am sure you understand the need for reliable high speed internet service in today's economy. I run a small business from my home called Hannold Media Services. High speed internet would enable me to provide my customers with additional services that I am unable to provide with our current setup.

I have filled out the survey on the Orange Co website related to broadband service. If there is anything else I can do, please let me know. The Barboursville area of Orange County is a good place to live – appropriate internet would make it ideal!

Thank you,  
Barbara Hannold

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

## Lewis Foster

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**From:** Weaver, Gail [USA] <Weaver\_Gail@bah.com>  
**Sent:** Wednesday, July 24, 2019 2:21 PM  
**To:** Lewis Foster  
**Subject:** Broadband/Internet/ Barboursville

Mr. Lewis,

Can you give me an update on obtaining USEABLE Internet in the area of Barboursville- I am near Tisdale and Burnley rd. We have lived there for 10 months. I tried satellite and it was worse than dial up....

I currently use a hot spot and mifi. Sure would like to come into this century. My neighbor literally lost a sale of her house, because the buyer worked from home and had to have a reliable connection.

Rumor has it there is a survey on the Orange County site for Broadband,,, but I didn't see it,

Regards,  
Gail Weaver  
2322 Columbia Dr  
Barboursville, VA 22923  
540-272-0189

## Lewis Foster

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**From:** Sharon Collier <sharonc@firstva.com>  
**Sent:** Wednesday, July 10, 2019 2:12 PM  
**To:** Lewis Foster  
**Subject:** RE: broadband eta

Hi Lewis,

Thanks for your prompt response. My address is 4151 Hamm Road, Barboursville, VA 22923. Douglas Road intersects with Hamm Road and they are both dead end roads. Total household count for the two roads combined is over 45 households along with at least 4 small businesses. I'm guessing at least 25% of these households have an educational need for broadband. I have also completed the survey.

If you have time, I would like to know more so I can understand the schedule below. My cell number is 434-466-1017.

Thanks

Sharon Collier

**From:** Lewis Foster <lfoster@orangecountyva.gov>  
**Sent:** Saturday, July 06, 2019 7:03 AM  
**To:** Sharon Collier <sharonc@firstva.com>  
**Subject:** RE: broadband eta

Good Morning Mrs. Collier,

I appreciate you reaching out to me. The orange duct you see along Hwy 15 is being used to installed fiber to connect the schools. We are in the process of bidding fiber construction to connect towers to the Public Safety Radio System. One of the towers will be near the trash collection site on US 33. Could you please provide me your address to review your area in more detail?

We are currently taking a survey along with a speed test to determine the areas unserved and underserved. We plan to use this information to apply for grants to serve these areas first along with funding from private providers. I encourage you and your neighbors to take the Broadband Survey to assist us in this process.

Below is the information concerning survey and link.

### Broadband Coverage Survey

The Orange County Broadband Authority has launched an interactive survey to gather internet upload and download speeds in the County. All survey fields are voluntary. Information provided may be used by Orange County or the Orange County Broadband Authority for research and grant funding opportunities.

To complete the survey, click [here](#).

In order to bring new companies to Orange County, we have to get connectivity to collocation facility in Culpeper.

Below is our current schedule.

Fiber connectivity to schools by July 15, 2019.

Fiber connectivity to public safety towers for radio system January 2020.

Connectivity to Culpeper by June 2020.

Pilot projects with private service providers will start July 2020.

Depending on funding from grants, service providers and County will determine the broadband schedule.

If you wish, I will be glad to call and discuss in more detail.

Thanks

Lewis

S. Lewis Foster  
Broadband Program Manager  
Orange County Broadband Authority  
127 Belleview Avenue  
P.O. Box 111  
Orange, VA 22960  
Office: 540.661.5332  
Cell: 540.920.7623

**From:** Sharon Collier <[sharonc@firstva.com](mailto:sharonc@firstva.com)>  
**Sent:** Friday, July 5, 2019 5:28 PM  
**To:** Lewis Foster <[lfoster@orangecountyva.gov](mailto:lfoster@orangecountyva.gov)>  
**Subject:** broadband eta

Hello Mr. Foster,

I live on Hamm Road in Barboursville and currently have HughesNet for internet. My son is currently enrolled in online classes through Old Dominion University and must travel to PVCC either in Stanardsville or Charlottesville to log into his classes. While traveling on Rt 15 between Gordonsville and Orange I see a lot of orange cable being installed. Is this for the broadband? Do you have an ETA on when we can expect to see the broadband available for this part of the county? I realize this end of the county is more rural than through Gordonsville and Orange and on up into the eastern part of the county but it seems this end of the county is the last to receive any upgrades. Please advise.

Thanks

Sharon Collier

## Lewis Foster

---

**From:** Sharon Collier <sharonc@firstva.com>  
**Sent:** Friday, July 5, 2019 5:28 PM  
**To:** Lewis Foster  
**Subject:** broadband eta

Hello Mr. Foster,

I live on Hamm Road in Barboursville and currently have HughesNet for internet. My son is currently enrolled in online classes through Old Dominion University and must travel to PVCC either in Stanardsville or Charlottesville to log into his classes. While traveling on Rt 15 between Gordonsville and Orange I see a lot of orange cable being installed. Is this for the broadband? Do you have an ETA on when we can expect to see the broadband available for this part of the county? I realize this end of the county is more rural than through Gordonsville and Orange and on up into the eastern part of the county but it seems this end of the county is the last to receive any upgrades. Please advise.

Thanks

Sharon Collier

## Lewis Foster

---

**From:** Letty Macdonald <lettymac@aol.com>  
**Sent:** Monday, August 5, 2019 2:54 PM  
**To:** Lewis Foster  
**Subject:** Re: Poor Connectivity - Help Desperately Needed

Good afternoon Lewis,

We "connect" to the internet through a Verizon hotspot. I do not know the terminology to use, but we have paid hundreds of dollars to get some kind of "box" antenna placed under the eaves. A wire from that box antenna comes into our attic and, by wire, connects to some device in a bedroom, and it wirelessly sends a signal to another box-like device which in turn sends a signal to the Verizon hotspot. (I think all this bit is designed to boost the signal.)

Our cellular service is with AT&T, usually getting one bar but not always. There are times when I go outside to get a good signal. We have a landline which is quite dependable considering it is so "yesterday."

If the above response does not answer your question about carriers, please let me know, and I will try harder.

Best wishes,  
Letty

On Aug 5, 2019, at 13:54, Lewis Foster <[lfoster@orangecountyva.gov](mailto:lfoster@orangecountyva.gov)> wrote:

Good Afternoon Letty,

I checked and we have listed as participating in the survey. May I ask, who is your current service provider?

Thanks  
Lewis

S. Lewis Foster  
Broadband Program Manager  
Orange County Broadband Authority  
127 Belleview Avenue  
P.O. Box 111  
Orange, VA 22960  
Office: 540.661.5332  
Cell: 540.920.7623

**From:** Letty Macdonald <[lettymac@aol.com](mailto:lettymac@aol.com)>  
**Sent:** Monday, August 5, 2019 12:17 PM  
**To:** Lewis Foster <[lfoster@orangecountyva.gov](mailto:lfoster@orangecountyva.gov)>  
**Subject:** Re: Poor Connectivity - Help Desperately Needed

Greetings Lewis,

I think we have completed the survey in the past. Is there anyway you could easily check to see for sure? If you can't tell, I will do it.

Thank you so much.

Letty

On Aug 5, 2019, at 10:12, Lewis Foster <[lfoster@orangecountyva.gov](mailto:lfoster@orangecountyva.gov)> wrote:

Good Morning Mr. and Mrs. Macdonald,

I appreciate your information. If you haven't take the survey, please take it for our records.

Broadband Coverage Survey

The Orange County Broadband Authority has launched an interactive survey to gather internet upload and download speeds in the County. All survey fields are voluntary. Information provided may be used by Orange County or the Orange County Broadband Authority for research and grant funding opportunities.

To complete the survey, click here.

<https://survey123.arcgis.com/share/fce579b3b48a4f13861fa1e40d7be540>

Thanks  
Lewis

S. Lewis Foster  
Broadband Program Manager  
Orange County Broadband Authority  
127 Belleview Avenue  
P.O. Box 111  
Orange, VA 22960  
Office: 540.661.5332  
Cell: 540.920.7623

**From:** [lettymac@aol.com](mailto:lettymac@aol.com) <[lettymac@aol.com](mailto:lettymac@aol.com)>  
**Sent:** Sunday, August 4, 2019 2:58 PM  
**To:** Lewis Foster <[lfoster@orangecountyva.gov](mailto:lfoster@orangecountyva.gov)>  
**Subject:** Poor Connectivity - Help Desperately Needed

Hello Lewis Foster,  
For the record, my husband and I would like you to add our names to your list of Orange County residents who have inadequate (sometimes, non-existent) broadband connectivity. For the limited, unsatisfactory connection we get, we pay a high price for a Verizon hotspot. Our smartphone can sometimes get its best signal if we go outdoors. Sometimes we hear via the grapevine that maybe in one year, two years, etc., there may be something coming near us. We have been hearing that for years. Anything you can do to expedite bringing us and other Orange County residents into the 21st century would be appreciated. It would be wonderful to hear - one month, two months.

Thank you for working to effect meaningful change.

Robert and Letty Macdonald  
13078 Albano Road  
Barboursville, VA 22923

540 832 5248

## Lewis Foster

---

**From:** Jenkins, Ryan \*HS <RND2Z@hscmail.mcc.virginia.edu>  
**Sent:** Thursday, July 25, 2019 9:26 AM  
**To:** Lewis Foster  
**Subject:** HSI service

Hi Mr. Foster,

I was given your info from a lady named Gail Weaver in reference to this HSI issue in the Barboursville area. I recently joined an app group called "Nextdoor" which gives neighbors and other folks close to you the opportunity to buy/sell items, advertise services, and also create discussions regarding neighborhood issues. I reached out on there to see if anyone else was as frustrated as I am about the lack of HSI in our area. With numerous responses, found that there are lots of folks in this dead zone who share that frustration. I moved here 9 years ago from Staunton and couldn't believe there were no carriers that serviced our home on Spotswood Trail. My husband, who is lifelong resident, explained there has never been internet service in our area. I worked for Comcast for several years and reached out to some of my previous co-workers to have a maintenance tech come out to survey the area last year. I was told our area was not serviceable but given no further explanation other than the closest serviceable address is 3083 Spotswood Trail. My address is 4399. We have contacted several other carriers who again said we are "unserviceable". My mother in law (lives next door) tried Hughes Net, which turned out for her to be worse than dial up. I have had to opportunity to work from home for the last 5 years but with this issue, am unable to do so. As much as I don't want to leave the area, it may be the next step. If you can help in any way or even point me in the direction to get the ball rolling, it would be much appreciated. I don't believe that commitment from "potential customers" would be an issue at all. We have new subdivisions and homes as well as longtime residents that are hopeful this will one day be an option for our area. Thank you for your time!

Ryan Jenkins  
4399 Spotswood Trail  
Barboursville, Va 22923  
540-849-5478

Thanks,  
*Ryan Jenkins*  
*Registration Analyst*  
*UVA Physicians Group*  
*434.295.1000 x1314*

### CONFIDENTIALITY NOTICE

Do not read, copy or disseminate this communication unless you are the intended addressee. This email communication may contain information that is confidential and privileged/exempt from disclosure. If you have received this communication in error, please notify me immediately via email or telephone and either shred or return the original message to me by mail. Thank you for your cooperation.

8/20/19

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

RE: Virginia Telecommunications Initiative (VATI) 2020 - "Barboursville Service Area One"

Dear Dr. Holmes,

I am writing to convey my support of the application submitted by the Orange County Broadband Authority, in partnership with Madison Gigabit Internet, Inc. The project, known as "Barboursville Service Area One," will allow installation of a fiber-to-the-premise (FTTP) network to provide broadband service in the unserved Barboursville and Eheart areas of Orange County. The project will serve 590 homes, home-based businesses, and traditional businesses in the service area. Additionally, the project will connect Barboursville Volunteer Fire Company, Barboursville Community Park, and the non-profit Four County Players organization.

As I understand it, the goal of VATI is to create strong, competitive communities throughout the Commonwealth by preparing those communities to build, utilize, and capitalize on telecommunications infrastructure. This project is essential to our community by providing access to healthcare via telemedicine, increased educational opportunities through distance learning, and encouraging entrepreneurial economy where existing and start-up home-based and small business can compete globally.

My family has been waiting for over 13 years for decent broadband to our home. I have had to settle on satellite as it is our only option. It is very expensive for the average 3 Mb/s download speeds and 1.3 Mb/s upload. This has proven inadequate for my children to do their homework using the required online school rooms that Orange County HS and PHMS requires them to use. We need this upgrade and am looking forward to getting fiber to the house that would greatly enhance my children's ability to compete with other children in residential areas. Thank you for your support.

Sincerely,

WRIGHT.WILLIA Digitally signed by  
M.C.1156162716 WRIGHT.WILLIAM.C.1156162716  
Date: 2019.08.20 07:33:32 -0400

William C. Wright  
16382 Douglas Rd  
Barboursville, VA 22923

Barboursville Ruritan Club  
5259 Barboursville Community Center Drive  
Barboursville, VA 22923

August 26, 2019

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

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Our club is a civic service organization and our mission is to survey the needs in the community and work to meet some of those needs. Lack of communications has always been a problem---we can't find out the needs and likewise the residents frequently don't know the services we provide. Ruritan National, our parent organization, is handling most of their record keeping and correspondence via telecommunications and low cost, quality internet will enhance our communications in the community.

For many years the club has provided each third-grade student in the local elementary school with a dictionary. It has been suggested the dictionary project be eliminated since the students are being provided with tablets and laptops. Many students in our area will not be able to use them at home because of no internet service. Programs offered to our students such as the Blue Ridge Virtual Governor's School require students to collaborate remotely with students across the state. This is currently impossible for students in our area.

In our community there are residents, including several club members, who can work at home. Because there is not adequate high speed service in their homes, they frequently have to travel to adjacent communities to use the updated service in churches, restaurants, etc. Technical, STEM personnel in high-paying jobs are looking to leave the expense of living in cities and are migrating to more rural locations. Orange County is missing out on the additional tax revenue due to the lack of infrastructure.

The Club supports this project and welcomes the opportunities it will provide for our community.

Sincerely,



Annette M. Robertson  
President



COMMONWEALTH OF VIRGINIA

**HOUSE OF DELEGATES**  
RICHMOND

**NICHOLAS J. FREITAS**  
210 NORTH MAIN STREET  
CULPEPER, VIRGINIA 22701

THIRTIETH DISTRICT

COMMITTEE ASSIGNMENTS:  
FINANCE  
SCIENCE AND TECHNOLOGY  
MILITIA, POLICE AND PUBLIC SAFETY FINANCE

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

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Sincerely,

A handwritten signature in black ink, appearing to read "Nick J. Freitas".

Nick J. Freitas  
Delegate 30th District  
540-222-7706  
nfreitas@nickjfreitas.com