

Application to DHCD Submitted through CAMS

Page County

Project Tower 2020

Application ID: 75707092020141056
Application Status: In Progress - DHCD
Program Name: Virginia Telecommunications Initiative 2021
Organization Name: Page County
Organization Address: 103 South Court Street
Luray, VA 22835
Profile Manager Name: Liz Lewis
Profile Manager Phone: (540) 743-1216
Profile Manager Email: llewis@pagecounty.virginia.gov

Project Name: Project Tower 2020
Project Contact Name: Liz Lewis
Project Contact Phone: (540) 743-1216
Project Contact Email: llewis@pagecounty.virginia.gov
Project Location: 103 South Court Street
Luray, VA 22835-1262
Project Service Area: Page County

Total Requested Amount: \$2,525,888.00

Required Annual Audit Status: Accepted

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Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	\$2,525,888.00	\$640,000.00	\$3,165,888.00
Construction	\$2,525,888.00	\$640,000.00	\$3,165,888.00
Total:	\$2,525,888.00	\$640,000.00	\$3,165,888.00

Budget Narrative:

The proposed project represents a partnership between HSL and Page County. HSL, the co-applicant, upon award of the VATI grant, will be responsible for any matching funds and will provide the labor and materials to complete the provision of services. HSL will provide approximately 10% of the projected construction costs of \$3,165,888, totaling approximately \$320,000. Page County will also provide 10% of the projected construction costs \$320,000 and in-kind assistance to include application analysis and preparation, coordination with the Department of Housing and Community Development, assistance with right of way permitting, and participating in project efforts with HSL as the project is approved and construction begins

Questions and Responses:

1. Project Description and Need

Describe why and how the project area(s) was selected. Describe the proposed geographic area including specific boundaries of the project area (e.g. street names, local and regional boundaries, etc.). Attach a copy of the map of your project area(s). Label map: Attachment 1 – Project Area Map.

Answer:

Page County is a valley community with two rural highways coming into the area - US Route 340 and Route 211. The county has the Blue Ridge Mountains (Shenandoah National Park) to the East and Massanutten Mountain (George Washington National Forest) range to the West. The nature of the topography makes it difficult and costly to provide adequate internet service especially fiber to a large percentage of the households.

The project area was selected by both Page County and VATI co-applicant Rural Broadband Network Services (RBNS) DBA HighSpeedLink (HSL) based on the demand for service expressed by many residents living in neighborhoods outside Page County's three towns (Luray, Stanley and Shenandoah). During a debrief of Page County's 2019 VATI application, VATI staff indicated the importance that the next application submitted by Page County reach a greater density (universal coverage) of households and provide a more comprehensive approach to connectivity in Page. HSL has designed a wireless project that should increase internet passings especially in hard to reach areas by employing a combination of technologies that will overcome a number of obstacles affecting Page County's ability to provide adequate internet to the entire community. 5G (5th Generation) wireless will be used by incorporating unlicensed 5Ghz, Licensed Lite 3Ghz CBRS Spectrum and finally Television White Space. All three of these spectrums will be used with the latest 5G hardware on the market and each will be placed in locations based on environment need.

The urgency to provide internet service to all Page County households is a priority. COVID-19 is impacting the quality of education the county can provide to its students because a significant percentage of the population has limited access to internet and will not be able to participate in virtual distance learning opportunities. Increasing teleworking opportunities is also an important economic strategy and can be accomplished with this project.

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

Answer:

Provider maps like those produced by FCC do not accurately show the lack of connectivity in Page County and oversells the number of providers available in Page

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County based on census blocks. These maps state that Page County has multiple providers with plenty of coverage. A household connectivity survey was needed to prove these maps inaccurate.

Outreach efforts began with a countywide Connectivity Survey that was mailed to every tax paying household in Page County. This survey request was included with the tax notices and was sent out in spring of 2019 and another mailing went out in fall of 2019. The insert directed every household to a website to complete a connectivity survey. The survey asked for an address, internet provider, type of connection and three different time of day speed tests. This survey was boosted on social media and was covered in the newspaper. Data collected from the survey by the Page County Economic Development Coordinator was mapped out by Page County's GIS department. Addresses that corresponded to "hot spot" areas were collected and random calls were made to better target connectivity speeds. Countywide providers identified in the survey were CenturyLink, HighSpeedLink, Comcast and HughesNet.

When COVID-19 hit in early spring 2020 local schools closed temporarily. As schools tried to reopen it became apparent that many students within the county did not have the necessary internet connectivity to move forward with virtual learning. Schools closed permanently in March of 2020. The Page County School System took those months before summer officially started to call every household with a child and ask them about their internet service. Please see their findings attached (Attachment 3, Page 2).

County household data, school system data and HSL customer data were analyzed to determine priority areas of need.

See Attachment 16- Mapped Areas

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

Answer:

Although there are Federally funded project areas in Page County based on this search there are no active projects to build speeds that meet the VATI threshold of served.

See attached maps

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

Answer:

The proposed project map will show coverage into areas that are served based on the VATI requirements. It is important to understand that in this case with wireless technology and to make the most effective use of funds and assets, coverage areas that start in point A for coverage to point C will need to fly over point B where B is a served area. The nature of the services being provided in this project, although up to 100mbps, will have cases where overlap will occur. For example, Comcast provides up to 1Gbps service in the project area but should not be considered an overlap issue and that any overlap would be considered secondary use for a backup connection for businesses. In a very few cases where the overlapped carrier has some type of service quality issues and is not meeting the needs of the customer, having an alternative carrier is an ancillary benefit provided by this funding but not the primary purpose of the funding. It is also understandable that areas that are marked as served by the FCC 477 data is flawed due to irregularities in coverage of a census block.

Attached are maps derived from local surveys (county, school and HSL) and a map produced by BTOP (Broadband Technology Opportunities Program) that was administered by the National Telecommunications and Information Administration (NTIA) funded back in 2009 by the American Recovery and Reinvestment Act. This mapping data was generated from FCC census block information. The unserved and underserved area information shown in this map correlates with the same "in need" areas present in Page County today - supported by school system and household surveys. Speed technology and definitions have changed since 2009, therefore, making more of the underserved areas in Page County unserved.

5. Total Passings: Provide the number of total serviceable units in the project area. Applicants are encouraged to prioritize areas lacking 10 Megabits per second download and 1 Megabits per second upload speeds, as they will receive priority in application scoring. For projects with more than one service area, each service area must have delineated passing information. Label Attachment: Attachment 4 – Passings Form

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a. Of the total number of passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area. Describe the methodology used for these projections.

b. Provide the number of serviceable units in the project area that have 10/1 mbps or less. Describe the methodology used for these projections.

Answer:

a. Of the total number of passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area. Describe the methodology used for these projections.

Each tower placement and configuration should support over 2000 subscribers per tower in a mix of line of sight, near-line of sight as well as non-line of sight.

We have established relationships with six property owners who have provided verbal agreement on allowing the construction of a tower based on specific terms we have stated to them. These tower locations would be leased by HSL and the towers would be owned by HSL.

These towers will have capacity for other uses such as cellular and needed wireless communications services that can be used by the County.

Because the scope of the project is universal in nature it is difficult to estimate passings. A GIS address analysis was conducted and a 2-mile radius from each tower was analyzed to determine an estimated number of passings.

Also see:

Attachment 14 Tower Contacts, Agreement and Design

Attachment 15 Mapped Areas - households identified

b. Provide the number of serviceable units in the project area that have 10/1 mbps or less. Describe the methodology used for these projections.

This network technically will pass about 11,000 households. However, not all of them will be 10mbps or less service.

Towers are placed in static locations to cover multiple pockets of unserved areas throughout the county. Diverse coverage is needed to ensure optimal penetration into the most heavily wooded and hard to reach areas. Most of the unserved areas will have two tower options. This will ensure the highest probability for service at the highest speed options. Due to the sparsely populated and spread out nature of the areas in most need, it is understood that in some cases coverage from these towers will overlap existing wired providers who have 25mbps or better speeds. To make this buildout as cost-effective as possible, this overlap technologically is unavoidable however areas currently served by wired services that meet the VATI definition of served are not being targeted by this project.

6. For wireless projects only: Please explain the ownership of the proposed wireless infrastructure. Please describe if the private co-applicant will own or lease the radio mast, tower, or other vertical structure onto which the wireless infrastructure will be installed.

Answer:

If the project is funded, the plan is for HSL to own the structures and the county would have the right to use these towers for communications and offer use to the towns if needed. This arrangement will be defined in an agreement and would outline position priority on the towers. This agreement would also discuss information about if the tower ownership should change. HSL will actively encourage cell carriers to co-locate on these towers to improve cell service in Page. Preliminary discussions with tower location property owners have included an offer of a 50/50 net split on any revenues from tower rentals instead of a flat monthly rental payment to the landowner.

See Attachment 14 Tower Contacts, Agreement and Design

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

Answer:

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HSL will offer "Ultra Class" speed packages on this network. Each radio connection will support two times the actual package sold. Therefore, at a minimum each connection on the 5Ghz and 3Ghz 5G systems will test at 200mbs but packages will only be sold as high as 100mbs down with 25mbs up for residential and 50mbs up for businesses. The TVWS band will have a max of 25mbs down and 3mbs up. This technology will be used for customers who are in wooded areas or with no line of sight to the tower. For businesses within relatively close proximity to the tower and with a clear line of sight, HSL can offer "Enterprise" level service that is dedicated by leveraging millimeter wave tech. In these cases, HSL can offer 100-4gbs services in the future.

Speed packages:

ULTRA BUSINESS

10 mbps / 5 mbps\$30
25 mbps / 10 mbps\$50
50 mbps / 25 mbps.....\$85
75 mbps / 25 mbps.....\$130
100 mbps / 50mbps\$180
Includes WIFI
Install fee \$150

ULTRA Residential

10 mbps / 2 mbps\$25
25 mbps / 3 mbps\$40
50 mbps / 10 mbps.....\$75
75 mbps / 20 mbps.....\$120
100 mbps /25mbps\$160
Includes WIFI
Install fees \$150
Enterprise
\$5/mbs synchronous
Install fee \$500

8. Network Design: Provide a description of the network system design used to deliver broadband service from the network's primary internet point(s) of presence to end users, including the network components that already exist and the ones that would be added by the proposed project. Provide a detailed explanation of how this information was determined with sources. If using a technology with shared bandwidth, describe how the equipment will handle capacity during peak intervals. For wireless projects, provide a propagation map for the proposed project area with a clearly defined legend for scale of map. Label Map: Attachment 5 – Propagation Map Wireless Project.

Answer:

HSL will be employing a combination of technologies to overcome obstacles in delivering high speed and high quality broadband to the citizens of Page County. 5G (5th Generation) wireless will be used for this proposal, incorporating unlicensed 5Ghz, Licensed Lite 3Ghz CBRS Spectrum and finally Television White Space. All three of these spectrums will be used with the latest 5G hardware on the market and each will have a place in its use based on the environment it is best suited. For purposes of this proposal, 8 Maps have been produced. One for each tower location and one that encompasses them all as a whole and finally one map with the backhaul network. Each tower will deploy three spectrums of technology. Each technology is considered 5thGeneration or 5G within its band. Technology explained as:

Ubiquity LTU 5G – This technology will be utilizing the 5Ghz band. This band was recently increased in capacity by the FCC to add an additional 45 Mhz of spectrum in the upper 5.9Ghz. This band has been and still is the workhorse of Point to Multi point wireless broadband technology. The latest product from UBNT is their LTU platform. UBNT LTU was built from the ground up. Not based on legacy 802.11 standards, it is truly a revolution in wireless technology, allowing for significantly higher speeds and larger channel sizes. Additionally LTU can handle twice as many clients than other products in its class and without quality of service degradation as you increase clients' usage. This product will be leveraged for Clear line of sight installations, where the customer can clearly see without obstruction the tower. This system can support speeds as high as 1Gbs but will be used to provide services from 10/3-100/50mbs to business and residential customers.

CBRS 3Ghz 5G – This band is relatively new to the wireless industry but is perfect for near line of sight applications that are common in this area. The characteristics of this frequency are similar to that of 2.4Ghz wifi, allowing for near to non line of sight use but without interference from wifi devices. Additionally, this band is being used for 5G applications specifically and stated by the FCC planned use for this innovation band. This 5G platform can support speeds as high as 500mbs but will be used to provide businesses and residential customers speeds from 10/3-100/50mbs.

TVWS 5G – This band was taken back after the repack of the TV spectrum and is perfect for Non-line of sight applications that can sometimes hinder the deployment of wireless solutions in parts of this area. Trees and rolling hills are not an issue for this band as it easily penetrates foliage as well as bouncing around hills. This technology can support speeds up to 70mbs but will be used for services from 10/3-25/10mbs This tower configuration should support over 2000 subscribers per tower who are a mix of line of sight, near-line of sight as well as non-line of sight. We have established relationships with six property owners who have given us a verbal agreement at this point on allowing the construction of a tower based on specific terms we have stated to them.

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These tower locations would be leased by HSL and the towers would be owned by HSL. These towers will have capacity for other uses such as cellular and other wireless communications services that can be used by the County.

Backhaul network:

HSL is proposing a Microwave Backhaul network that is fully redundant to provide the highest reliability and quality.

9. Project Readiness

Describe the current state of project development, including but not limited to: planning, preliminary engineering, identifying easements/permits, status of MOU or MOA, and final design. Prepare a detailed project timeline or construction schedule, identifying specific tasks, staff, contractor(s) responsible, collection of data, etc., and estimated start and completion dates. Applicants must include Memorandums of Understanding (MOUs) or Memorandums of Agreement (MOAs) between applicants (drafts are allowable). Label Attachments: Attachment 6 – Timeline/Project Management Plan; Attachment 7 – MOU/MOA between Applicant/Co-Applicant.

Answer:

There is no formal agreement in place between the applicant and the co-applicant, although a formal agreement will be established if the project is awarded funding.

10. Matching funds: Complete the funding sources table indicating the cash match and in-kind resources from the applicant, co-applicant, and any other partners investing in the proposed project (VATI funding cannot exceed 80 percent of total project cost). In-kind resources include, but are not limited to: grant management, acquisition of rights of way or easements, waiving permit fees, force account labor, etc. Please note the a minimum 20% match is required to be eligible for VATI, the private sector provider must provide 10% of the required match. If the private co-applicant's cash match is below 10% of total project cost, applicants must provide financial details demonstrating appropriate private investment. Label Attachments: Attachment 8 - Funding Sources Table; Attachment 9 – Documentation of Match Funding.

Answer:

The proposed project represents a partnership between HSL and Page County. HSL, the co-applicant, upon award of the VATI grant, will be responsible for any matching funds and will provide the labor and materials to complete the provision of services. HSL will provide approximately 10% of the projected construction costs of \$3,165,888, totaling approximately \$320,000. Page County will also provide 10% of the projected construction costs \$320,000 and in-kind assistance to include application analysis and preparation, coordination with the Department of Housing and Community Development, assistance with right of way permitting, and participating in project efforts with HSL as the project is approved and construction begins. The value of in-kind services will depend on the level of activity occurring as the project commences. Page County Economic & Tourism and Page County Economic Development Authority will contribute up to \$3,000 in staff time and funds to enhance community engagement strategies and public relations to include marketing, promotions, educational meetings, and other needed project advertising.

11. Leverage: Describe any leverage being provided by the applicant, co-applicant, and partner(s) in support of the proposed project.

Answer:

With the use of TVWS 5G technology proposed in this project, the County can leverage this technology for more than just broadband. Since this technology allows for very long distance line of sight use, and the underlying tech can be integrated into a drone allowing county law enforcement to leverage this build out in the future for police drone deployments. This possibility was brought HSL's attention when talking to the manufacturer 6 Harmonics about their drone integration testing. This could be of great value as technology plays a bigger role in modern law enforcement. Also every tower location can be used by Page County's E911 services at no cost and a community service.

12. Marketing: Describe the broadband adoption plan.

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

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

Answer:

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

Marketing and plan will include:

- Outreach (phone or mail) to households where connectivity data has been provided and are known to be “in need” of service.
- Local media sites and word of mouth marketing will spread the news of internet opportunity quickly.
- The priority is to connect with the school system and identify student households that need internet service for distance learning during the pandemic. If needed, work with the school system on the affordability of the service for students
- Door hangers will be produced and distributed by our installation crews that can be left in neighborhoods
- Yard signs will be located at installation households

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

Currently, HighSpeedLink supports the Town of Shenandoah's computer training service that has regular training on digital literacy. HSL will continue this support.

13. Project Management: Identify key individuals who will be responsible for the management of the project and provide a brief description of their role and responsibilities for the project. Present this information in table format. Provide a brief description of the applicant and co-applicant's history and experience with managing grants and constructing broadband communication facilities. Please attach any letters of support from stakeholders. If applicant is not a locality(s) in which the project will occur, please provide a letter of support from that locality. Attachment 10 – Letters of Support.

Answer:

Page County has managed grants from the U.S. Department of Agriculture, Virginia Tourism Corporation, Department of Conservation and Recreation, Virginia Information Technologies Agency (for PSAP), Virginia Department of Emergency Management, DHCD, and more. Finance and accounting systems are in place with Page County's Director of Finance and Page County's Treasurer. The Page County Broadband Authority ("PCBA") was created in 2009 for the purpose of becoming a legal entity eligible to accept grants from the National Telecommunications and Information Administration's Broadband Technology Opportunities Program to build a line-of-sight radio tower system.

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HSL is a for-profit corporation that has been in business in the Shenandoah Valley since 2001. HSL has been a pioneer in the wireless broadband industry, manufacturing equipment in the early days to provide high quality service at affordable prices. The CEO of HSL is a recognized leader in this industry and was a past board member of the Wireless ISP Association for six years and President for two of those years. Today HSL's owner, Mr. Phillips furthers the effort of broadband proliferation throughout the Shenandoah Valley area by leveraging the latest in wireless technology.

See Attachment 17 Project Contacts

14. Project Budget and Cost Appropriateness

Budget: Applicants must provide a detailed budget that outlines how the grant funds will be utilized, including an itemization of equipment, construction costs, and a justification of proposed expenses. If designating more than one service area in a single application, each service area must have delineated budget information. For wireless projects, please include delineated budget information by each tower. Expenses should be substantiated by clear cost estimates. Include copies of vendor quotes or documented cost estimates supporting the proposed budget. **Label Attachments:** Attachment 11 – Derivation of Costs; Attachment 12 - Documentation of Supporting Cost Estimates.

Answer:

See Attachments

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 and averaged together to create a point scale for a composite score. Provide the following:

- a. Total VATI funding request
- b. Number of serviceable units
- c. Highest residential speed available in proposed project area

Answer:

- a. Total VATI funding request - \$2,525,888/\$3,615,888
- b. Number of serviceable units - Estimated 4,500 households
- c. Highest residential speed available in proposed project area - 100 mbps/25mbps

16. Commonwealth Priorities

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

- a. How the proposed project fits into a larger plan to achieve universal broadband coverage for the locality. Explain the remaining areas of need in the locality and a brief description of the plan to achieve universal broadband coverage.
- b. Businesses, community anchors, or other passings in the proposed project area that will have a significant impact on the locality or region because of access to broadband.

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

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

Answer:

a. How the proposed project fits into a larger plan to achieve universal broadband coverage for the locality. Explain the remaining areas of need in the locality and a brief description of the plan to achieve universal broadband coverage.

- Page County's Broadband Authority (PCBA) has recently adopted a strategic plan that first acknowledges their efforts to implement a fully utilized bandwidth, a completely implemented and closed grant, private competition for urbanized areas, and an expiring service provider contract as their primary purpose in Page County. However, access to broadband in rural Page County is still inadequate, cost prohibitive, or absent. The PCBA will shift its focus from catalyzing the private sector and serving a handful of large commercial users to pursuing and advocating for access to quality, affordable broadband throughout Page County.
- The Tower Project 2020 also meets several goals outlined in Page County's Comprehensive Plan recently adopted in April 2020. Policy 6.3 of the comp plan states - "Encourage the expansion of telecommunications infrastructure throughout the County, including an open access fiber optic network, broadband service and other high-speed communications infrastructure, to support technology-dependent industries."
- The Tower Project 2020 is one of the first projects ever proposed that could provide universal broadband coverage in Page County. This is a very exciting project for Page County.
- COVID-19 restrictions and the lack of universal coverage will impact Page County's students ability to learn virtually. The school system's learning options are challenged and COVID-19 has put a huge burden on the school's ability to prepare learning platforms because 41% of their students say they don't have access to internet in their homes. Therefore, the school system can't offer virtual learning opportunities resulting in no online learning activity.

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

The universal coverage proposed by the Tower Project 2020 makes it difficult to narrow down businesses, community anchors, or other passings. The addresses that fall within a 2-mile radius of each tower were analyzed with the following estimated results:

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- Churches: 33
- Residences: 4,382
- Cabin Rentals: 124

As seen in the data, numerous tourism based businesses will be supported by this project. Those businesses contribute to the growth of local and statewide tourism industry. Page County collects Transient Occupancy Tax (TOT) on cabins rentals in the project area. This tax is used to fund tourism development and marketing projects throughout the county. In 2018/19 fiscal year, Page County's collection of TOT funds totaled almost \$1,150,605. This industry supports thirteen of Page County's top employers and creates 762 jobs.

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

Tower Project 2020 priority partnership will be with the Page County Public School System.

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

Page County Economic Development will make every effort to work with HSL and other funding resources to make sure low to moderate households can afford services offered in Tower Project 2020.

17. Additional Information

17. Provide any other information that the applicant desires to include. Applicants are limited to four additional attachments.

Label Additional Attachments as:

- a. Attachment 13 – Two most recent Form 477 submitted to the FCC or equivalent
- b. Attachment 14 – XXXXXXXX
- c. Attachment 15 – XXXXXXXX
- d. Attachment 16 – XXXXXXXX
- e. Attachment 17 – XXXXXXXX

Answer:

- b. Attachment 14 – Tower Design
- c. Attachment 15 – Letter Intent to Apply
- d. Attachment 16 – Mapped Areas
- e. Attachment 17 - Project Contacts

Attachments:

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Map(s) of project area, including proposed infrastructure

Attachment1ProjectAreaMapPageCounty8172020113524.pdf

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

Attachment2FederalFundingArea8172020113534.pdf

Documentation that proposed project area is unserved based on VATI criteria

Attachment3DocumentationUnservedAreaVATICriteria8172020113718.pdf

Passings Form (Please use template provided)

Attachment4PassingsFormPageCounty8172020114337.pdf

Propagation Map if Wireless Project

Attachment5PropagationMapWirelessProject8172020114359.pdf

Timeline/Project Management Plan

Attachment6ProjectTimeline8172020115152.pdf

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

Attachment7DocumentofAgreement8172020115200.pdf

Funding Sources Table

Attachment8FundingSourceTable8172020115320.pdf

Documentation for match funding

Attachment9DocumentationofMatchingFunds8172020115331.pdf

Letters of Support

Attachment10LettersofSupport8172020122746.pdf

Derivation of Cost (Project Budget)

Attachment11DerivationofCosts8172020115507.pdf

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

Attachment12DocumentationofSupportingCostEstimates8172020115542.pdf

Two most recent Form 477 submitted to FCC

Attachment13HSLfcc477July2020fcc477July2020csv8172020115611.pdf

Optional

Attachment14Attachment14TowerContactsAgreementsandDesign8172020115623.pdf

Optional

Attachment15LetterofIntentVATIPageCounty8172020115638.pdf

Optional

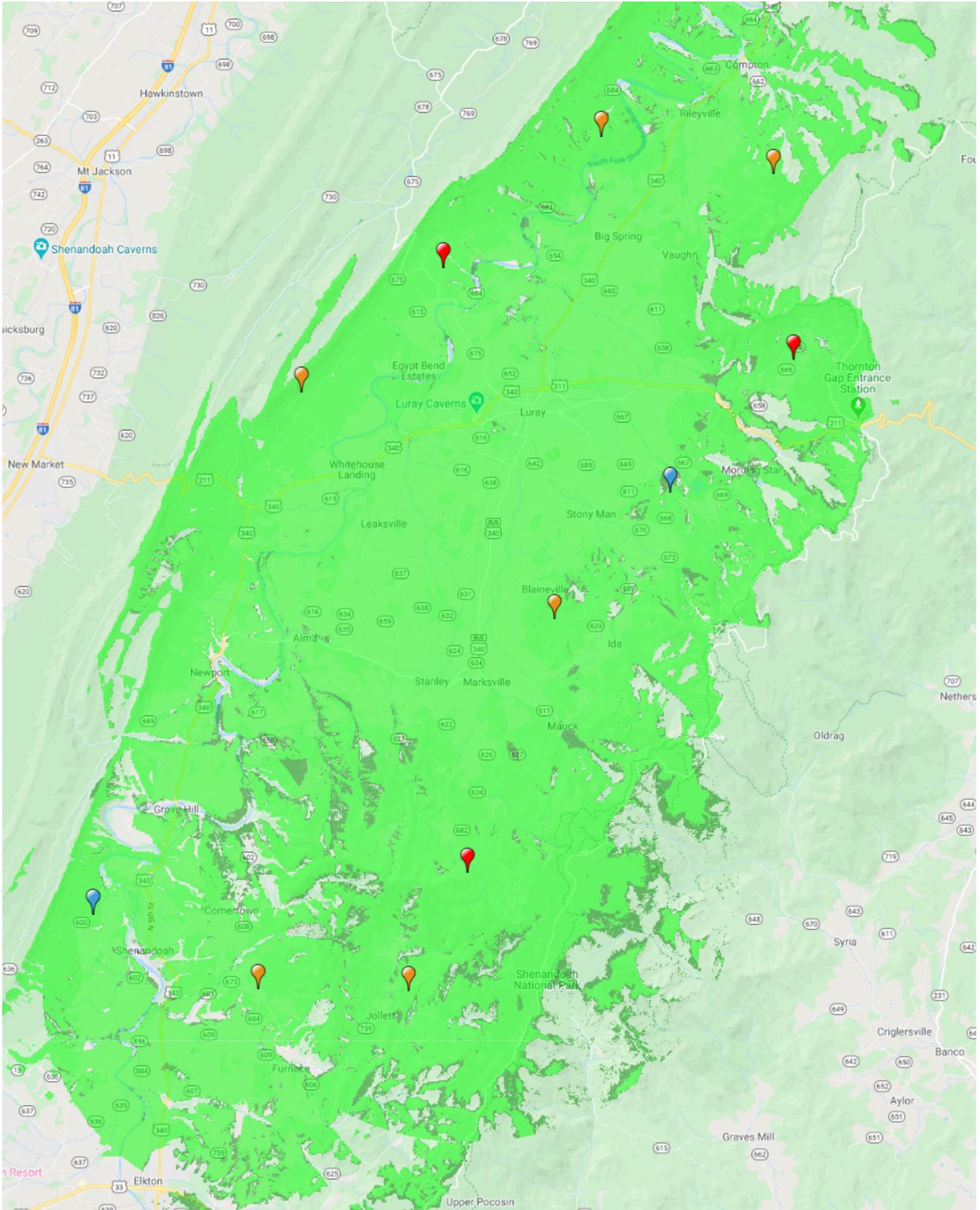
Attachment16MappedAreasPageCounty8172020121252.pdf

Optional

Attachment17ProjectContactsTableforHSL2020crop8172020122004.pdf

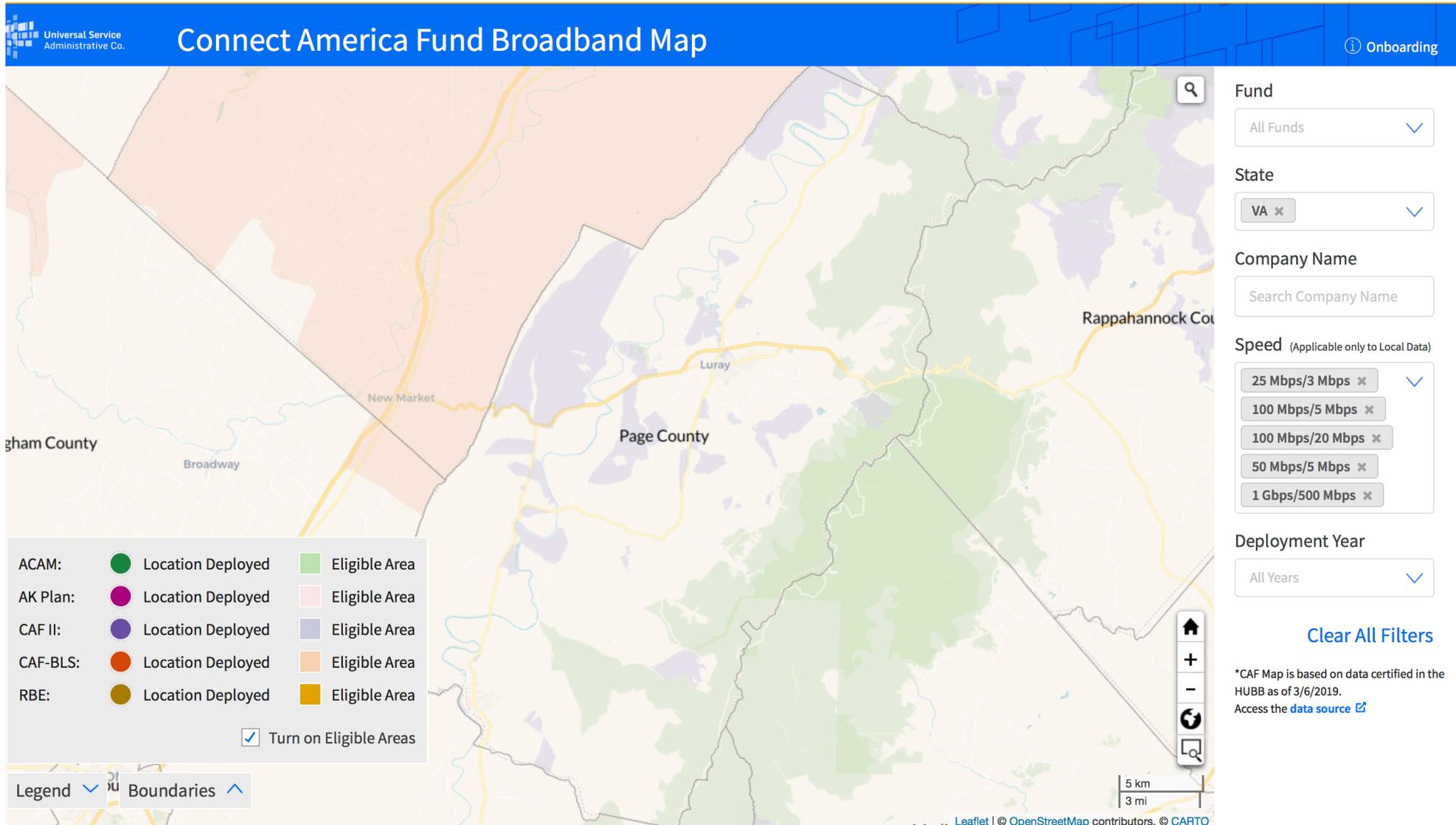
Project Map

Project: Project Tower 2020
Attachment 1



Project Tower 2020 - Page County Attachment 2

Connect America Map showing Federal projects nearby:



Rural Digital Opportunity Fund (RDOF) eligible census blocks located in the proposed project area

Federal Communications Commission

Browse by CATEGORY

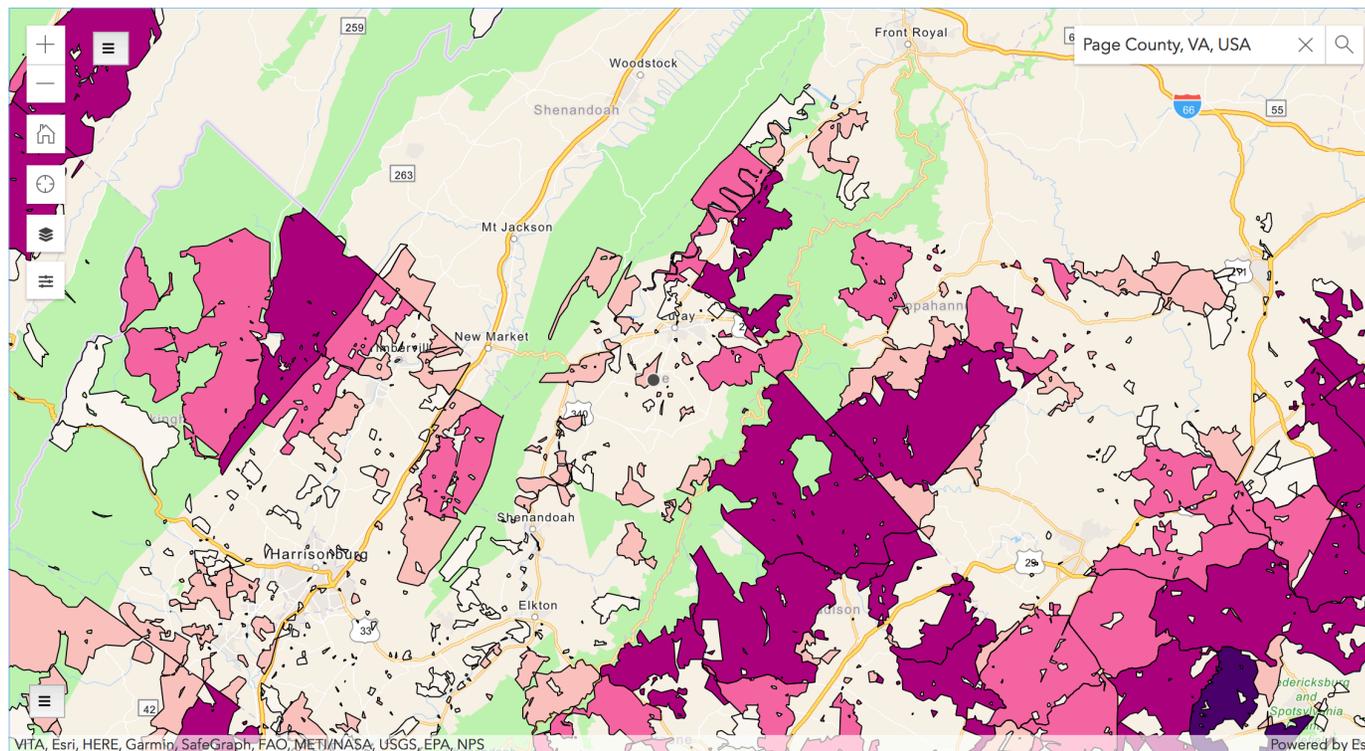
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Auction 904 Updated Eligible Areas

Published on 06/25/20



Project Tower 2020 Page County Attachment 3 Unserved Area Map from BTOP



Virginia Broadband Availability Map and
Integrated Broadband Planning and Analysis Toolbox



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ON ?

Coverage Query Results

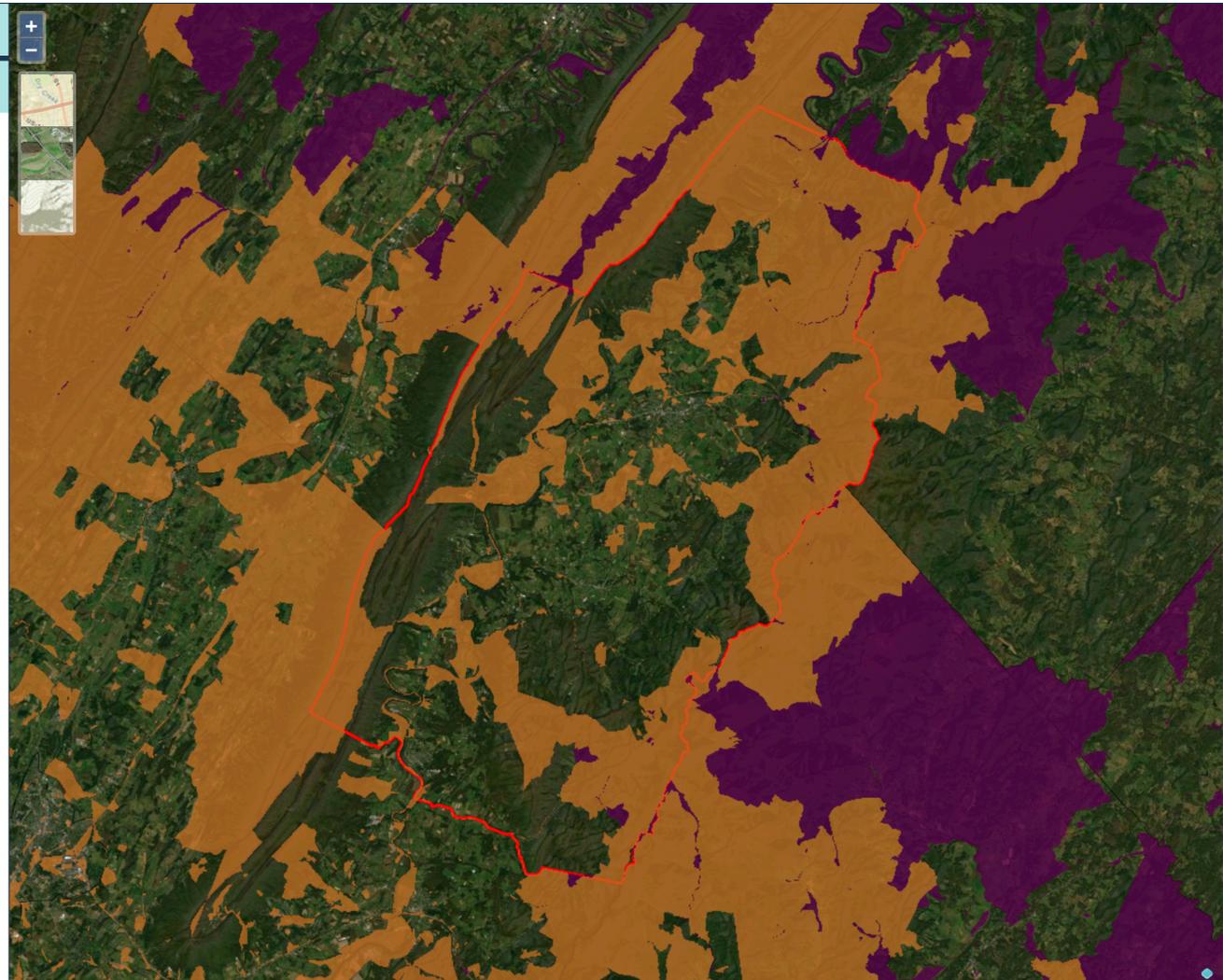
Provider	Technology	Consumer Upload Speed	Consumer Download Speed	Business Upload Speed	Business Download Speed

Va. Funding Query Results

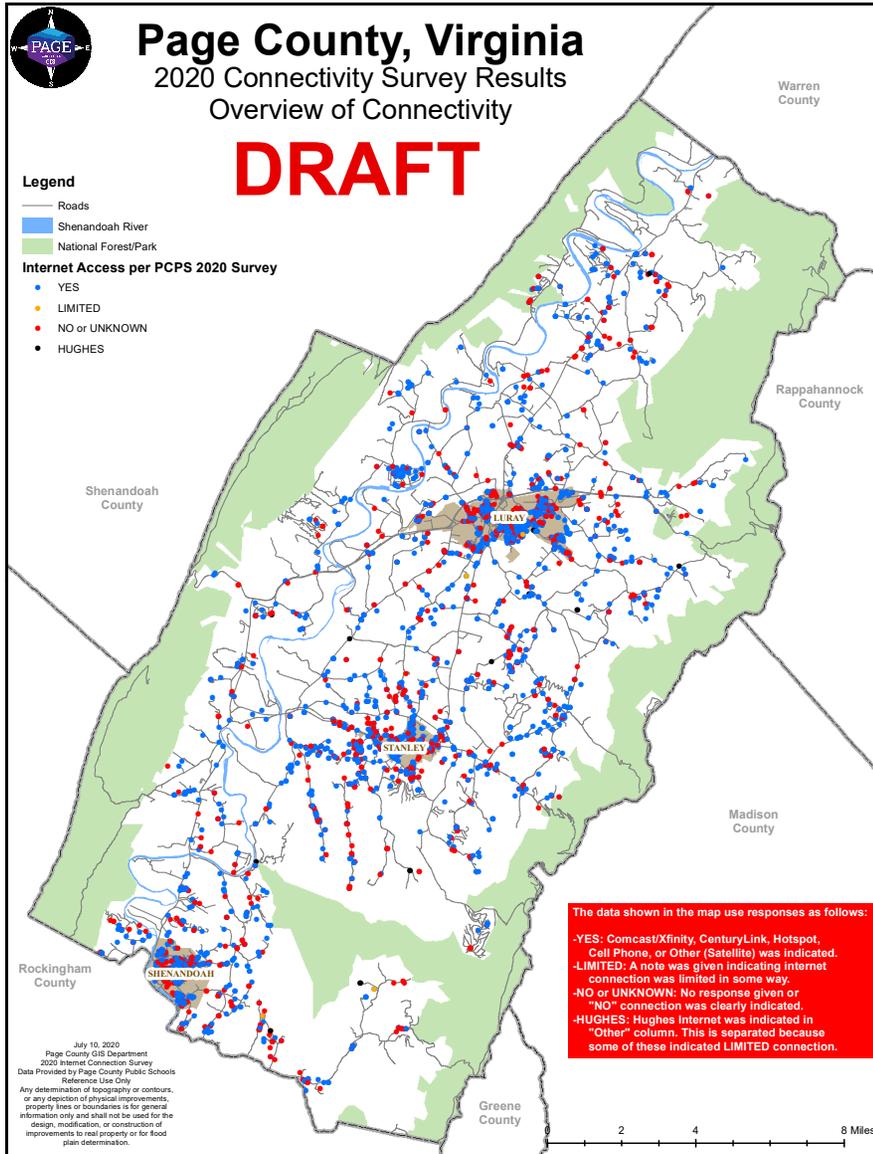
County	Partner	Year	Award Amount	Units Contracted to Pass	Funding Program

Choose Some Layers

- Cities/Counties
- Cable Wireline Coverage (Dec. 2018)
- DSL/Copper Coverage (Dec. 2018)
- Fiber Optic Coverage (Dec. 2018)
- Fixed Wireless Coverage (Dec. 2018)
- Mobile Wireless Coverage (Dec. 2018)
- 4G/LTE Wireless Coverage (Dec. 2018)
- Satellite Coverage (Dec. 2018)
- Virginia Telecommunication Initiative (VATI) Funding
- Tobacco Region Revitalization Commission (TRRC) Funding
- Underserved Areas
[greater than 10 Mbps download and 1 Mbps upload and less than 25 Mbps download and 3 Mbps upload] (Dec. 2018)
- Unserved Areas
[below or equal to 10 Mbps download and 1 Mbps upload] (Dec. 2018)
- No Residential Broadband (25/3) reported (Dec. 2018)
- Vertical Assets (updated daily)
- Community Anchor Institutions (Dec. 2017)
 - School
 - Library
 - Hospital
 - Public Safety Entity
 - Government Building
 - Other
- DataCardinal Desktop Download Speeds (Jul. 2017)
 - < 769 Kbps



Page County Public School Household Data



Technology Needs Survey Spring 2020 (numbers)

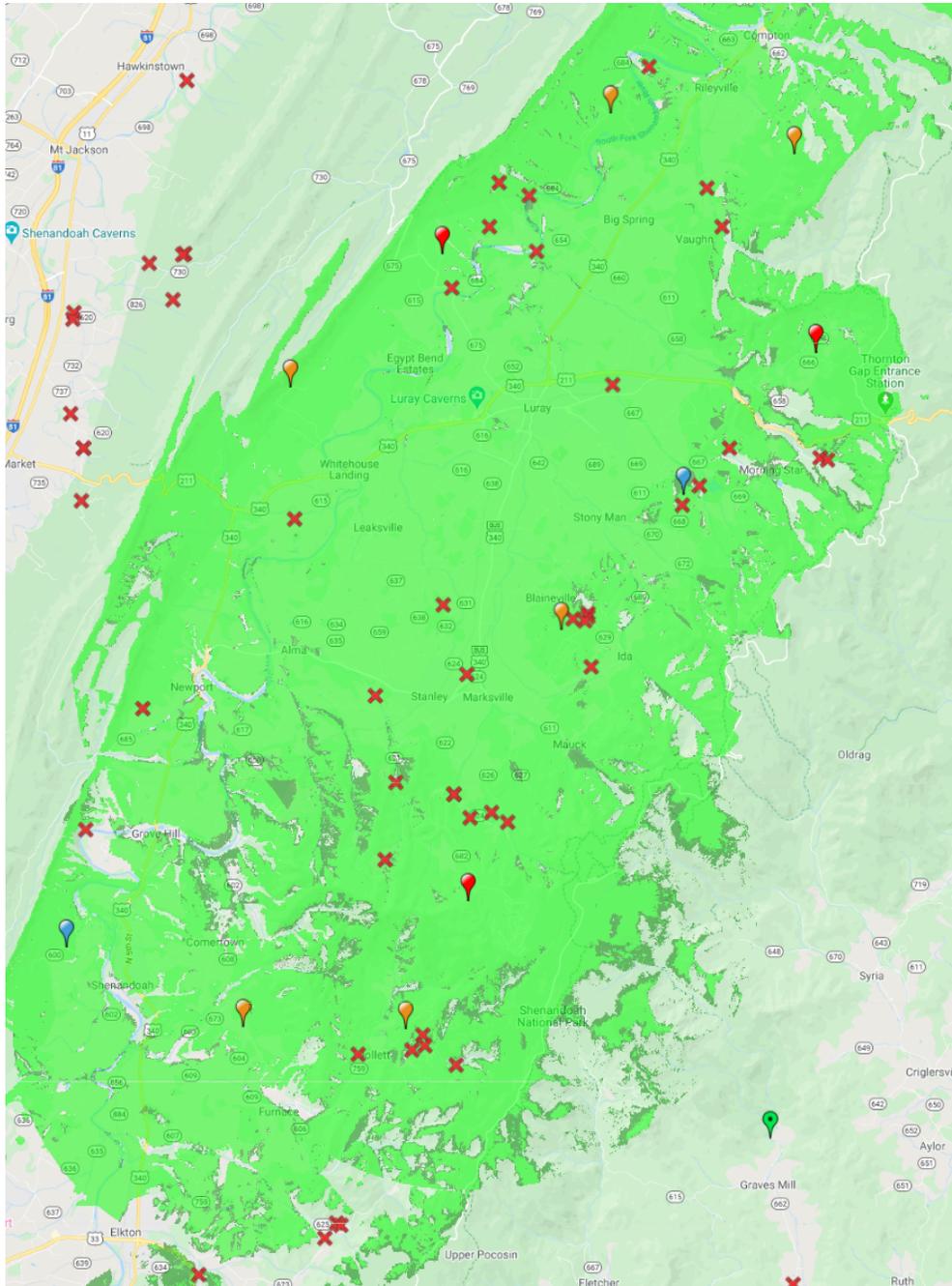


with rosters from 19-20 school year (PK-11)*

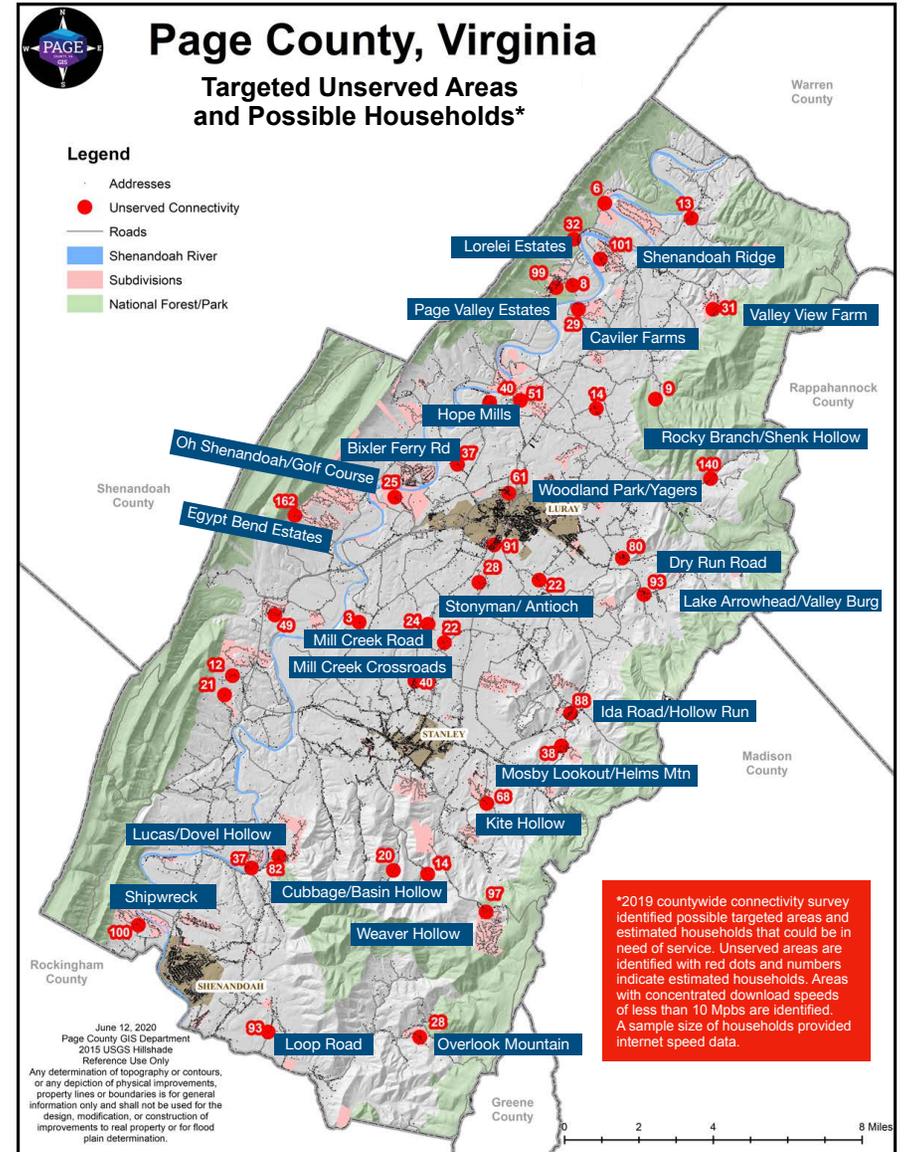
	PCPS	LES	STAN	SHEN	SPFD	LIMS	PCMS	LHS	PCHS	
Number of student homes	3124	482	415	365	246	386	393	395	442	
Access to Internet? Check all that are in the home. If other - explain	Comcast Xfinity Centurylink Hotspot Cellphone Other	1000 182 583 257 143 295	172 67 30 90 21	129 61 77 32 84 26	61 91 83 31 89 21	91 92 51 25 83 86	92 124 61 27 105 28	149 108 53 175 24		
What devices does the student have access to?	Desktop Chromebook or Laptop Cellphone Tablet No device	542 1199 1493 993 98	92 202 239 238 16	60 162 182 169 27	63 126 122 155 13	39 100 106 125 7	72 140 168 78 10	56 118 154 76 13	66 156 217 70 8	94 195 305 82 4
How many people are sharing your device?	1 2 3 4 more than 5	501 324 276 197 183	72 77 54 48 46	54 65 47 27 33	27 47 39 25 14	59 29 37 24 22	59 22 37 24 22	57 19 29 16 7	79 36 17 20 22	94 36 17 20 22
Which cell phone services work in your area?	Spring AT&T Verizon Other	1199 337 450 443	208 77 89 117	179 25 43 85	113 14 61 0	117 57 45 33	136 46 32 55	116 17 42 43	125 56 93 59	205 56 93 59
Does your cell plan include unlimited data?	Yes	1561	287	225	155	152	161	154	171	256
If you do not have internet access at home, do you have another way that you can gain access?	Yes Maybe	617 5	117 0	78 0	54 0	95 4	70 0	30 0	85 0	88 1
Would you be willing to use drive up internet access in school parking lots for school work if it were available?	Yes Maybe	816 37	150 3	148 6	52 0	85 0	93 2	55 17	78 6	155 3

*for some, we were not able to elicit responses although multiple attempts were made to make contact

HighSpeedLink Customer Data



County Household Survey Data



2021 Virginia Telecommunication Initiative (VATI) Passing Form

Type of Passings	Total Number in Project Area	Number with Speeds at 10/1 or below in Project Area
Residential	4382	4382
Businesses (non-home based)		
Businesses (home-based)	124	124
Community Anchors		
Non-residential	33	33
Total Number of Passings	4539	4539

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

Definitions

Passing – any structure that can receive service.

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

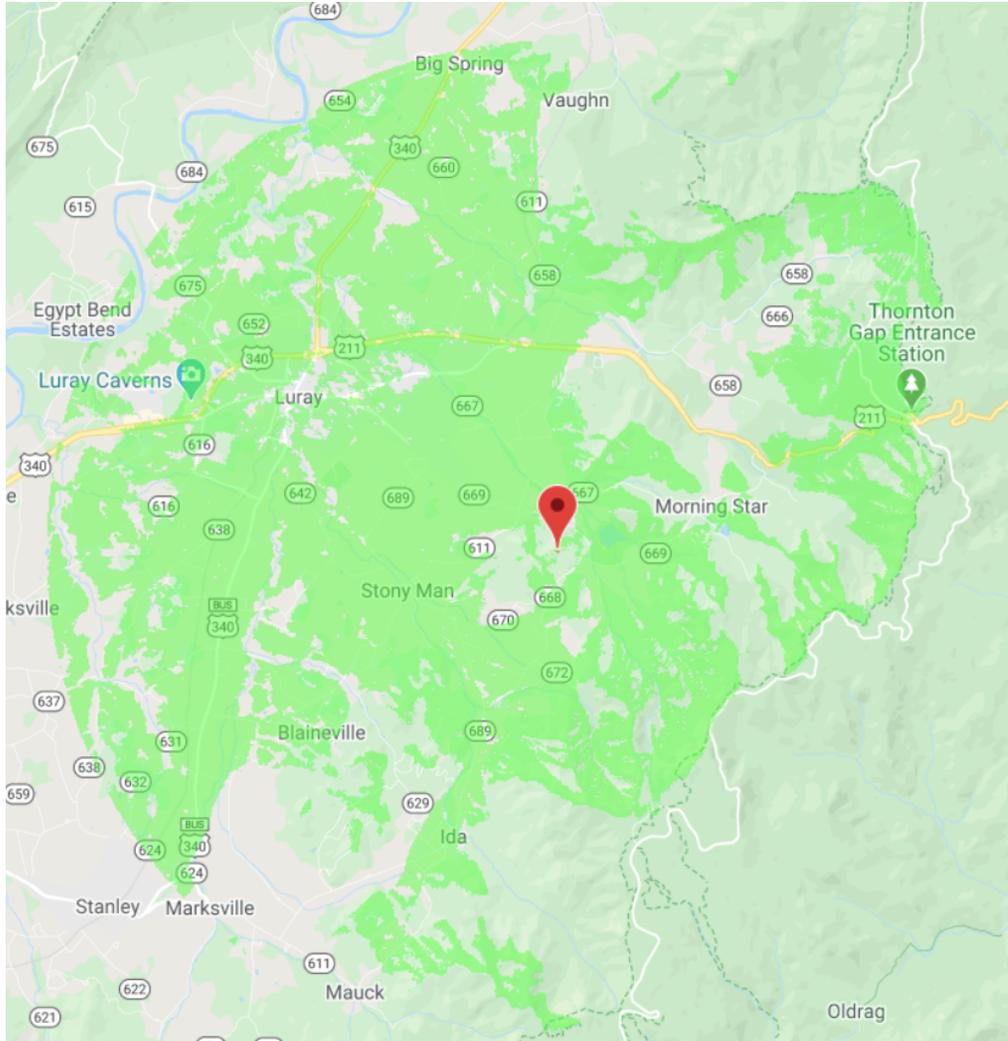
Community Anchor - schools, libraries, medical and health care providers, public safety entities, community colleges and other institutions of higher education, and other community support organizations and agencies that provide outreach, access, equipment, and support services to facilitate greater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

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

**Project Tower 2020 Page County
Attachment 5 - Propagation Map Wireless Project**

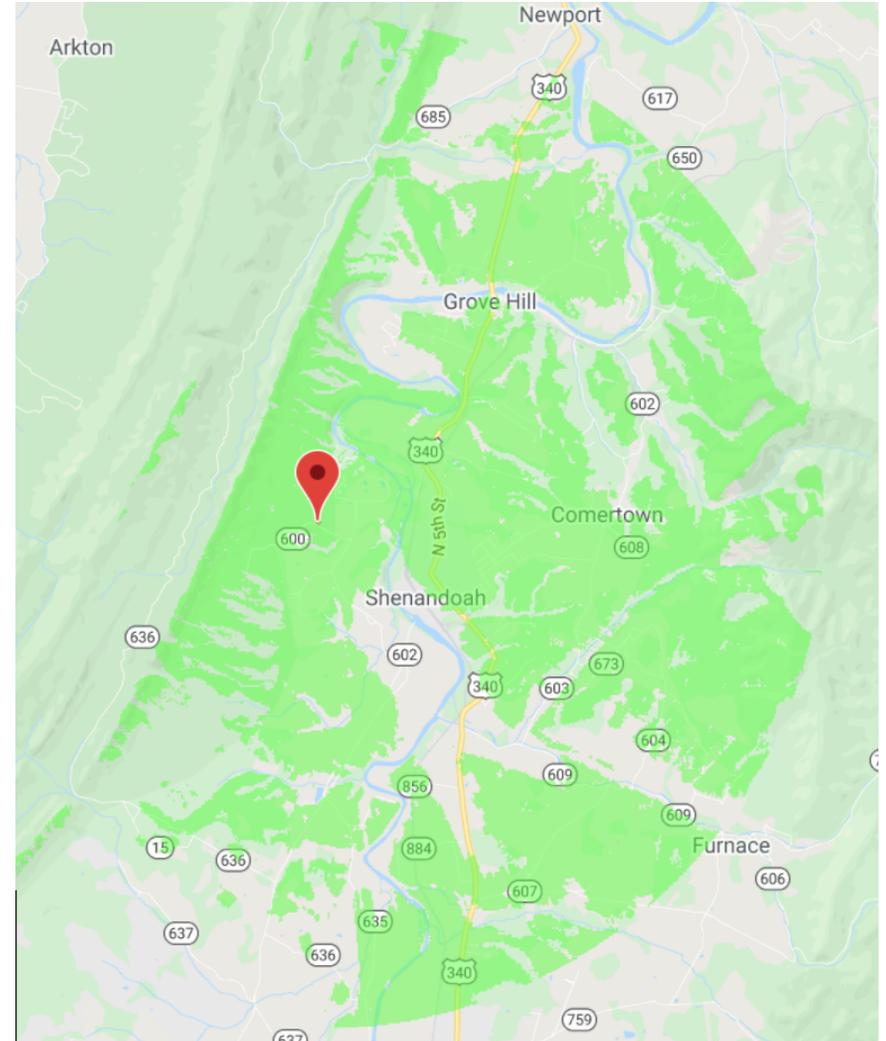
Tower #1 Lake Arrowhead

This is an existing site that, if updated with two new technologies with Near and Non-Line of Sight on the Christian Broadcast Tower, will allow for enhanced coverage for Stonyman, Antioch, Dry Run Road, Lake Arrowhead/Valley Burg.



Tower #2 Batman Road

This is an existing site that, if updated with two new technologies with Near and Non-Line of Sight on the Christian Broadcast Tower will allow for enhanced coverage Ship wreck, Loop Road, Lucas/Dovel Hollow and Cubbage/Basin Hollow areas



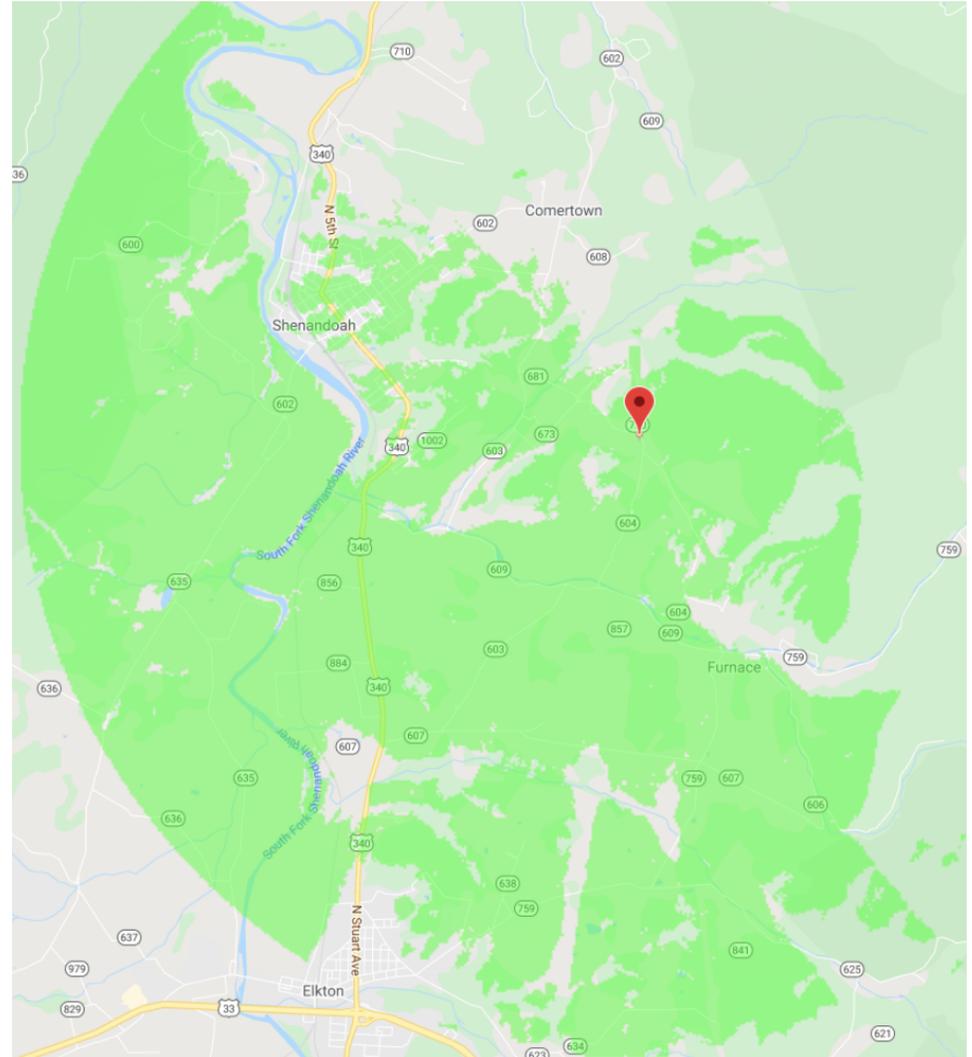
Tower #3 Hizer

This tower will utilize Near and Non-Line of Sight technology mostly due to the high level of tree obstruction however there are a number of Line of sight residents from this location as well. Coverage of Overlook Mt Road as well as Jollett with up to 100mbs of broadband.



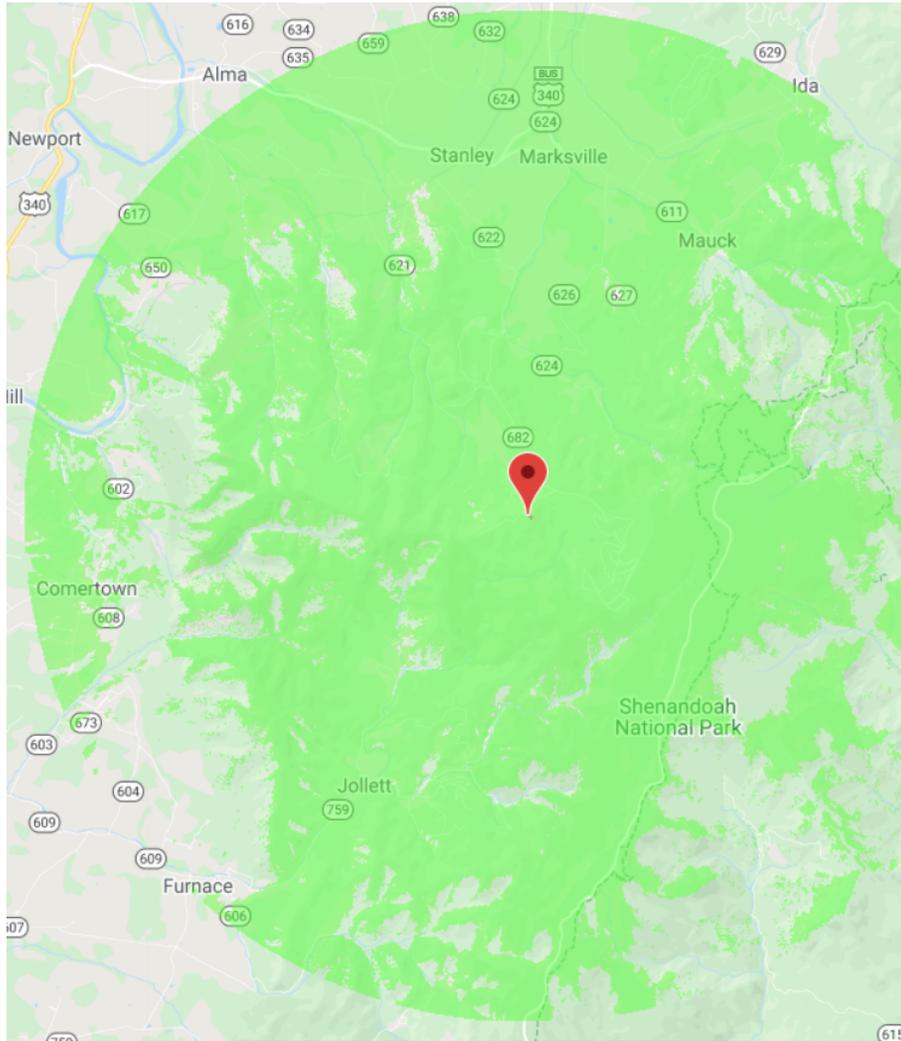
Tower #4 Powell

This tower location will provide diverse coverage into Loop Road, Lucas/Dovel Hollow and Cabbage/Basin Hollow areas



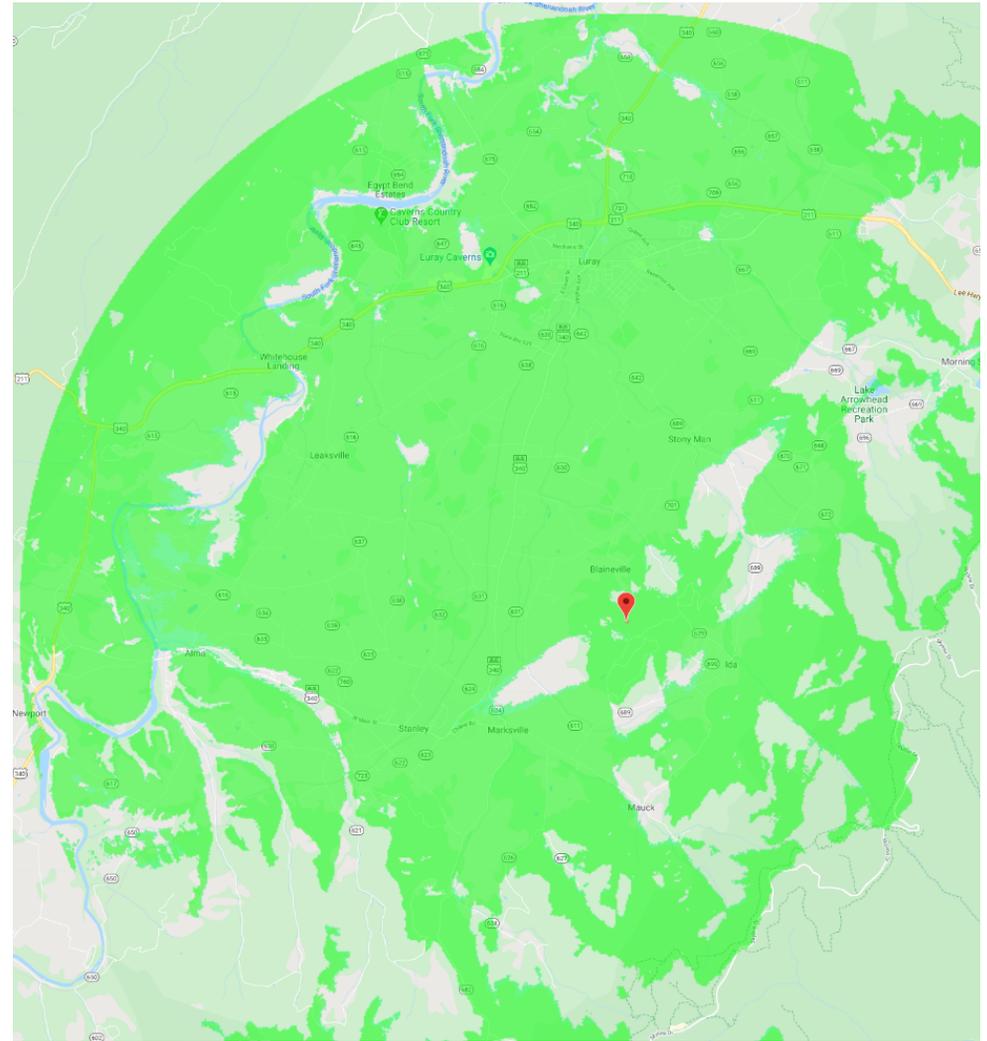
Tower #5 Chapman

This is an elevated tower location that can be utilized by E911 as well have cover many dead spots where there is no Broadband such as Weaver Hollow, Kite Hollow Mosby Lookout/Helms MT and Ida Road



Tower #6 Log Cabin

This tower location will have diverse coverage for Woodland Park/Yagers, Ida Road/Hollow Run, Kite Hollow, Mosby Lookout/Helms Mtn, Stoney Man/Antioch, Mill Creek Road and Mill Creek Cross Roads.



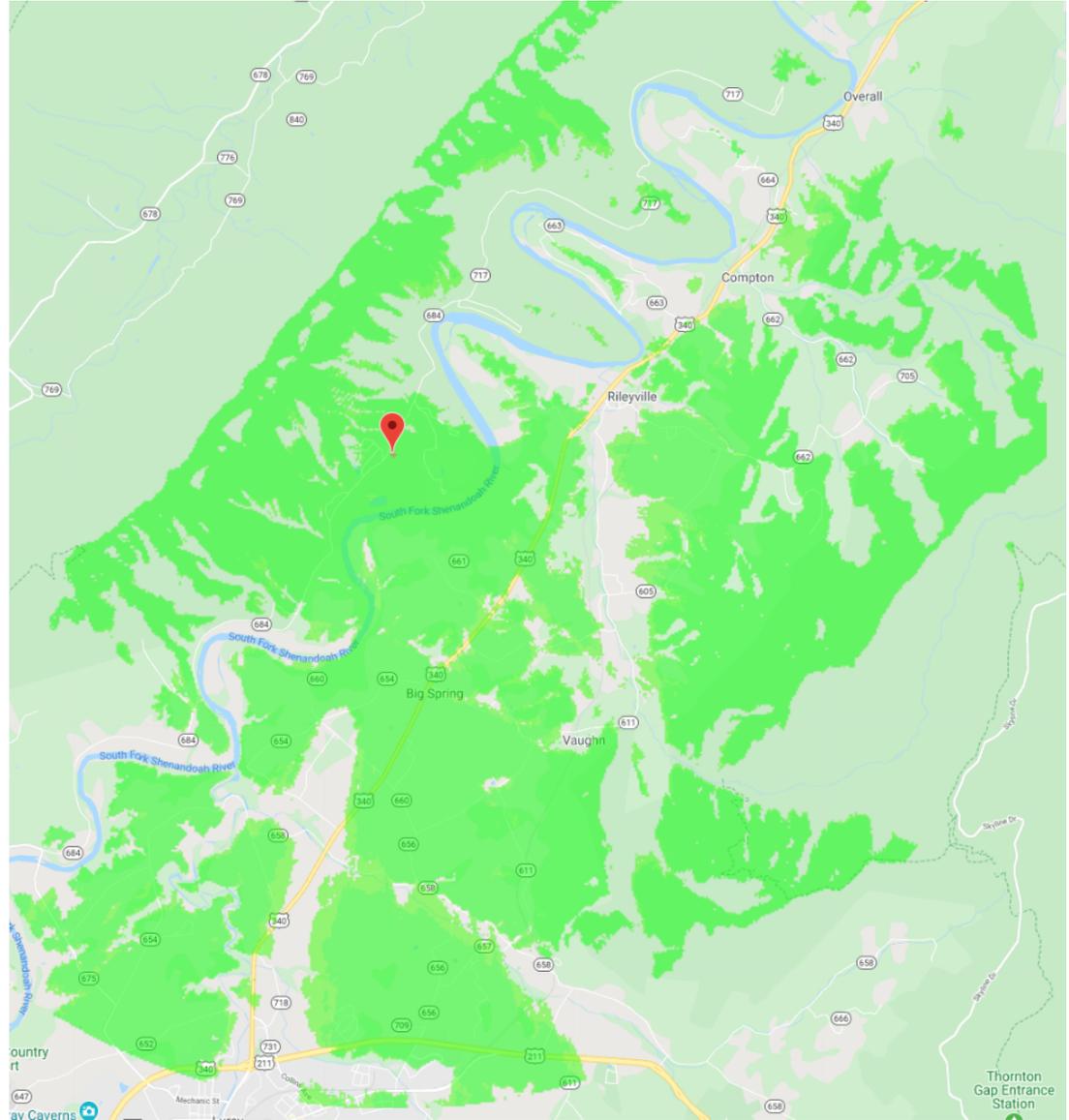
Tower #7 Rileyville

This location will cover Valley View Farm, Caviler Farms, Shenandoah Ridge, and Page Valley Estates.



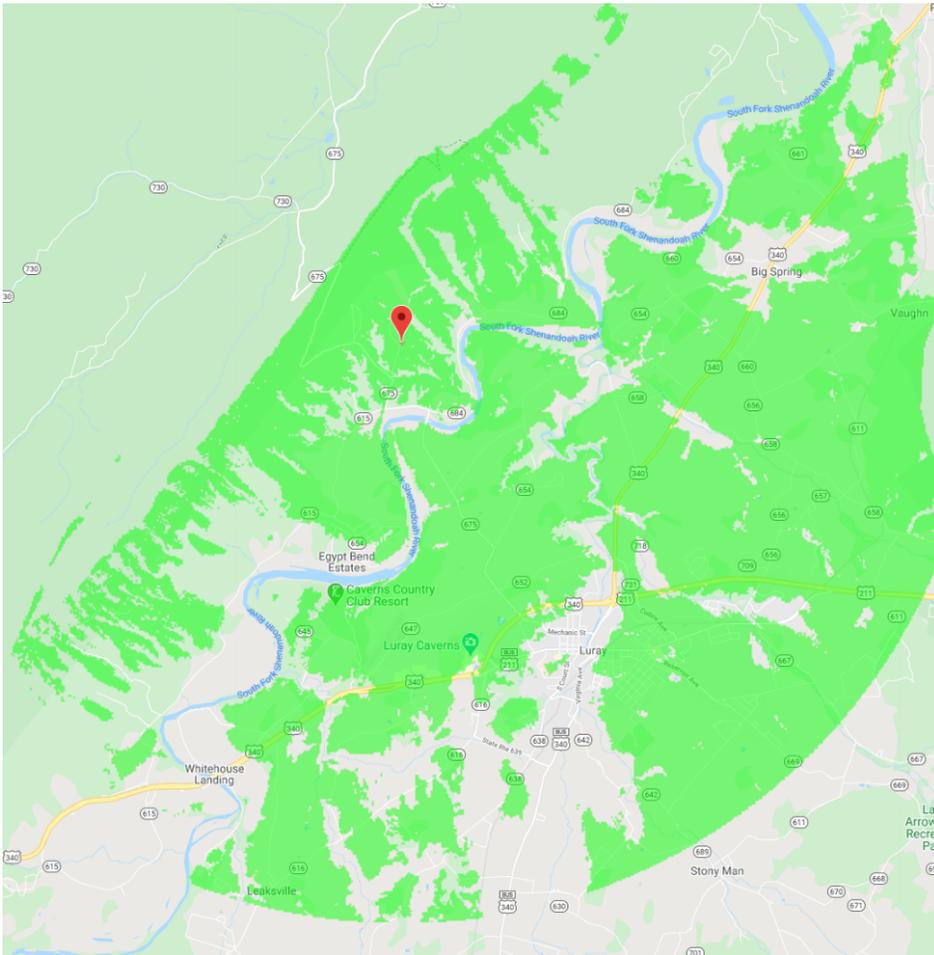
Tower #8 Shenandoah Campgrounds

This location will provide diverse coverage of Shenandoah Ridge, Valley View Farm, Page Valley Estates, Lorelei Estates, Cavalier Farms as well as Hope Mills



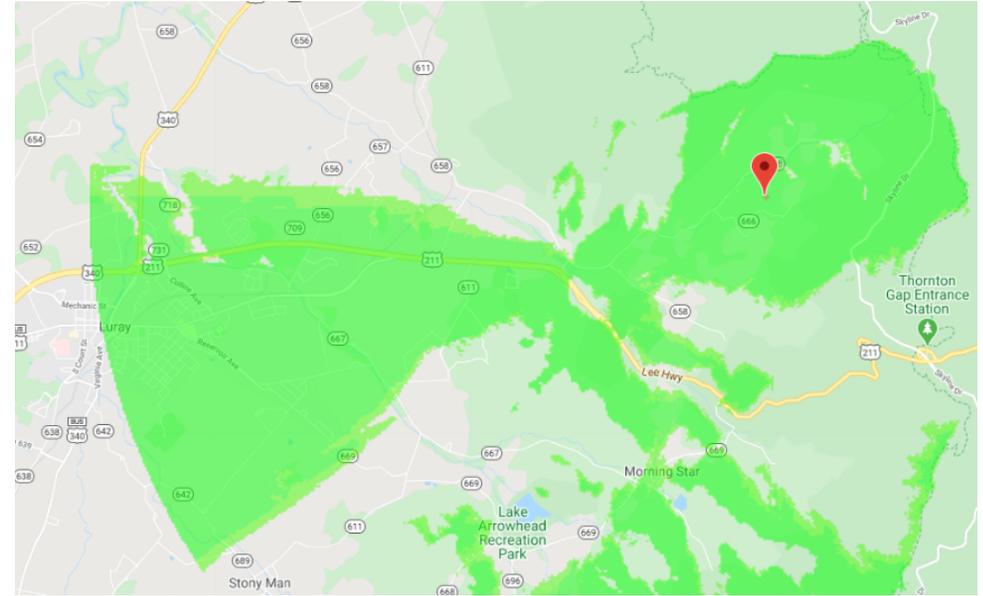
Tower #9 Verba

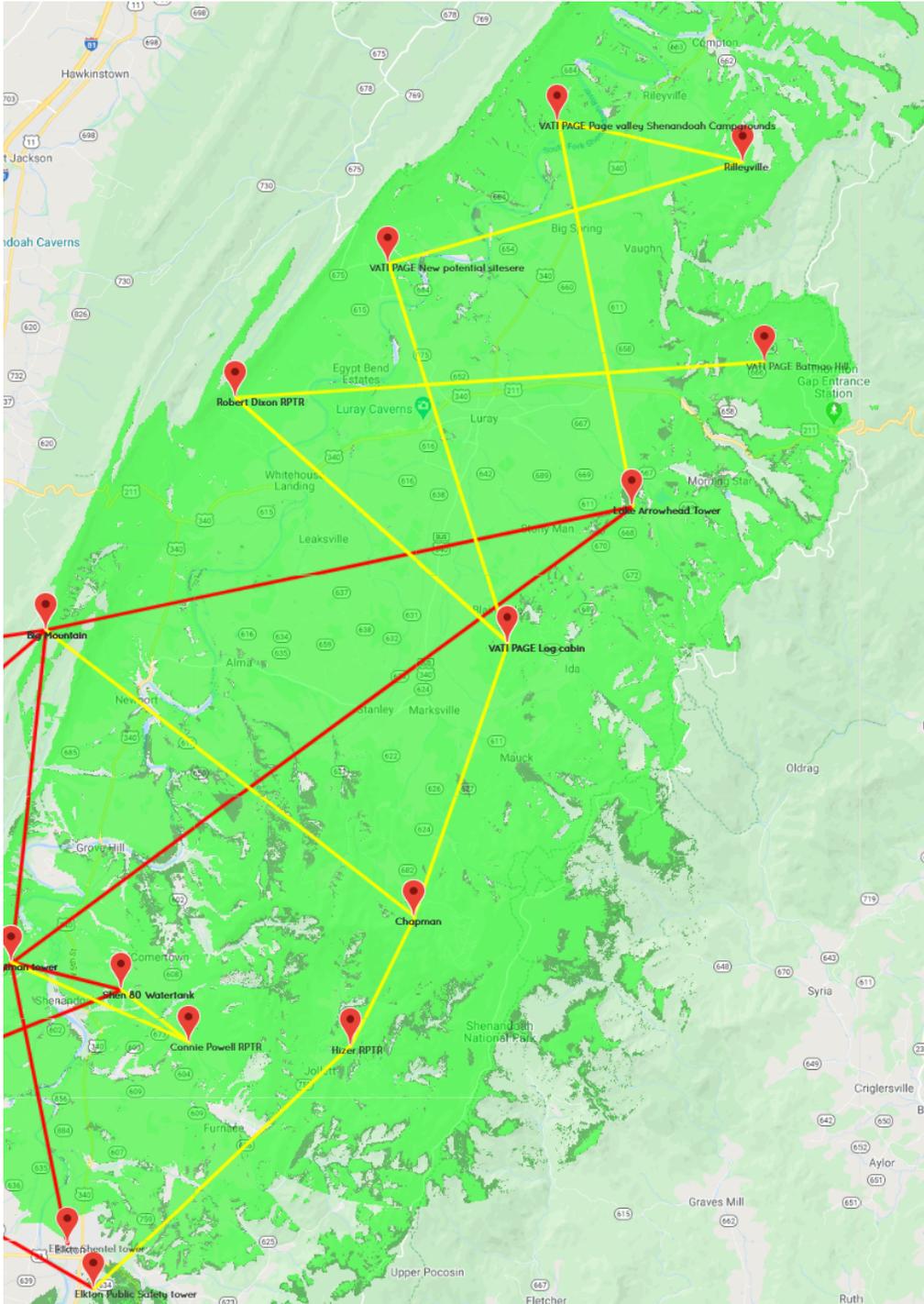
This tower will cover Egypt Bend Estates, Oh Shenandoah/Golf Course and provide diverse coverage into Bixler Ferry Rd and Mill Creek Road



Tower #9 Batman Hill Road

This location will be servicing a very isolated area, Rocky Branch/Shenk Hollow as well as select areas around Luray who don't have service noted by Page County.





Backhaul network:

Proposed a Microwave Backhaul network that is fully redundant to provide the highest reliability and quality.

Details

Yellow lines are Microwave links to the new proposed VATI Grant network and the red are existing RBNS network links. We have designed this network to fail over if a drop happens. There is one orphan tower however we plan to hook up fiber to that location ourselves after the network matures. Eventually Fiber will be built to all of the towers by allowing for a more cost effective transition to all fiber networks in the future. A technology called OSPF (Open Shortest Path First) will be used on this network to support automatic failover. MPLS (Multi-Protocol Label Switching) will be used to manage the network otherwise. Each backhaul radio will be a licensed microwave radio that can support 1.4+gbs.



Project Timeline

Project Tower 2020

Attachment 6



At this time, HSL has network facilities in Page County to provide connectivity to this new network. Likewise, HSL has relationships with the property owners and are ready to make formal lease agreements with them as soon as we are able. HSL has worked with Mountain Valley Towers on construction estimates, however, final engineering, and permits are needed but should not be of any issue. This is indeed a shovel ready project and only requires funding support from VATI to begin. There should be no issues in having this project completed in 18 months.

Project Schedule following grant approval:

- Month 1: Finalize lease agreement with property owners
Make Application to the County to build 9 195 ft towers
Begin finalizing engineering on each tower location with construction plans. Initiate construction schedule with Mountain Valley Towers and subcontractors. Order all hardware to be deployed.
Permits, hearings and applications
Install AP's on Batman Rd and Lake Arrowhead towers
- Month 2: Schedule Ground and begin construction
- Month 3: Schedule and begin Tower constructions
- Months 4-5: Schedule Tower constructions
Sight construction begins
Each site will be prepped for dropping a tower so that once the tower is installed, network and other equipment can be installed right away. All ground prep, concrete pads, conduits and electrical
- Month 6: As ground sites are prepped, hardware will be installed in the cabinets in preparation of tower installation
- Months 7-8: Ground site installations
- Month 9: Tower Construction and installation begins one tower per month minimum
Once a tower is up, Access Point and Backhauls will be installed and go through a 30 day burn in test. HSL will employ some customers to test each part of the tower during this testing phase.
- Month 10: Tower install, backhaul network AP Install and Testing. As towers pass 30 day burn in, start putting customers on the network
- Month 11: Tower install, AP install, Turn up, burn in test, install customers on previous month's tower
- Month 12: Tower install, AP install, Turn up, burn in test, install customers on previous month's tower
- Month 13: Tower install, AP install, Turn up, burn in test, install customers on previous month's tower
- Month 14: Tower install, AP install, Turn up, burn in test, install customers on previous month's tower
- Month 15: Tower install, AP install, Turn up, burn in test, install customers on previous month's tower
- Month 16: Tower install, AP install, Turn up, burn in test, install customers on previous month's tower
- Month 17: Start installing customers on last tower
- Month 18: Project complete and all of the compliance reporting will finalize



Project Tower 2020
Attachment 7 - Agreement
Page County

VATI Informal Agreement

A partnership between Page County and HSL has not been formalized for this project at this time but the parties will be completing an agreement if the VATI grant is awarded. The agreement will cover HSL obligations to implement the Project Tower 2020 within the designated periods, to provide updates to the County on the status of the project, to notify the County if assistance is needed with issues where the County can provide assistance, to submit requests for payment as work is completed, to complete all work within the required timeframe, and to provide the County with information showing the locations where broadband has been enabled.

The agreement will also include obligations of the County to process requests for payment in a timely manner, review information provided by HSL and submit requests for additional information in a timely manner, provide any necessary public rights of way and assist in contacting citizens and others when appropriate to assist in completing the project within the required timeframe.

The partners have agreed in principle on the following responsibilities:

- Page County intends to partner with HSL as a co-applicant for a VATI grant to extend broadband service to unserved areas of Page County.
- Page County would complete the grant application (with HSL's assistance); submit the completed application(s) to the Virginia DHCD; and manage the processing of work payments. Because Page County will be the funded applicant in the event of award, the county would timely process all VATI related HSL invoices that applied directly to the approved work plans, design, and statement of work. Any delays in completing the work as planned would be negotiated with DHCD as partners.
- Page County also would provide services and support for any necessary citizen engagement activities, including but not limited to: processing applications for right of way in a manner consistent with all local, state, and federal law; advocating and describing the benefits of the project to those affected; and working with HSL and other partner agencies (e.g. VDOT) and private industry to help coordinate construction tower placement.
- HSL would provide accurate VATI construction plans; associated material and work invoices to match the construction plans; detailed descriptions of necessary lease agreements with pole tower land owners; and timely notice of other needs to Page County.
- This general agreement proceeds from the notice of VATI award to the completion of the projects.

Project Tower 2020 - Page County
Attachment 8 Funding Source Table

SOURCE	AMOUNT	%	STATUS
Requested VATI	\$ 2,525,888.00	80%	Pending
HSL	\$ 320,000.00	10%	Secured
Page County	\$ 320,000.00	10%	Secured
Total	\$ 3,165,888.00	100%	



Project Tower 2020 Page County
Attachment 9 Documentation of Matching Funds

The purpose of this document is to provide discussed contributions by applicant and co-applicant for Project Tower 2020 proposed to the Virginia Telecommunication Initiative (“VATI”) program.

The proposed project represents a partnership between HighSpeedLink (HSL) and Page County.

As indicated in the application, HighSpeedLink (HSL) will provide approximately provide approximately 10% of the projected construction costs of \$3,165,888, totaling approximately \$320,000. Page County will also provide 10% of the projected construction costs \$320,000 and in-kind assistance to include application analysis and preparation, coordination with the Department of Housing and Community Development, assistance with right of way permitting, and participating in project efforts with HSL as the project is approved and construction begins.

The value of in-kind services will depend on the level of activity occurring as the project commences. Page County Economic & Tourism and Page County Economic Development Authority will contribute up to \$3,000 in staff time and funds to enhance community engagement strategies and public relations to include marketing, promotions, educational meetings, and other needed project advertising.

The value of these services will depend on the level of activity occurring as the project commences.

Should you have any questions regarding the information listed above, please do not hesitate to contact me.

Amity Moler
Page County
County Administrator

Opinions

Send letters to: editor@pagenewspaper.com

LETTERS TO THE EDITOR

'You can't make this stuff up'

May 22 was another day in the life of the troubled United States. At this time, we're still struggling with getting a grip on the coronavirus pandemic. Over 95,000 Americans, in just five months, have died from the virus and 1.6 million citizens have contracted the disease.

In a press conference last week, a reporter asked Donald Trump what he would have done differently regarding his leadership to contain the coronavirus. He replied "nothing," saying that what he had done was "perfect."

When asked about the ever-increasing mortality and contamination statistics, Trump gave lots of reasons, mostly saying that the numbers were overestimated. This week, Trump directed the Centers for Disease Control scientists, epidemiologists and physicians to revise their calculations downward after he concluded that they were wrong in their efforts. Is he qualified to make this decision? Is this science?

Trump also announced last week that he is taking hydroxychloroquine, which is an antimalarial drug that has caused serious heart problems for coronavirus patients. Physician experts said that taking the drug is not without hazards, but use of the drug was up to Trump and his physician, whom the White House press secretary stated had written a prescription.

However, Dr. Scott Solomon of Harvard Medical School offered that "what is irresponsible is the example he is setting."

As Trump is a proven pathological liar, many assume that he could be lying as a distraction from his performance managing the pandemic. Trump also continues to decline wearing a face mask as a virus prevention tool, saying that it makes him look bad. Is that leadership by example?

Also, this week, Columbia University's School of Public Health did a retroactive study that estimates 62 percent of the confirmed coronavirus cases and 36,000 deaths from the virus up through May 3 would have been avoided if the CDC's expert control measures had been adopted on March 8 instead of March 15.

Again, had the control measures occurred when recommended, 36,000 lives might have been saved. Trump was reportedly playing golf in Florida with a Washington Nationals baseball player on March 8.

Trump has called the study "fake news."

Don Feliciano
Luray

High speed internet

Page County needs high speed internet for everyone. It is my understanding that the state will pay 80 percent, by way of a grant, if a cable company such as Comcast or whoever will pony up the other 20 percent. Go figure!

This is a great deal for the cable companies. The problem is that the county does not have enough data and/or participation needed to convince the cable companies to do this.

Please go to pagecountyliving.com and then go to Connectivity Survey, under the "Live" link, and fill out the information to help get the data needed to require cable companies to get on board.

Donna Eames
Luray

A taste of socialism

Now that the economy is starting to get back on track, let us take a look at what our government has done to us and for us. Can anyone tell me why the government decided that liquor stores, and furniture stores can remain open, but tobacco stores and thrift stores are closed? We the people have had no say in what part of the economy stays open or what part closes. We have no control on when this shutdown will end.

The government is dishing out free money (nothing is free). Unfortunately, the \$3 trillion stimulus proposal is loaded with a lot of pork, with quite a bit not pertaining to COVID-19.

The government is telling us who gets the checks and how much. Some states are even telling you what you can buy, what you can't, where you can go and where you can't. Take a look at which states are opening up and which states are hanging on to controlling our lives. This is all coming down to politics.

We need to take control of our own lives and our government before the government controls every aspect of our lives forever. It is up to each individual to protect themselves. It is not my responsibility to protect you. It is not the government's responsibility to protect you. It's your responsibility to protect yourself. If you have an underlying condition or are elderly, you may want to stay home and protect yourself. But, it should be our own decision to make.

Bob Brown
Luray

LETTERS TO THE EDITOR

In response to last week

I am writing in response to Mr. Lucke's letter from last week ("Response to last week's letters," May 21, 2020).

First, I am a Mr. not a Ms., so I would suggest to Mr. Lucke to not make false assumptions.

Second, I did not "state" in my letter that Trump said "my gut tells me more sometimes than anybody else's brain can ever tell me." These are not the words that I used.

To reference, Trump has made statements about his feelings on things often enough for those people who do listen.

During last Monday's news conference was just one time. Some people hear and read what they want to and disregard the rest.

I would like to see the reference on which specific days in January Trump was told it was a pandemic? One fact I would point out is that the president does not develop COVID-19 tests himself. He does not make personal protective equipment or ventilators himself.

Some people would like to believe their is a magic wand that should have been used for this national emergency.

Trump did act many times from the beginning and on the advice of a special team of very smart people. There is one last point I would like to make.

If you believe that this president is responsible for the death of many thousands, you are being conned. That would be like saying Franklin D. Roosevelt was responsible for all the Americans who died in World War II.

You can see how absurd this kind of thinking is. This just insults my intelligence.

It is easy to sit on the sidelines and judge others' performances based on the little information you think is enough to make life and death decisions.

It is also easy to bear false witness against others for committing serious crimes they did not commit.

Carey Kebrle
Luray

More on President Trump

In response to last week's letter (On President Trump's recommendations," May 21, 2020).

Yes, Mr. Overfelt, Trump did suggest ingesting/injecting disinfectant in a tentative way, but that doesn't make the suggestion any less ridiculous — especially from a man who has declared he has a natural flair for medical matters.

Proctor and Gamble thought it necessary to warn the public not to ingest their disinfectants, as did a number of medical authorities.

About the 2016 election, I remind you that Trump lost the popular vote by 2.7 million votes. It was only by an artifact of the Electoral College that he is president.

A paragraph in your letter reads in part "...why the previous administration conducted illegal surveillance on our duly elected president and his staff."

There was no surveillance of Trump, illegal or legal. Carter Page was legally surveilled after he left the campaign. Paul Manafort was

apparently legally surveilled, but not while he ran the campaign.

So, what are you talking about? And what staff members?

That paragraph goes on to say "...and attempted to cripple and terminate his term of office." But, the next paragraph goes on to talk of impeachment. So, what does "...cripple and terminate his term of office" refer to?

As for the impeachment, Trump attempted to extort/bribe the Ukrainian president into manufacturing dirt on Hunter and Joe Biden. His guilt was admitted, even by some Republican senators.

But, the Republican senators decided Trump was above the law and refused to punish him.

Perhaps you should watch another news channel than Fox, as all this was covered thoroughly by the media.

Hunter Lucke
Shenandoah

EDITORIAL

citizen comment in local newspaper

If you look at the share of those with jobs in the unemployed. But that through state suspension programs under the CARES Act has to be paid for, somehow.

Our solution in the United States has been to print more money. We call it deficit spending and, to date, it has increased the national debt to more than \$25 trillion. If you have a calculator, you can determine your share of that. Sit down, first.

The bottom line is that the COVID-19 lockdown is unsustainable, and not just in the long run. We simply cannot afford to maintain an economy on the current basis.

Clearly, we have to reopen the United States. That must be done very, very carefully.

care

lect your share of without jobs because shutdown?

not being serious. would never, ever of those with jobs in he unemployed. But at through state suspension programs under the CARES Act has to be paid for, somehow.

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Clearly, we have to reopen the United States. That must be done very, very carefully.

SUBMIT A LETTER

The Page News and Courier welcomes letters to the editor. Letters should not exceed 300 words. Please include name, address and contact telephone number for verification. Letters may be edited for length and/or content.

Mail letters to:
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Page News & Courier
P.O. Box 707
Luray, VA 22835
or e-mail letters to: editor@pagenewspaper.com

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Page News, est. 1881
Consolidated, May 22, 1911

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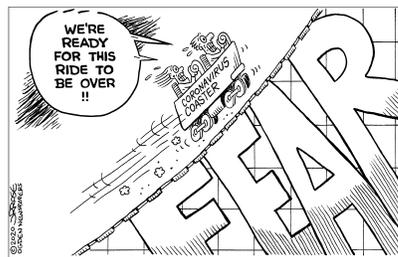
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COUNTY OF PAGE

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Fax: (540) 743-4533

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D. Keith Guzy, Jr. – District 1
Allen Louderback – District 2
Mark Stroupe – District 3
Larry Foltz – District 4
Jeff Vaughan – District 5

County Administrator:

Amity Moler

August 12, 2020

Virginia Telecommunication Initiative

Page County is a rural community with landscape barriers that make it difficult to secure large scale business development. We must rely on a tourism economy that encourages residential growth and small business development. Access to high speed internet is important to these sectors and is an expected infrastructure by those thinking about living in Page County and starting up a business.

Today, internet connectivity correlates directly to our economic success. Page County relies on business and residential growth to contribute to its tax base. Those taxes support important programs.

Our local school system is also being impacted by the lack of connectivity with regard to distance learning and the impact COVID-19 will have on our Page County's students ability to learn virtually.

Internet connectivity in a rural community is of high importance. We must sustain and encourage residential and business growth; and those populations are asking for better internet service.

As the County Administrator, it is a priority for me to ensure our community has access to 21st century amenities like appropriate internet and intelligent communications or we risk being left behind in today's information-driven economy.

Rural areas with better access to internet at higher speeds have the opportunity to:

- Enhance educational programs
- Provide economic options for area youth to stay in the community
- Attract visitors and businesses
- Connect better to healthcare and emergency services
- Encourage less commuting and increase in virtual work
- Allow businesses to run more efficiently

We hope you consider our VATI application for the proposed project.

Sincerely,

Amity Moler



Office of Instruction, Innovation and Accountability
735 West Main Street • Luray, Virginia 22835
Phone 540.743.6533 • Fax 540.743.7784
www.pagecounty.k12.va.us

Eric Benson, Assistant Superintendent

August 17, 2020

Virginia Telecommunications Initiative
Office of Broadband
Department of Housing and Community Development
600 East Main Street, Ste 300
Richmond, VA 23219

Dear Dr. Tamarah Homles,

Page County Public Schools is looking to provide new instruction to all students during the 2020-21 school year. It is our goal to engage students with relevant and challenging learning, encourage students with strong supports, and empower students to be future ready.

Page County is a rural valley community with two small highways - US Route 340 and Route 211. The county has the Blue Ridge Mountains (Shenandoah National Park) to the East and Massanutten Mountain (George Washington National Forest) range to the West. The very nature of the topography makes it very difficult to provide adequate internet service especially fiber to a large percentage of the households located in our county.

The need to provide internet service to all Page County households is now more important than ever. COVID-19 is affecting the quality of education the county can provide to its students because a significant percentage of the population has limited access to internet and will not be able to participate in virtual distance learning opportunities.

I am writing to request your support of Page County's application. Stronger and faster internet speeds are essential to the education of our students and future development of Page County. The availability of internet service in our area will enhance the quality of life for students and residents. Feel free to reach out if you have any additional questions regarding this request. Thank you in advance for your consideration.

Sincerely,

Eric W. Benson

August 15, 2020

Virginia Telecommunications Initiative

Page County needs better internet accessibility.

Page County residents deserve better internet speeds.

As the Page County Supervisor in District 2 and representative of the proposed project area, it a priority for me to ensure our community has access to 21st century amenities like appropriate internet and intelligent communications.

The availability of better internet service in our rural area with enhance the quality of life and contribute to business growth. Better connectivity will encourage start-ups and small-scale businesses to reach potential customers directly in more rural locations.

Rural areas with better access to internet at higher speeds have the opportunity to:

- Enhance educational programs
- Provide economic options for area youth to stay in the community
- Attract visitors and local businesses
- Connect better to healthcare and emergency services
- Encourage less commuting and increase in virtual work
- Allow businesses to run more efficiently
- Make the county more appealing to individuals wanting to flea unsafe urban for a better quality of life

Better and more consistent internet speeds in the project area will upgrade our rural area and make us more competitive for business and residential recruitment which is a significant step towards greater economic prosperity and development.

We hope you consider our VATI application for the wireless project.

Sincerely,
Allen Louderback
District 2 Supervisor
(letter submitted via email)

August 17, 2020

Virginia Telecommunication Initiative

Looking at Page County from a satellite view is the best way to show the difficulties of providing middle and last mile telecommunications. Page County is best described as “the Page Valley,” an area somewhat isolated and separate, bounded by a river and mountain ranges. Surrounded by the Massanutten Mountains, including the George Washington-Thomas Jefferson National Forrest, and the Blue Ridge Mountains featuring the Shenandoah National Park, with the Skyline Drive.

In much of Page County, natural landscape features such as high ridges, heavily wooded slopes, sinkholes, and springs contribute to isolated and widely-scattered home developments that make it extremely difficult and costly for last-mile copper providers to extend coverage at a reasonable monthly cost to the consumer.

Governor Northam’s Broadband Initiative put’s the hammer directly on the nail. The VATI grants program is the long-term incentive program that our county needs to enable internet service providers to affordably extend high speed internet to poorly-accessed, unserved locations.

Bernie Miller
Chairman
Page County Broadband Authority
(letter submitted via email)

TOWN OF SHENANDOAH

426 First Street
Shenandoah VA 22849



Phone: (540) 652-8164
Fax: (540) 652-8194
www.townofshenandoah.com

August 17, 2020

Virginia Telecommunication Initiative

As the Town Manager of Shenandoah, it has been brought to my attention that a Virginia Telecommunication Initiative (VATI) application will be submitted for areas near our town boundary in the more rural southern end of Page County.

After researching the initiative and reading through Governor Northam's 2018 press release stating: "The governor's proposal would increase funding for the Virginia Telecommunications Initiative (VATI), a program that incentivizes internet service providers to expand their service to Virginians that are unserved, to \$50 million in Fiscal Year 2020. The funding would be a significant increase to the \$4 million already appropriated on an annual basis. This state funding will be matched by local, federal, and private funds, helping to connect tens of thousands more Virginians. Additional investments will support the technical expertise needed to assist local governments in developing detailed plans to connect all their citizens."

I am in support of Page County Economic Development Department's sense of urgency to get stronger and faster internet speeds to our area. Improved access to internet at higher speeds is essential to the future growth and development of Page County.

The availability of better internet service in our rural area will enhance the quality of life and contribute to business growth. Better connectivity will encourage start-ups and small-scale businesses to reach potential customers directly in more rural locations.

Better and more consistent internet speeds in the designated project area will upgrade our rural area and make us more competitive for business and residential recruitment which is a significant step towards greater economic prosperity and development.

We hope you consider Page County's VATI application.

Sincerely,

A handwritten signature in cursive script that reads "Juanita Roudabush".

Juanita Roudabush
Town Manager

August 17, 2019

Virginia Telecommunication Initiative

As a resident in the IDA area of Page County it has been brought to my attention that a Virginia Telecommunication Initiative (VATI) application will be submitted in hopes of increasing internet speeds and improving better provider consistency.

After researching the initiative and reading though Governor Northam's 2018 press release stating: "The governor's proposal would increase funding for the Virginia Telecommunications Initiative (VATI), a program that incentivizes internet service providers to expand their service to Virginians that are unserved, to \$50 million in Fiscal Year 2020. The funding would be a significant increase to the \$4 million already appropriated on an annual basis. This state funding will be matched by local, federal, and private funds, helping to connect tens of thousands more Virginians. Additional investments will support the technical expertise needed to assist local governments in developing detailed plans to connect all their citizens."

I am in support of Page County Economic Development Department's sense of urgency for stronger and faster internet speeds in this area. Improved access to internet at higher speeds is essential to the future growth and development of Page County. This project area is home to many vacation rentals and wedding venues that contribute greatly to the tax structure in Page County. Page County has been named one of the top wedding destinations because of its rural landscape and "farm style" venues in this area. Hundreds of visitors enter the Ida area every year and we, as a community, have an opportunity to convert these visitors to full time residents. High speed internet connections are a priority for this group of potential future residents. We also need internet access to allow local children to be better prepared for successful completion of their school homework and for farmers and other local residents to participate in the advantages of Virginia's growing digital economy.

The availability of better internet service in our rural area will enhance the quality of life to all our residents and possibly contribute to business growth. Better connectivity will encourage start-ups and small-scale businesses to reach potential customers directly in more rural locations.

I hope you will approve Page County's VATI application.

Sincerely,



Charles Newton
149 Balkamore Hill Road
Stanley, VA 22851

Project Tower 2020 - Page County
Attachment 11 Derivation of Costs

Product	Total	VATI	NonVATI	Source of Estimate	Date
Towers (see quote from Mountain Valley Tower)	\$ 208,825.00	\$ 167,060.00	\$ 41,765.00	HighSpeedLink	8/12/20
Other Equipment and Supplies (see funding source table for detailed equipment and supplies)	\$ 2,957,063.00	\$2,365,650.00	\$ 591,413.00	HighSpeedLink	8/12/20

5G Cost tower build out costs

Full Build

Page County

Tower AP	5 Ghz	Antenna System	4	\$499	\$1,996
	5G-LTU	Access Point	12	\$399	\$4,788
	UBNT	Tower Switch	1	\$530	\$530
		Jumpers	12	\$7	\$84
	3Ghz	AP w Integrated Ant	4	\$7,500	\$30,000
	5G	DC Surge Supp	4	\$310	\$1,240
	Cambium	DC Power supply	4	\$160	\$640
		Sync Generator	4	\$223	\$893
		Power cable	800	\$1	\$400
	TVWS	AP with Integrated Ant	4	\$7,500	\$30,000
5G	Tower Switch	1	\$530	\$530	
6 Harmonics	Jumpers	12	\$7	\$84	
	Fiber Cable	800	\$3	\$2,000	
Ground	Air Conditioned enclosure	1	\$4,000	\$4,000	
	Router with SFP	1	\$3,700	\$3,700	
	Power system with Battery	1	\$2,500	\$2,500	
	10kw Generator Propane	1	\$5,500	\$5,500	
Tower and build	198 Foot Mono pole	1	\$129,105	\$129,105	
	Construction installation	1	\$79,720	\$79,720	
	Permits	1	\$1,500	\$1,500	
			Tower total	\$299,210	
Back haul network	1Gbs+ Backhaul radios systems	12	\$12,000	\$144,000	
	Installation Cost	12	\$750	\$9,000	
				Back haul total	\$153,000
CPE	UBNT LTU 5G	300	\$400	\$120,000	
	Cambium CBRS 5G	300	\$400	\$120,000	
	6 Harmonics	200	\$400	\$80,000	
			Starter CPE	\$320,000	
Summary of total costs					
	New Towers fully equipment	9	\$299,210	\$2,692,888	
	Existing Tower 3Ghz + TVWS addon	2	\$40,012	\$80,024	
	Back haul network	12	\$12,750	\$153,000	
	CPE	800	\$400	\$320,000	
			Total Project	\$3,165,888	
			HSL Contribution	\$320,000	
			Net Grant Request	\$2,845,888	



Tower quote from Mountain Valley Tower services

PROJECT :	Page County monopole		Mountain Valley Tower Service, Inc.
Site Name & I. D.			2014 N. Augusta St.
RFP#			Staunton, VA 24401
	LABOR	ADDER:	Bidder's Comments
1) LAND IMPROVEMENTS	Whole Dollars Please		
A) Site Work	\$4,500.00	\$7,400.00	80x80 compound
A1) Permitting	\$8,500.00	\$3,500.00	Site C.D.'s,
A2) Clearing			Sealed Tower drawings
B) Roads	\$3,120.00	\$2,880.00	200 linear feet estimate
C) Equipment Foundations	\$3,500.00	\$2,000.00	Highspeed equipment slab
C1) Ice Shield			
E) Fences/gates	\$10,600.00	\$8,600.00	8 'chain link with double 6' personnel gate
F) Electrical & Telco	\$6,200.00	\$4,650.00	New 4 gang meter center
F1) Conduits			
F2) Fiber Box			
G) Grounding	\$5,500.00	\$4,200.00	
H)			
I) Payment Bond (if required)			None
2) TOWER			198' monopole
A) Tower Erection	\$9,500.00	\$59,200.00	Highspeed antennas + 1 carrier
B) Tower Foundation (FFP)	\$14,500.00	\$25,500.00	oundation based on normal soils
C)			50 cu. Yd. est.
D) Ice Bridge	\$800.00	\$875.00	10'x 2' direct burial
3) ANTENNA & LINE			
A) Antenna/Line Install & Test	\$7,500.00	\$4,800.00	
B) Antenna Mounts/Materials		\$5,500.00	Highspeed sector mounts
c) Waveguide Ladder/Materials			
4) Equipment			
A) Offload and Set Equipment - Provide Crane	\$5,500.00		
Sub Totals:	\$79,720.00	\$129,105.00	
GRAND TOTAL of Labor & Materials:	\$208,825.00		



Project Tower 2020 - Page County

Attachment 12 - Documentation of Supporting Costs

The costs for this project are \$208,825 in towers and \$2,957,063 in other equipment and supplies. The cost for this project includes all of the planning, engineering, materials and labor for the installation of the tower/wireless service necessary for this project, along with the equipment necessary to provide the service and all agreements required. The cost estimates are based on HighSpeedLink's experience in building these same systems throughout Virginia's Shenandoah Valley.

Alex Phillips
CEO and General Manager
High Speed Link

HighSpeedLink

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51015070200	70	12	4	2	2
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51015070400	70	5	2.5	1	0
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51015071000	70	15	5	1	1
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51059481900	70	5	2.5	1	0
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51139030200	70	15	5	1	1
51139030300	70	4.5	3	2	2
51139030300	70	5	3	2	2
51139030300	70	7.5	3	1	1
51139030300	70	10	3	3	3
51139030300	70	12	4	1	1
51139030300	70	15	5	1	1

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51660000207	70	5	2.5	1	0
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51660000302	70	3	3	1	1
51660000302	70	10	5	1	0
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51660000302	70	25	10	1	0
51660000302	70	55	25	1	0
51660000401	70	15	7.5	1	0
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51660000402	70	7.5	3	1	1
51660000402	70	9	3	2	2
51660000402	70	12	4	4	4
51660000402	70	10	5	1	0
51760030500	70	6	6	1	0
51775010501	70	4.5	3	1	1
51790000500	70	6	3	1	1
51840000100	70	10	10	2	0

Tower Contacts, Agreement and Design

Project: Project Tower 2020



Towers:

The tower locations will be built on private property.

The following are a list of the project property owners:

1. Dixon
2. Rilleyville
3. Log Cabin
4. Shenandoah Campgrounds
5. Powell
6. Hizer
7. Verba
8. Batman Hill Rd
9. Batman Rd (RBNS Owned)
10. Lake Arrowhead (RBNS Lease)
11. Chapman (Emergency Communications Location)

Each tower is a 195 foot mono pole that can support the Broadband Wireless hardware, county 911 communications equipment (if needed) and 2 cellular phone carriers. This type of tower is the most effective and efficient type of tower for this application. It can support a heavy load but not take up much ground space.

Tower construction and ownership: HSL is currently working with property owners in Page County. Contact with property owners and verbal agreements regarding the details on leased space and tower constructed have been discussed.

Mountain Valley Tower service has given quotes for these towers and will be our primary contractor on this project.

This is an example of what the site may look like:



COMMERCIAL LEASE AGREEMENT

THIS LEASE (this "Lease") dated this _____ day of _____, _____

BETWEEN:

Property Owner of _____

Telephone: _____ Fax: _____

(the "Landlord")

OF THE FIRST PART

- AND -

Rural Broadband Network Services LLC of 1528 Country Club Rd Harrisonburg VA 22802

Telephone: (540) 908-3993

(the "Tenant")

OF THE SECOND PART

IN CONSIDERATION OF the Landlord leasing certain premises to the Tenant, the Tenant leasing those premises from the Landlord and the mutual benefits and obligations set forth in this Lease, the receipt and sufficiency of which consideration is hereby acknowledged, the Parties to this Lease (the "Parties") agree as follows:

Definitions

1. When used in this Lease, the following expressions will have the meanings indicated:

- a. "Additional Rent" means all amounts payable by the Tenant under this Lease except Base Rent, whether or not specifically designated as Additional Rent elsewhere in this Lease;
- b. "Building" means all buildings, improvements, equipment, fixtures, property and facilities from time to time located at Tower Location, as from time to time altered, expanded or reduced by the Landlord in its sole discretion;
- c. "Common Areas and Facilities" mean:
 - i. those portions of the Building areas, buildings, improvements, facilities, utilities, equipment and installations in or forming part of the Building which from time to time are not designated or intended by the Landlord to be leased to tenants of the

Building including, without limitation, exterior weather walls, roofs, entrances and exits, parking areas, driveways, loading docks and area, storage, mechanical and electrical rooms, areas above and below leasable premises and not included within leasable premises, security and alarm equipment, grassed and landscaped areas, retaining walls and maintenance, cleaning and operating equipment serving the Building; and

ii. those lands, areas, buildings, improvements, facilities, utilities, equipment and installations which serve or are for the useful benefit of the Building, the tenants of the Building or the Landlord and those having business with them, whether or not located within, adjacent to or near the Building and which are designated from time to time by the Landlord as part of the Common Areas and Facilities;

d. "Leasable Area" means with respect to any rentable premises, the area expressed in square feet of all floor space including floor space of mezzanines, if any, determined, calculated and certified by the Landlord and measured from the exterior face of all exterior walls, doors and windows, including walls, doors and windows separating the rentable premises from enclosed Common Areas and Facilities, if any, and from the center line of all interior walls separating the rentable premises from adjoining rentable premises. There will be no deduction or exclusion for any space occupied by or used for columns, ducts or other structural elements;

e. "Premises" means the commercial premises at Tower Location which is located approximately as shown in red on Schedule 'A' attached to and incorporated in the Lease.

f. "Rent" means the total of Base Rent and Additional Rent.

Intent of Lease

2. It is the intent of this Lease and agreed to by the Parties to this Lease that rent for this Lease will be on a gross rent basis meaning the Tenant will pay the Base Rent and any Additional Rent and the Landlord will be responsible for all other service charges related to the Premises and the operation of the Building save as specifically provided in this Lease to the contrary.

Leased Premises

3. The Landlord agrees to rent to the Tenant the commercial premises municipally described as Tower Location, (the "Premises") which is located approximately as shown in red on Schedule

"A" attached to and incorporated in the Lease.

The Premises will be used for only the following permitted use (the "Permitted Use"):

Placement of an 80x80 foot fenced-in compound, electrical easements, road access easements and sublease.

4. Subject to the provisions of this Lease, the Tenant is entitled to the non-exclusive use of the following parking on or about the Premises: _____ Road access from the public road to the private road with gate access, to the tower location. (the "Parking"). Only properly insured motor vehicles may be parked in the Tenant's space.

Term

5. The term of the Lease commences at 12:00 noon on August 1, 2020 and ends at 12:00 noon on August 31, 2025 (the "Term").
6. Should the Tenant remain in possession of the Premises with the consent of the Landlord after the natural expiration of this Lease, a new tenancy from month to month will be created between the Landlord and the Tenant which will be subject to all the terms and conditions of this Lease but will be terminable upon either party giving one month's notice to the other party.

Rent

7. Subject to the provisions of this Lease, the Tenant will pay a base rent based on the Additional Clauses below (the "Base Rent"), without setoff, abatement or deduction. In addition to the Base Rent, the Tenant will pay for any fees or taxes arising from the Tenant's business.
8. The Tenant will pay the Base Rent on or before the 5th of each and every month of the Term to the Landlord at _____, or at such other place as the Landlord may later designate.
9. No acceptance by the Landlord of any amount less than the full amount owed will be taken to operate as a waiver by the Landlord for the full amount or in any way to defeat or affect the rights and remedies of the Landlord to pursue the full amount.

Use and Occupation

10. The Tenant will carry on business under the name of HighSpeedLink.net and will not change such name without the prior written consent of the Landlord, such consent not to be unreasonably withheld. The Tenant will open the whole of the Premises for business to the public fully

fixtures, stocked and staffed on the date of commencement of the Term and throughout the Term, and will continuously occupy and utilize the entire Premises in the active conduct of its business in a reputable manner on such days and during such hours of business as may be determined from time to time by the Landlord.

11. The Tenant covenants that the Tenant will carry on and conduct its business from time to time carried on upon the Premises in such manner as to comply with all statutes, bylaws, rules and regulations of any federal, state, municipal or other competent authority and will not do anything on or in the Premises in contravention of any of them.

Quiet Enjoyment

12. The Landlord covenants that on paying the Rent and performing the covenants contained in this Lease, the Tenant will peacefully and quietly have, hold, and enjoy the Premises for the agreed term.

Distress

13. If and whenever the Tenant is in default in payment of any money, whether hereby expressly reserved or deemed as rent, or any part of the rent, the Landlord may, without notice or any form of legal process, enter upon the Premises and seize, remove and sell the Tenant's goods, chattels and equipment from the Premises or seize, remove and sell any goods, chattels and equipment at any place to which the Tenant or any other person may have removed them, in the same manner as if they had remained and been distrained upon the Premises, all notwithstanding any rule of law or equity to the contrary, and the Tenant hereby waives and renounces the benefit of any present or future statute or law limiting or eliminating the Landlord's right of distress.

Overholding

14. If the Tenant continues to occupy the Premises without the written consent of the Landlord after the expiration or other termination of the Term, then, without any further written agreement, the Tenant will be a month-to-month tenant at a minimum monthly rental equal to twice the Base Rent and subject always to all of the other provisions of this Lease insofar as the same are applicable to a month-to-month tenancy and a tenancy from year to year will not be created by implication of law.

Additional Rights on Reentry

15. If the Landlord reenters the Premises or terminates this Lease, then:

- a. notwithstanding any such termination or the Term thereby becoming forfeited and void, the provisions of this Lease relating to the consequences of termination will survive;
- b. the Landlord may use such reasonable force as it may deem necessary for the purpose of gaining admittance to and retaking possession of the Premises and the Tenant hereby releases the Landlord from all actions, proceedings, claims and demands whatsoever for and in respect of any such forcible entry or any loss or damage in connection therewith or consequential thereupon;
- c. the Landlord may expel and remove, forcibly, if necessary, the Tenant, those claiming under the Tenant and their effects, as allowed by law, without being taken or deemed to be guilty of any manner of trespass;
- d. in the event that the Landlord has removed the property of the Tenant, the Landlord may store such property in a public warehouse or at a place selected by the Landlord, at the expense of the Tenant. If the Landlord feels that it is not worth storing such property given its value and the cost to store it, then the Landlord may dispose of such property in its sole discretion and use such funds, if any, towards any indebtedness of the Tenant to the Landlord. The Landlord will not be responsible to the Tenant for the disposal of such property other than to provide any balance of the proceeds to the Tenant after paying any storage costs and any amounts owed by the Tenant to the Landlord;
- e. the Landlord may relet the Premises or any part of the Premises for a term or terms which may be less or greater than the balance of the Term remaining and may grant reasonable concessions in connection with such reletting including any alterations and improvements to the Premises;
- f. after reentry, the Landlord may procure the appointment of a receiver to take possession and collect rents and profits of the business of the Tenant, and, if necessary to collect the rents and profits the receiver may carry on the business of the Tenant and take possession of the personal property used in the business of the Tenant, including inventory, trade fixtures, and furnishings, and use them in the business without compensating the Tenant;
- g. after reentry, the Landlord may terminate the Lease on giving 5 days' written notice of termination to the Tenant. Without this notice, reentry of the Premises by the Landlord or its agents will not terminate this Lease;
- h. the Tenant will pay to the Landlord on demand:

- i. all rent, Additional Rent and other amounts payable under this Lease up to the time of reentry or termination, whichever is later;
- ii. reasonable expenses as the Landlord incurs or has incurred in connection with the reentering, terminating, reletting, collecting sums due or payable by the Tenant, realizing upon assets seized; including without limitation, brokerage, fees and expenses and legal fees and disbursements and the expenses of keeping the Premises in good order, repairing the same and preparing them for reletting; and
- iii. as liquidated damages for the loss of rent and other income of the Landlord expected to be derived from this Lease during the period which would have constituted the unexpired portion of the Term had it not been terminated, at the option of the Landlord, either:
 1. an amount determined by reducing to present worth at an assumed interest rate of twelve percent (12%) per annum all Base Rent and estimated Additional Rent to become payable during the period which would have constituted the unexpired portion of the Term, such determination to be made by the Landlord, who may make reasonable estimates of when any such other amounts would have become payable and may make such other assumptions of the facts as may be reasonable in the circumstances; or
 2. an amount equal to the Base Rent and estimated Additional Rent for a period of six (6) months.

Renewal of Lease

16. Upon giving written notice no later than 60 days before the expiration of the Term, the Tenant may renew this Lease for an additional term. All terms of the renewed lease will be the same except for any signing incentives/inducements and this renewal clause.

Tenant Improvements

17. The Tenant will obtain written permission from the Landlord before doing any of the following:
 - a. painting, wallpapering, redecorating or in any way significantly altering the appearance of the Premises;
 - b. removing or adding walls, or performing any structural alterations;

- c. changing the amount of heat or power normally used on the Premises as well as installing additional electrical wiring or heating units;
- d. subject to this Lease, placing or exposing or allowing to be placed or exposed anywhere inside or outside the Premises any placard, notice or sign for advertising or any other purpose;
- e. affixing to or erecting upon or near the Premises any radio or TV antenna or tower, or satellite dish; or
- f. installing or affixing upon or near the Premises any plant, equipment, machinery or apparatus without the Landlord's prior consent.

Abandonment

18. If at any time during the Term, the Tenant abandons the Premises or any part of the Premises, the Landlord may, at its option, enter the Premises by any means without being liable for any prosecution for such entering, and without becoming liable to the Tenant for damages or for any payment of any kind whatever, and may, at the Landlord's discretion, as agent for the Tenant, relet the Premises, or any part of the Premises, for the whole or any part of the then unexpired Term, and may receive and collect all rent payable by virtue of such reletting, and, at the Landlord's option, hold the Tenant liable for any difference between the Rent that would have been payable under this Lease during the balance of the unexpired Term, if this Lease had continued in force, and the net rent for such period realized by the Landlord by means of the reletting. If the Landlord's right of reentry is exercised following abandonment of the premises by the Tenant, then the Landlord may consider any personal property belonging to the Tenant and left on the Premises to also have been abandoned, in which case the Landlord may dispose of all such personal property in any manner the Landlord will deem proper and is relieved of all liability for doing so.

Governing Law

19. It is the intention of the Parties to this Lease that the tenancy created by this Lease and the performance under this Lease, and all suits and special proceedings under this Lease, be construed in accordance with and governed, to the exclusion of the law of any other forum, by the laws of the Commonwealth of Virginia, without regard to the jurisdiction in which any action or special proceeding may be instituted.

Severability

20. If there is a conflict between any provision of this Lease and the applicable legislation of the Commonwealth of Virginia (the 'Act'), the Act will prevail and such provisions of the Lease will be amended or deleted as necessary in order to comply with the Act. Further, any provisions that are required by the Act are incorporated into this Lease.

Assignment and Subletting

21. The Tenant will not assign this Lease in whole or in part, nor sublet all or any part of the Premises, nor grant any license or part with possession of the Premises or transfer to any other person in whole or in part or any other right or interest under this Lease (except to a parent, subsidiary or affiliate of the Tenant), without the prior written consent of the Landlord in each instance, which consent will not be unreasonably withheld so long as the proposed assignment or sublease complies with the provisions of this Lease.
22. Notwithstanding any assignment or sublease, the Tenant will remain fully liable on this Lease and will not be released from performing any of the terms, covenants and conditions of this Lease.
23. If the Lease is assigned or if the Premises or any part of the Premises are sublet or occupied by anyone other than the Tenant, the Landlord may collect rent directly from the assignee, subtenant or occupant, and apply the net amount collected, or the necessary portion of that amount, to the rent owing under this Lease.
24. The prohibition against assigning or subletting without the consent required by this Lease will be constructed to include a prohibition against any assignment or sublease by operation of law.
25. The consent by the Landlord to any assignment or sublease will not constitute a waiver of the necessity of such consent to any subsequent assignment or sublease.

Bulk Sale

26. No bulk sale of goods and assets of the Tenant may take place without first obtaining the written consent of the Landlord, which consent will not be unreasonably withheld so long as the Tenant and the Purchaser are able to provide the Landlord with assurances, in a form satisfactory to the Landlord, that the Tenant's obligations in this Lease will continue to be performed and respected, in the manner satisfactory to the Landlord, after completion of the said bulk sale.

Additional Provisions

27. Tenant will actively find Cell Phone or other tenants to sublease and split the net rental income 50/50 with the Landlord.
28. Tenant will provide the Landlord HighSpeed Internet access either at the location of the lease or at a location of the Landlords choosing within the Tenant's network foot print.

Maintenance

29. The Tenant will, at its sole expense, keep and maintain the Premises and appurtenances in good and sanitary condition and repair during the Term and any renewal of this Lease.
30. The Tenant will be responsible at its own expense to replace all electric light bulbs, tubes, ballasts or fixtures serving the Premises.

Care and Use of Premises

31. The Tenant will promptly notify the Landlord of any damage, or of any situation that may significantly interfere with the normal use of the Premises.
32. Vehicles which the Landlord reasonably considers unsightly, noisy, dangerous, improperly insured, inoperable or unlicensed are not permitted in the Tenant's parking stall(s), and such vehicles may be towed away at the Tenant's expense. Parking facilities are provided at the Tenant's own risk. The Tenant is required to park in only the space allotted to them.
33. The Tenant will not make (or allow to be made) any noise or nuisance which, in the reasonable opinion of the Landlord, disturbs the comfort or convenience of other tenants.
34. The Tenant will not engage in any illegal trade or activity on or about the Premises.
35. The Landlord and Tenant will comply with standards of health, sanitation, fire, housing and safety as required by law.

Surrender of Premises

36. At the expiration of the lease term, the Tenant will quit and surrender the Premises in as good a state and condition as they were at the commencement of this Lease, reasonable use and wear and damages by the elements excepted.

Hazardous Materials

37. The Tenant will not keep or have on the Premises any article or thing of a dangerous, flammable, or explosive character that might unreasonably increase the danger of fire on the Premises or that might be considered hazardous by any responsible insurance company.

Rules and Regulations

38. The Tenant will obey all rules and regulations posted by the Landlord regarding the use and care of the Building, parking lot and other common facilities that are provided for the use of the Tenant in and around the Building on the Premises.

General Provisions

39. Any waiver by the Landlord of any failure by the Tenant to perform or observe the provisions of this Lease will not operate as a waiver of the Landlord's rights under this Lease in respect of any subsequent defaults, breaches or nonperformance and will not defeat or affect in any way the Landlord's rights in respect of any subsequent default or breach.

40. This Lease will extend to and be binding upon and inure to the benefit of the respective heirs, executors, administrators, successors and assigns, as the case may be, of each party to this Lease. All covenants are to be construed as conditions of this Lease.

41. All sums payable by the Tenant to the Landlord pursuant to any provision of this Lease will be deemed to be Additional Rent and will be recoverable by the Landlord as rental arrears.

42. Where there is more than one Tenant executing this Lease, all Tenants are jointly and severally liable for each other's acts, omissions and liabilities pursuant to this Lease.

43. Time is of the essence in this Lease.

44. This Lease will constitute the entire agreement between the Landlord and the Tenant. Any prior understanding or representation of any kind preceding the date of this Lease will not be binding on either party to this Lease except to the extent incorporated in this Lease. In particular, no warranties of the Landlord not expressed in this Lease are to be implied.

IN WITNESS WHEREOF the Parties to this Lease have duly affixed their signatures under hand and seal, or by a duly authorized officer under seal, on this _____ day of _____, _____

(Witness)

Property Owner (Landlord)

Rural Broadband Network Services LLC (Tenant)

(Witness)

Per: _____ (SEAL)



COUNTY OF PAGE

103 South Court Street, Suite F
Luray, Virginia 22835
(540) 743-4142
Fax: (540) 743-4533

Board of Supervisors:
Morgan Phenix – Chairman – At-Large
D. Keith Guzy, Jr. – District 1
Allen Louderback – District 2
Mark Stroupe – District 3
Larry Foltz – District 4
Jeff Vaughan – District 5

County Administrator:
Amity Moler

June 26, 2020

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

Richmond, VA 23219

Dear Dr. Holmes:

I am providing this VATI Application Notice to notify the Virginia Department of Housing and Community Development of Page County and private provider's may submit an application for the FY2021 Virginia Telecommunication Initiative (VATI).

Liz Lewis will be our main point of contact for the purposes of the application process, and can be reached at: llewis@pagecounty.virginia.gov and 540-743-1216

Page County relies on business and residential growth to contribute to its tax base. Those taxes support important community programs. Countywide internet infrastructure is a priority and correlates directly to our rural economic success and development.

Page County understands that this VATI Application Notice is required in order to submit an application for the 2021 the Virginia Telecommunication Initiative and that this notice is not binding on the entity represented by the undersigned, Virginia Department of Housing and Community Development.

Sincerely,

Amity Moler
County Administrator
Page County

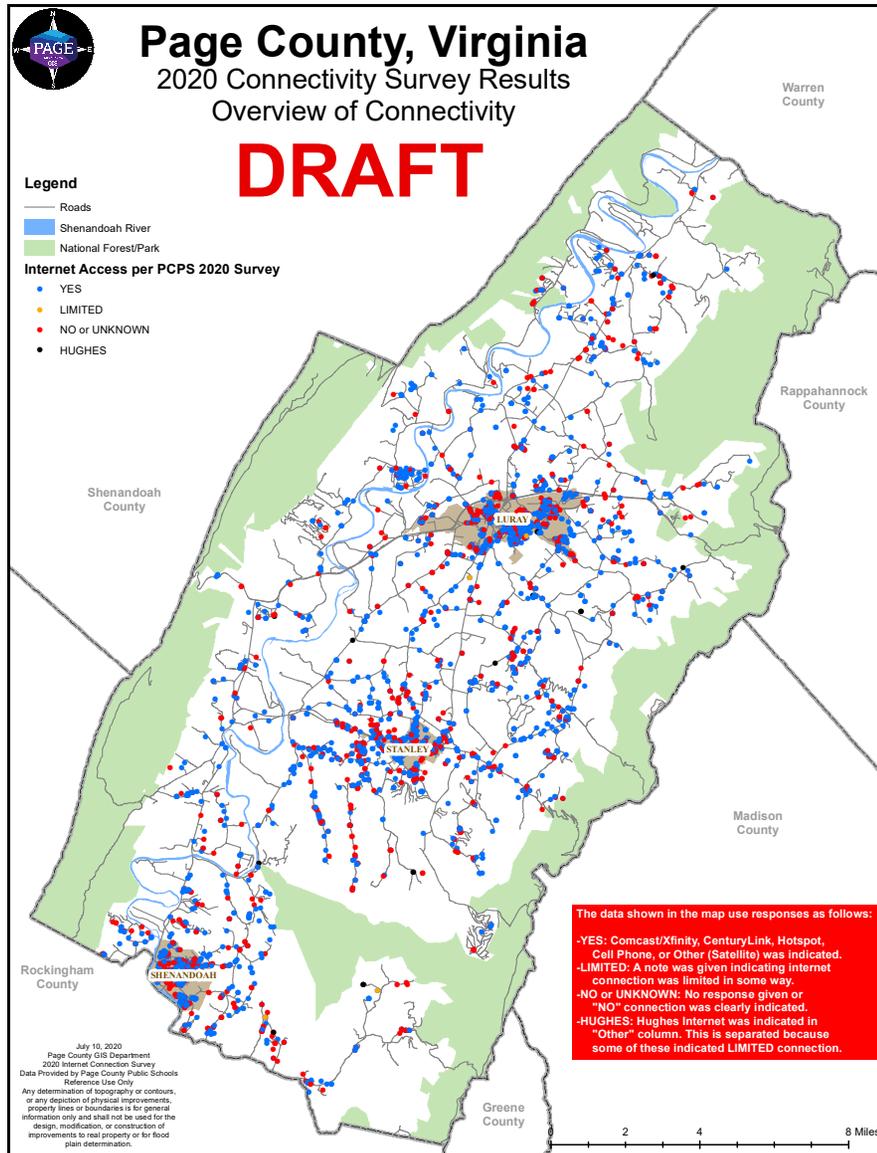
MAPPED Areas of Need

Project Tower 2020 Page County

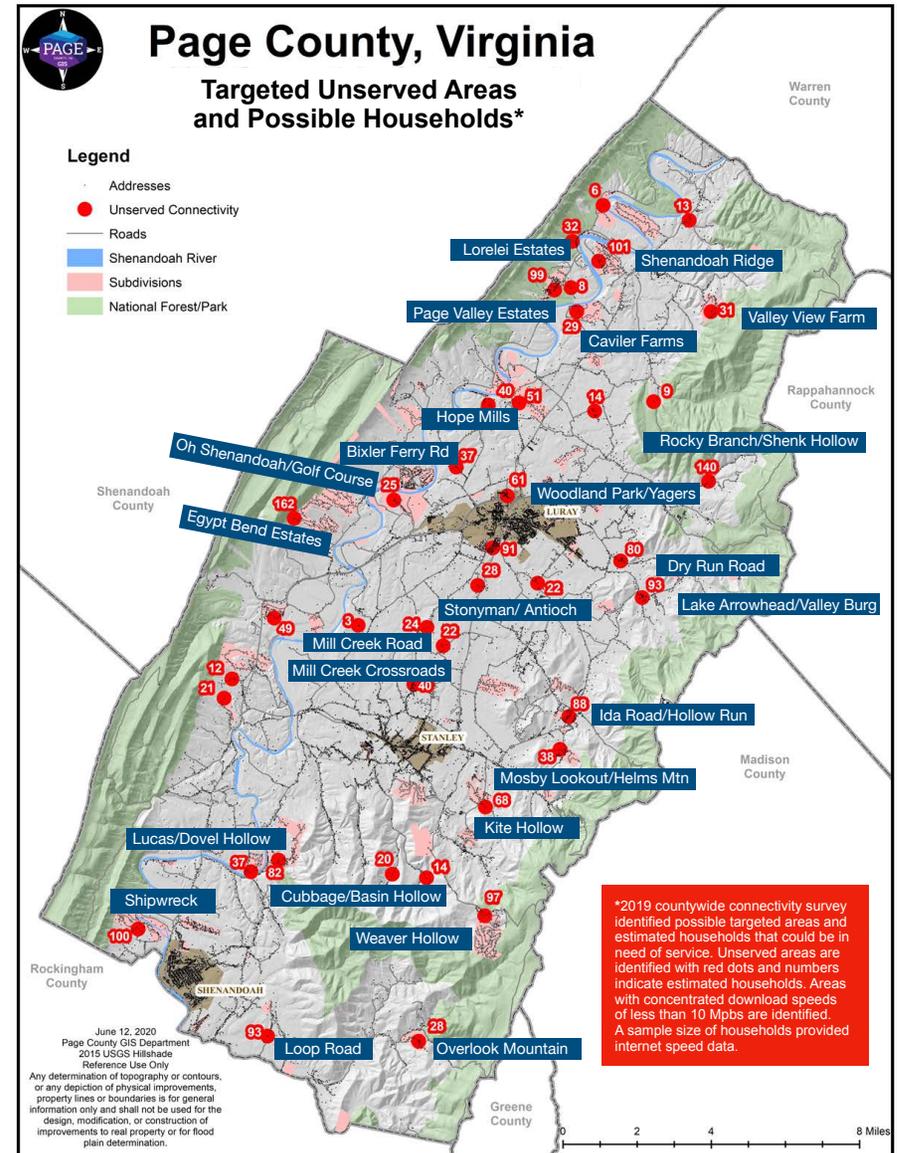
Attachment 16

Passings derived from the following maps based on household and school system data collection.

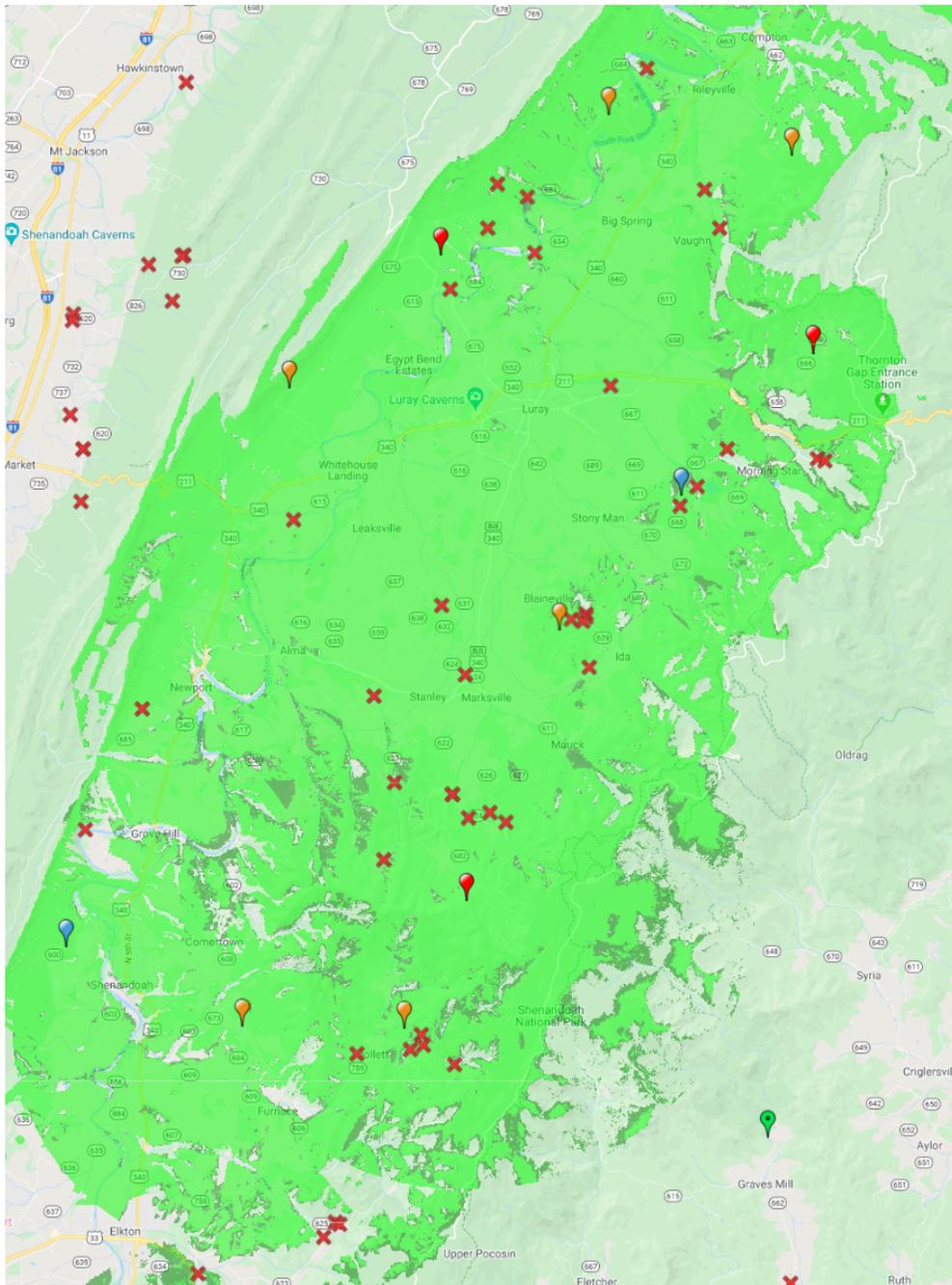
Page County Public School Household Data



County Household Survey Data



HighSpeedLink Customer Data



Project Tower 2020

Project Contact	Organization	Title	Duties
Liz Lewis	Page County	Page County Economic Development & Tourism Coordinator	Ms. Lewis will be the responsible for the coordination of the project with DHCD and HighSpeedLink to include VATI administrative duties and citizen support/liaison.
Alex Phillips	HighSpeedLink	CEO and General Manager	Overall Project Manager
Mike Bosserman	HighSpeedLink		Field Project Manager
Mark Bowles	Mountain Valley Tower Service		Construction Contractor