

# Application to DHCD Submitted through CAMS

County of Albemarle

Albemarle CenturyLink VATI Project

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**Application ID:** 39711172016144823  
**Application Status:** Pending  
**Program Name:** Virginia Telecommunications Initiative  
**Organization Name:** County of Albemarle  
**Organization Address:** 401 McIntire Road, Room 149  
Charlottesville, VA 22902-4579  
**Profile Manager Name:** Betty Burrell  
**Profile Manager Phone:** (434) 296-5855  
**Profile Manager Email:** bburrell@albemarle.org

**Project Name:** Albemarle CenturyLink VATI Project  
**Project Contact Name:** Michael Culp  
**Project Contact Phone:** (434) 296-5891  
**Project Contact Email:** mculp@albemarle.org  
**Project Location:** 6659 Mint Springs Park Road  
Crozet, VA 22932-2504  
**Project Service Area:** Albemarle County

**Total Requested Amount:** \$118,400.00  
**Required Annual Audit Status:** Pending Review

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## Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
<b>Telecommunications</b>	<b>\$118,400.00</b>	<b>\$34,600.00</b>	<b>\$153,000.00</b>
Construction	\$118,400.00	\$24,600.00	\$143,000.00
Other: Const. Spt. Albemarle Funds	\$0.00	\$5,000.00	\$5,000.00
Other: Admin. Spt. Albemarle Funds	\$0.00	\$5,000.00	\$5,000.00
<b>Total:</b>	<b>\$118,400.00</b>	<b>\$34,600.00</b>	<b>\$153,000.00</b>

## Budget Narrative:

Albemarle would provide \$5,000.00 Construction for Yancey Mills, and \$5,000 for admin. support. If DHCD awards all three CenturyLink projects the Albemarle "match" is \$10,000. If DHCD decides against awarding Yancey Mills but awards one or both of the other projects; the Albemarle "match" would be \$5,000 to be used to provide administrative support for invoice and remittance processing and other administrative tasks.

## Questions and Responses:

### 1. Project Area

A map and description of the proposed geographic area including specific boundaries of the project area e.g.; street names, local and regional boundaries, etc. Explain why and how the project area(s) was selected. Attach a copy of your Map(s)

#### Answer:

The areas were identified by both the County and CenturyLink as areas that meet the eligibility criteria and locations where CenturyLink and the County receive inquiries from citizens in these areas about when broadband might be available to them.

Maps of the project areas are attached. The maps show street names. The maps also show the approximate location of the VDSL2-enabled device, noted with the abbreviation "FTTM." Each of these devices will be connected to the CenturyLink network by new fiber connections, the cost of which is included in the budget.

- Describe population both in terms of absolute numbers within the project area and the likely users that will be served by the proposed project. Indicate the numbers of residential, businesses and community anchor institutions the proposed project will pass in the project area. Estimate the overall expected subscriber projections for the project and the basis for the projections.

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**Answer:**

The proposed project area includes three distinct areas; one of which contains a County park. Below are the combined data for the entire project and the data for each individual area. Each area can be completed independent of any of the others and each area separately meets the speed and matching funds requirements.

Total Project: An estimated 284 “living units” are in the total project area, of which 219 will meet the VATI speed requirements. Note that many additional citizens will also have access to broadband service with speeds up to 10M/1M. Based on an analysis of other exchanges where broadband was enabled after no preexisting service, an estimated 50% of residents would subscribe, for a total of 110 subscribers.

The figures for each of the three areas are:

<b>Service Area</b>	<b>Living Units</b>	<b>Living Units capable to be served at the Required Speed</b>	<b>Projected Subscription Rate</b>	<b>Estimated Subscribers</b>
<b>Emerald Ridge/Saddle Hollow</b>	104	80	50%	40
<b>Tillman’s</b>	53	41	50%	21
<b>Yancey Mills</b>	127	98	50%	49
<b>Project Total</b>	<b>284</b>	<b>219</b>	<b>50%</b>	<b>110</b>

3. Has the locality where the proposed project area is located been designated to receive funding through Connect America? The applicant must provide supporting documentation proving the VATI project area is NOT to be served by Connect America Funding.

**Answer:**

CenturyLink has attached a verification statement that the proposed project area has not been designated to receive  
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funding through the FCC's Connect America Fund (CAF).

4. Discuss the benefits to the community. For example, the applicant should discuss how broadband availability will help foster economic development and how the use of broadband applications is relevant to residents, businesses, telemedicine, teleworking/telecommuting, public schools, distance learning, e-commerce, e-government, public safety, tourism, entertainment, etc.

**Answer:**

Albemarle County will benefit when the type of businesses identified in the Central Virginia Partnership for Economic Development (CVPED) Target Market Study choose to locate or remain in the County. These businesses will rely on other local businesses, service providers and farms; spur creation of other supporting local businesses; create jobs and generally continue to strengthen the tax and economic base of the community.

*The Bioscience and Medical Devices/Health Services* industry group is primarily driven by start-ups and commercialization opportunities emerging from research activities at the University of Virginia (UVA), including the UVA Center for Telehealth. The latter provides broadband enabled telemedicine services to remote areas, offering face-to-face clinical specialty consultation and medical education, substantially reducing travel time, home displacement and costs. Other advances include smartphone enabled ECGs, Echocardiograms, and wireless glucose monitoring. Direct and indirect patient care activities including advances in telemedicine are centric to the local UVA Health Systems and Sentara Martha Jefferson Hospital. Quality broadband is fundamental to ensuring these benefits remain and flourish in Albemarle.

*Business and Financial Services* are experiencing rapid increases in the use of electronic payments through mobile technologies, return of foreign outsourced services to the US, and compliance with regulatory provisions associated with healthcare and pension plans. Small-sized enterprises continue to thrive while larger scale "data centers" face challenges in meeting ready access to trunk line broadband capacity, along with source water to cool stacked computers and dual-power to protect from losses of power. Making broadband available to this market sector and its employees will attract business, create jobs and utilize or create local supporting services. Many of these employees in Albemarle work primarily from home. Providing broadband in the rural areas will assist in retention and recruitment.

*Information Technology and Defense Security* industries can build upon two large federal defense and intelligence installations located in Albemarle, along with more than 10 federal contractors. Long time employers like GE and Northrop Grumman are well-positioned to expand and recruit select sectors for the industry group. Strong future markets are expected due to product developments like battery back-up systems, open-road intelligent transportation systems and mobile medical monitors. Growth is expected in the semiconductors market for consumer electronics, use of electronics in the transportation industry and increased downstream demand for

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sophisticated measuring and monitoring systems from the energy, military, health and biotechnology sectors. Locations need highway access for truck deliveries, broadband for data capacity and secure communications, and water and sewer, along with adequate building footprint. All of these attributes have a positive impact on the local economy and are especially reliant on robust broadband.

*Agribusiness and Food Processing and Related Technology* rely on close proximity between agricultural production and the local and regional markets such as Richmond, DC Metro, Norfolk and Raleigh-Durham. The cluster includes wineries, breweries, perishable prepared food manufacturing, growers, and value-added foods. Also included are the supporting industries such as the local food aggregators (e.g. Relay Foods, Horse & Buggy and the Local Food Hub); sellers of local foods to local and regional food markets from multiple local producers.

Access to robust broadband will benefit existing and future rural businesses through more efficient operations, broader appeal for online shoppers, employee and livestock safety, improved monitoring of product quality and production, accurate monitoring of weather conditions and trends, cost savings and customer satisfaction. Per the latest report available from the VA Wine Board, Albemarle is the top grape producer in the Commonwealth, with 32 licensed wineries. The viticulture industry impact is broader than simple wine-making. On-site wine sales are a critical component to maximizing profit; for this reason, private event and festival related activities more than double the revenue impacts from the viticulture industry. Local event-industry professionals estimate each private event generates, on average, over \$100,000 of local expenditures, for a resulting, aggregate impact of over \$50 million/year (source: Keswick Vineyard).

Complimentary to the viticulture industry is the farm-to-table experience that includes specialty food producers engaged in food and wine pairing; Albemarle County-based cheese production has more than doubled in the last three years (VA Dept. of Agriculture). Albemarle also ranks among the top five Virginia localities for generating equine industry employment and ranked fourth in industry total sales, behind Loudoun, Fauquier and Culpeper (Weldon Cooper 2011). Access to broadband provides these rural businesses with the competitive edge necessary to compete with the urban ring businesses that typically rely heavily on broadband for marketing, selling, purchasing, regulatory compliance and general operating. Many contend that broadband is fundamental to the preservation of America's rural farms as it provides a mechanism to not only compete locally but globally. Without successful market penetration, farms who fail subdivide and sell.

Access to broadband has been identified as one of the key attributes for business retention and attracting prospective businesses referenced in these four core industry clusters.

## 5. Need

To be eligible for VATI, applicants must demonstrate that the proposed project area(s) is unserved. An unserved area is defined as an area with speeds <10 Mbps/1 Mbps. Provide a list of the broadband service providers, if any,

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currently serving the area the applicant proposes to serve and the available broadband speeds.

**Answer:**

There are no broadband service providers currently providing broadband service to meet the VATI requirement in any of the three project areas.

## 6. Project Description

A statement whether the proposed project is targeting the “last mile,” “middle mile,” or “backbone” portion of the broadband infrastructure. This statement should also indicate whether the facilities involved would be owned, rented or leased.

**Answer:**

This is a “last mile” project and the facilities will be owned, operated and maintained by CenturyLink.

7. A description of the broadband service to be provided, including estimated download and upload speeds, whether that speed is based on dedicated or shared bandwidth, and the technology that will be used. This description should be illustrated by a map or schematic diagram, as appropriate.

i. If the application proposes a wireless broadband service, provide a list of all broadband service providers that overlap the footprint of the proposed wireless broadband project. If known, provide an estimate of the customers within the proposed footprint that are served by competing broadband service providers.

ii. If the application proposed a wireless broadband service, provide a list of all facilities-based landline telecommunications providers that overlap the footprint of the proposed wireless broadband project. Describe the extent to which any facilities-based landline telecommunications providers are currently offering a digital subscriber line (DSL) or cable broadband service within the footprint of the proposed wireless broadband project.

**Answer:**

CenturyLink will deploy VDSL2 technology, leveraging existing facilities and infrastructure to each qualified customer, providing the required bandwidth to qualified living units.

The proposed project area includes three distinct areas. Below are the combined data for the entire project and the data for each individual area. Each area can be completed independent of any of the others and each area meets the VATI speed and cost requirements independent of any other area. Note that many other citizens will be enabled at speeds up to 10M/1M.

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Service Area	40-80M download / 3M upload	25M download / 2M upload	Total
<b>Emerald Ridge/Saddle Hollow</b>	30	50	80
<b>Tillman's</b>	14	27	41
<b>Yancey Mills</b>	66	32	98
<b>Project Total</b>	<b>110</b>	<b>109</b>	<b>219</b>

8. Provide a description of the network system design used to deliver broadband service from the network's primary Internet point(s) of presence to end users, including the network components that already exist and the ones that would be added by the proposed project. Also describe specific advantages of using this technology.

**Answer:**

CenturyLink proposes leveraging existing twisted-pair, copper facilities to each customer. Further, CenturyLink would build new fiber to each area and connect the new fiber to a new VDSL2 enabled device. These devices would, in-turn, provide the broadband service to qualified loops in the area.

**9. Project Timeline**

What is the current state of project development (i.e. planning, preliminary engineering, final design, etc.). Prepare a detailed project timeline or construction schedule, which identifies specific tasks, staff, contractor responsible(s), collection of data, etc., and estimated start and completion dates. The timeline should include all activities being completed by June 20, 2017

**Answer:**

This project is currently in the planning stage. See the attached Project Management Plan for more details.

**10. Project Budget**

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.

**Answer:**

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Grant funds will be used to reimburse CenturyLink for its costs. The total project costs are:

<b>Service Area</b>	<b>Electronics</b>	<b>Fiber</b>	<b>Total</b>
<b>Emerald Ridge/Saddle Hollow</b>	\$21,000	\$10,000	\$31,000
<b>Tillman's</b>	\$21,000	\$30,000	\$51,000
<b>Yancey Mills</b>	\$42,000	\$24,000	\$66,000
<b>Project Total</b>	<b>\$84,000</b>	<b>\$64,000</b>	<b>\$148,000</b>

These costs include all of the fiber installation and VDSL2 equipment required for the project, along with all of the planning, construction and testing costs.

The proposed project area includes three distinct areas. Each area can be completed independent of any of the others and each area meets the VATI speed and cost requirements independent of any other area.

11. A summary showing the revenue source, including estimated VATI grant funds and matching funds, for each expenditure itemized above.

**Answer:**

The revenue sources for the total projects are:

<b>Service Area</b>	<b>VATI</b>	<b>CenturyLink</b>	<b>Albemarle County</b>
<b>Emerald Ridge/Saddle Hollow</b>	\$24,800 (80%)	\$6,200 (20%)	

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<b>Tilman's</b>	\$40,800 (80%)	\$10,200 (20%)	
<b>Yancey Mills</b>	\$52,800 (80%)	\$8,200 (12%)	\$5,000 (8%)
<b>Project Total</b>	<b>\$118,400 (80%)</b>	<b>\$24,600 (17%)</b>	<b>\$5,000 (3%)</b>

The proposed project area includes three distinct areas. Each area can be completed independent of any of the others and each area meets the VATI speed and cost requirements independent of any other area.

Albemarle County would be providing an additional \$5,000 for overall administrative costs; in addition to \$5,000 direct construction support to the Yancey Mills project as noted.

12. Matching funds: A description of the matching funds the applicant and co-applicant will invest in the proposed project, (VATI funding cannot exceed 80% of total project cost)
- For each element of matching funds in the description, indicate the type of match (cash, salary expense, or in-kind contribution).
  - Identify whether the applicant or co-applicant is responsible for providing each element of the proposed matching funds.

**Answer:**

For this project CenturyLink would be providing between 16% and 17% of the total project cost in matching funds.

- CenturyLink would be providing all of the services (e.g., planning and engineering), labor and materials necessary for this project. The value of these services and materials are between 16% and 17% of the total project costs.
  - CenturyLink is responsible for providing all of the services, labor and materials necessary for this project. If the grant includes the Yancey Mills area, Albemarle County would be contributing \$5,000 of matching funds.
13. Applicant and Co-Applicant: A description of the public-private partnership involved in the project.
- If the partnership is formalized in a written agreement provide a copy of that agreement.
  - 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 and co-applicant and any additional partners.

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**Answer:**

A partnership between Albemarle County and CenturyLink has not yet been formalized for this project, but both partners are collaborating on an agreement to be executed if the VATI grant were awarded. The agreement would cover the following areas:

- CenturyLink would commit to implement the Project Management Plan within the designated period, to provide updates to the County on the status of the project, to notify the County if County assistance were needed, to submit requests for payment as work was completed, to complete all work within the required timeframe, to provide the County with information showing the locations where broadband had been enabled, and to propose any required non-disclosure agreements if CenturyLink were requested to share confidential information.
- The agreement also is expected to include the County's commitments to process requests for payment in a timely manner, to review information provided by CenturyLink and submit requests for additional information in a timely manner, to complete any necessary non-disclosure agreements, to provide necessary rights of way, and to assist in contacting citizens and others when appropriate to assist in completing the project within the required timeframe. The agreement would also address payment to CenturyLink from the County if the Yancey Mills area project were included in the final grant.
- The parties agree in advance that CenturyLink will consolidate bills on at least a monthly basis and submit as a single invoice for processing. The preferred method of billing is at mid-point of the projects and then at the completion of work; thereby providing only two sets of remittance processing.

14. Identify key individuals, including name and title, who will be responsible for the management of the project. Describe their role and responsibilities for the project. Present this information in table format.

**Answer:**

Name	Title	Role and Responsibilities
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Mike Culp	Information Technology Director Albemarle County, VA	Mr. Culp will be responsible for overall project management for the partnership. He will coordinate all activity with CenturyLink and manage administrative tasks to include invoice processing and remittances with DHCD.
Richard Schollmann	Director of Government Affairs CenturyLink	Mr. Schollmann will be responsible for overall coordination of the project with Albemarle County. He will provide all coordination with the planning, engineering, construction, and billing teams within

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

**Answer:**

- Albemarle County has worked with numerous state and federal agencies on many different types of Grants. Most recently Albemarle IT completed the Virginia Telecommunication Planning Initiative Grant with DCHD and the Housing Department is working on a CDBG Grant.
- CenturyLink has extensive experience with managing grants and constructing broadband communications facilities in the Commonwealth and elsewhere. In Virginia, CenturyLink and its predecessor companies have provided voice and data services to hundreds of thousands of Virginians

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for decades. All of those networks were constructed by CenturyLink companies. CenturyLink has built and provided high-speed Internet services to residential and business customers since the inception of those services.

CenturyLink serves approximately 12.9 million access lines in 37 states across the country, including over 6 million high-speed Internet customers. Its customer base ranges from rural residential customers to international Fortune 500 companies. CenturyLink is a global leader in managed hosting and cloud services, and offers network and data systems management, big data analytics and IT consulting, and operates nearly 60 centers in North America, Europe and Asia.

In 2015, CenturyLink announced that it had accepted nearly \$506 million in annual support from the federal Connect America Fund to support broadband for over 2.3 million customers in 33 states. In Virginia alone, CenturyLink accepted over \$15.7 million per year for 6 years to reach 49,993 homes and businesses. CenturyLink has committed to having 40% of the build completed in each state by the end of 2017.

CenturyLink also has experience in state-level broadband grant programs. Beginning in 2007, CenturyLink participated in grant programs with Mid-Atlantic Broadband and the Tobacco Commission to build, operate and maintain DSL broadband projects in some of the most rural locations in Virginia.

The initial project had a total project cost of \$968,000 and the project was completed on time and within budget. It provided broadband to nearly 3,000 homes and businesses would not have had access to broadband without the grant program. CenturyLink participated in several additional annual rounds of MBC/Tobacco Commission grants totaling over \$3 million in project costs. All of those projects were completed on time and within budget.

## 16. Service

Describe the Internet service offerings to be provided after completion of this project and your price structure for these services. The service offerings should include all relevant tiers.

### Answer:

The services being proposed for this program are the same products and services provided by CenturyLink across Virginia. Qualifying Broadband speeds will vary based on the customers loop length (from the VDSL2 device), but common speeds offered today include, but are not limited to speeds up to (downstream/upstream), 80M/10M, 60M/5M, 40M/5M, 25M/2M and 10M/1M. Further, customers served on facilities beyond the 10M/1M offering may still qualify for broadband, but at lower rates.

Pricing for CenturyLink services is publicly available on its website at [www.centurylink.com](http://www.centurylink.com).

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Currently, CenturyLink's pricing for 25M service is \$44.95 per month, 15M is \$34.95 per month and 3M is \$24.95 per month. Those prices are for a one year price lock and require a one year contract and customer enrollment in autopay for their bill. Pricing varies if a customer bundles voice and/or video services.

17. Any other equitable factor that the applicant desires to include.

**Answer:**

As mentioned above, CenturyLink and Albemarle County can complete any or all three of these projects based on the individual figures for each area. Each area, by itself meets the VATI criteria, including the speed and 80% VATI funding limitations.

All of the areas have participated in surveys where residents indicate a need for broadband for school work and teleworking. Many indicate that they are running home based businesses and need faster internet to be competitive. In addition, one of the projects is submitted in support of a public safety issue. Broadband is a necessity at the County owned Mint Springs Park. There is a swimming and fishing lake in the park as well as a network of mountain bike trails. The area is not currently served by broadband; having broadband access would provide much needed access for first responders.

**Attachments:**

Derivation of Costs

Attachment1rev11220201630219.pdf

Project Management Plan

Attachment21219201645604.pdf

Supporting Documentation of Cost Estimates

Attachment31219201645614.pdf

Map(s) of project area, including proposed infrastructure

Attachment4rev11220201633934.pdf

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

Attachment51219201645644.pdf

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

Attachment61221201614144.pdf

Audited Financial Statement/Reviewed Financial Statement of Balance Sheet

Attachment71219201645714.pdf

Two most recent Form 477 submitted to FCC

CTL477Combined1216201620526.pdf

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

Attachment9rev21220201630322.pdf

Documentation of source of match funding

Attachment10rev21220201630338.pdf

Documentation that proposed project area is unserved based on VATI criteria

Attachment111220201683040.pdf

Documentation that the proposed project area is not designated for Connect American Funding (CAF) or does not have other state or federal resources for construction

Attachment121220201683055.pdf

## Notes:

Albemarle County's required annual audit review (CAFR) was upload to CAMS during the week of 12/19/2016 and as of 12/21/2016 is listed as pending review. Albemarle County can provide the CAFR in digital format upon request.

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