

Application to DHCD Submitted through CAMS

King & Queen County

King & Queen County VATI 2021

Application ID: 75708102020111148
Application Status: In Progress - DHCD
Program Name: Virginia Telecommunications Initiative 2021
Organization Name: King & Queen County
Organization Address:
Profile Manager Name: Thomas Swartzwelder
Profile Manager Phone: (804) 785-5975
Profile Manager Email: tswartzwelder@kingandqueenco.net

Project Name: King & Queen County VATI 2021
Project Contact Name: Thomas Swartzwelder
Project Contact Phone: (804) 785-5975
Project Contact Email: tswartzwelder@kingandqueenco.net
Project Location: 242 Allens Circle, Suite L
King & Queen Courthouse, VA 23085-2007
Project Service Area: King and Queen County

Total Requested Amount: \$3,757,628.00
Required Annual Audit Status: Accepted

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Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	\$3,757,628.00	\$5,892,785.00	\$9,650,413.00
Construction	\$3,757,628.00	\$5,892,785.00	\$9,650,413.00
Total:	\$3,757,628.00	\$5,892,785.00	\$9,650,413.00

Budget Narrative:

We are requesting \$3,757,628.00 in VATI funds to complete the KQ FTTH network. The initial request for VATI funding was for \$6,043,905.00 and we received \$2,020,291.00 for a Phase I portion of the project. The difference in the initial funding request and the amount received is \$4,023,614.00. However, during the Phase I portion of the KQ FTTH network we have two additional CARES projects. These projects pass by a number of homes that RSN will offer service to once the CARES projects are successfully completed which reduces the number of non funded homes. To simplify our request we are basing it on the number of unfunded homes in Phase II by the amount of funding per home provided in Phase I. Since Phase I provided \$2,020,291.00 of funding to pass 714 homes, we have calculated the amount of funding per home to be \$2,829.54. To determine the number of homes needing funding we took the total number of habitable homes in the County GIS system (3,832) and subtracted out; CAF Funded Homes (1,615), VATI Funded Homes (714), CARES Project Passed Homes (175) which leaves the County with 1,328 homes that do not have any sort of broadband funding. The VATI Phase II project total budget is \$9,650,413.00 and breaks down accordingly; VATI - \$3,757,628.00 (38.9%), KQ County - \$1,851,413.00 (19.2%), RSN - \$1,593,240.00 (16.5%), CAF - \$2,448,133.00 (25.4%). If needed for clarification the CARES projects are going to cost \$947,378.00 and they will pass; All 3 KQ County Schools, KQ County Library, KQ County Administration Building, Rappahannock Indian Tribal Center, 175 homes in the Phase II project area. In Phase II the total build will be 310.29 miles of fiber that passes 2,299 homes. The VATI funding will support the installation and lighting of 155.38 miles of fiber servicing 1,328 homes.

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:

The FTTH plan covers the entire footprint of King and Queen County, VA. Previously, only two small areas of the County had Internet speed greater than 10/1. In the Northern part of the County along SR 721 down to the St. Stephens Church area of the County there is Verizon DSL service. The speeds available from Verizon DSL vary greatly from a high of 15/1 down to a low of 1.5/.5. Verizon DSL speeds are based on how far the customer is from the CO. In the Southern part of the County along SR 14/33 and Airport Road, Cox supplies Internet speeds greater than 10/1. Additionally, Cox has informed the County that they currently have no plans to build out Internet service to more areas in the County. According to the FCC mapping site there is wireless coverage in the County from

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Virginia Broadband (VABB). However, VABB's own coverage map from their website shows that their wireless coverage stops to the East of the County along SR 17. A majority of the County is primarily covered by the KQVA.net wireless network which has speeds no greater than 6Mbps down. KQVA.net network was installed by GTG and has been maintained by them since 2012. Prior to the public announcement of the purchase of GTG by RSN in 2018, a meeting was held with members of King and Queen County and RSN/GTG to discuss improvements to KQVA.net network. The main issue is that the network doesn't currently exceed the 10/1 Broadband Internet standard and several tower sites are at max capacity. During RSN purchase discussions with GTG, it was decided to add KQ County to the list of locations in which to bid on CAF II funding. Due to errors in the federal mapping system only 1,615 locations or less than 43% of the households were funded by the CAF II auction. Last year KQ was awarded VATI funding which is helping to jump start their plans to build a FTTH network throughout the County. This year King and Queen County and RSN are requesting VATI funding so they can continue to build a ubiquitous FTTH network throughout the entire county. This plan is based on the Broadband Expansion Plan that the County funded last year which showed an entire build cost of \$17,261,692.60. The Phase II project area is the continuation of the Phase I FTTH project area approved by VATI last year. The new project area picks up just North of Rte. 603 in King and Queen County near Little Plymouth. From this Southern boundary the project area North past Newton until it reaches the King and Queen County line with Caroline County. The project area covers all areas from the Western County line with King William County and the Eastern County line with Middlesex and Essex Counties. As mentioned in last year's application there is very little broadband coverage in the County especially at speeds greater than 25/3 Mbps. According to the FCC 477 reports from June 2019, there are only two providers in the Phase II project area that provide 25/3 Mbps or greater service and they will be discussed in more detail in this application.

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:

According to FCC 477 filings of 2019 the following service providers are supplying 25/3 Mbps or faster Internet services in the proposed service areas; Virginia Broadband LLC (VBB), Atlantic Broadband LLC (ABB). After further research of VBB "Coastal Coverage Area", their service ends to the East of Highway 17 which is outside of King and Queen County and the project area's footprint. Even though it does not show up on the FCC 477 report ABB has the largest coverage area in the project area. ABB has recently completed a fiber build that lies inside our planned project area but they have yet to file any FCC 477 reports showing those blocks being served. ABB's new fiber route runs across the entire width of the County along Hwy 360. Additionally, the route turns North in the St. Stephens Church area and runs along Rte 721 before continuing on to Caroline County. Based on ABB's agreement with the County to provide services to structures within 300' of their new 23 mile fiber route, it appears that they pass 233 homes. Approximately, 56 of these 233 homes are in RSN's CAF areas which leaves 177 homes. Additionally, KQ County and RSN are working on a CARES project that will connect all the County Schools, Library, and Administrative Building to fiber. This build will also pass 169 homes with 85 of them being along the newly constructed ABB fiber route. Therefore, the total number of homes not covered by current funding sources in the County is 1,334 and 92 of those are passed by ABB. This means that the total number of homes being covered by this project area and those that can potentially be served by ABB is 6.9% which is well below the amount allowed for "Challenge" purposes. RSN has had discussions with ABB about our intentions of building a ubiquitous FTTH network in KQ County. We have discussed possible partnering opportunities with them as well. RSN is currently working with ABB on another CARES project with the Rappahannock Indian Tribe (RIT). This CARES project would connect the Tribal Center and 10 homes to fiber that may be fed out of an ABB fiber handhold in Essex County. The RIT project has 6 homes not covered by CAF funding which reduces the number

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of Phase II VATI homes to 1,328. Therefore, the 92 homes passed by ABB is still only 6.9% of the homes included in our Phase II VATI application. As stated earlier, Verizon has DSL service in parts of the County but none of their speeds are above 25/3 Mbps and most are far below 10/1 Mbps.

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:

RSN has received \$5,071,453 CAF II funding to connect 1,615 of the 3,832 homes in King and Queen County to fiber Internet service. RSN also took out a USDA loan to cover the additional funding requirements needed to complete the passing of these 1,615 CAF supported homes. Due to the FCC's quiet period on the RDOF Auction, we must limit my discussion to only publicly provided information from the initial announcement. The initial RDOF auction package shows 3 census block groups in the County. The initial auction figures could provide just over \$1.9 million in FCC funding for 670 homes. However, some of these homes are part of the current Phase I build and the two CARES projects that are getting underway in the County. Attachment 2 is a map from Google Earth showing KQ County with CAF Blocks in yellow, KQ CARES fiber route in dark orange, and RIT CARES fiber route in light orange. Additionally, we understand the VATI 2021 guidelines when it comes to RDOF funded areas and we request that since our application is based on funding per home passed that VATI consider using that methodology if any funding is to be reduced due to RDOF being awarded in the project area.

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:

As stated previously, the FCC 477 filings for 2019 shows only two service providers are supplying 25/3 Mbps or faster Internet services in the proposed service areas; Virginia Broadband LLC (VBB), Atlantic Broadband LLC (ABB). According to VBB's map of their "Coastal Coverage Area", they do not provide service inside of King and Queen County. Their service ends to the East of Highway 17 which is well outside of King and Queen County and the project area's footprint. The 2019 FCC 477 only shows 1 census block in the County being supplied Broadband services by ABB. The FCC report does not show their newest service area in the County. ABB has recently completed a fiber build that lies inside our planned project area but the FCC 477 report does not show those blocks as being served. ABB's new fiber route runs across the entire width of the County along Hwy 360. Additionally, the route turns North in the St. Stephens Church area and runs along Rte 721 before continuing on to Caroline County. Based on ABB's agreement with the County to provide services to structures within 300' of their new 23 mile fiber route, it appears that they pass 233 homes. Approximately, 56 of these 233 homes are in RSN's CAF areas which leaves 177 homes in the VATI project's footprint. However, KQ County and RSN are working on a CARES project that will connect all the County Schools, Library, and Administrative Building to fiber. This fiber build will also pass 169 homes with 85 of them being along the newly constructed ABB fiber route. Therefore, the total number of homes not covered by current funding sources in the County is 1,334 and 92 of those are passed by ABB. This means that the total number of homes being covered by the VATI project area and those that can

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potentially be served by ABB is 6.9% which is well below the 10% allowed. Additionally, RSN is currently working on another CARES project with the Rappahannock Indian Tribe (RIT). This CARES project would connect the Tribal Center and 10 homes to fiber. The RIT project has 6 homes not covered by CAF funding which reduces the number of Phase II VATI homes to 1,328. Therefore, the 92 homes passed by ABB is still only 6.9% of the homes included in our Phase II VATI application for funding.

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
 - 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:

This phase of the project is going to pass a total of 2,299 homes; 1,328 funded by VATI, 971 funded by CAF. It is difficult to tell how many homes receive less than 10/1 service from Verizon. It is estimated that an extremely high percentage of the customers on Verizon DSL in the County receive less than 10/1 service. This is based on customer complaints to County officials and Board members about the poor quality of services as well as the 2014 study completed by CIT (complete Broadband Assessment is included in Attachment 17) . A conservative estimate is that at least 80% of the VATI funded homes or 1,062 currently have less than 10/1 service. Based on County GIS data, once completed the KQ FTTH Network will pass 3,832 homes with 397 home businesses, 96 businesses, 35 churches, and 33 Government/Anchor Institutions; 3- Schools, 3 - Rescue Squads, 4 - Fire Departments, 1 - Library, 1 - Ruritan Club, 1 - Woman's Club, 4 - Trash Collection Facilities, 1 - Landfill, 2 - VDOT Sheds, 5 - Post Offices, 1 - Fish Hatchery, 3 - Courthouse Buildings, 1 - Museum, 1 - VA Department of Health, 1 - Airport, 1 - Telecommuting Center

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:

Not applicable - not a wireless project

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

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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:

RSN plans on using their new OPTi Fi residential pricing for this project. The plan contains three Internet speeds that are fully symmetrical; 100/100 Mbps, 250/250 Mbps, 1/1 Gbps with no data caps. All three packages will come with a free VOIP phone line with multiple calling features as well as local and continental US long distance calls included. The packages will cost; \$75, \$100, \$200 plus a flat \$5 service fee to cover any taxes or FCC fees. The cost of these service packages can be reduced with a \$10 COOP Discount and \$9.25 life discount as shown in the marketing materials, Attachment 14- RSN Marketing Information. Since this a FTTH project the only sharing of bandwidth may occur at one of the fiber concentration cabinets or at the point RSN connects to their upstream Internet provider(s).

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:

This project area, Phase II, is the continuation of a totally new Fiber project. The only existing network components are the Internet access point that currently exist in the County. One of which currently feeds our KQVA.net customers. ABB has constructed new fiber in the Northern part of the County and RSN is working with them and MBC to get access in that area of the County as well. The design of the County wide fiber ring takes these Internet access points into consideration. When connected to both of these Internet access points the new ring should have two unique and diverse fiber routes out to the "Cloud". The County is broken into "Service Areas" with a "Fiber Ring" that is routed through those service areas. In this case the County is divided into 4 service areas with a fiber ring of approximately 106 miles which passes approximately 863 households. Attachment 15- Network Overview, shows details of the fiber ring to include its route, service areas, and major termination points. Off of the ring there are 384 miles of fiber trunk lines and laterals passing 2,969 households. Attachment 5 was added to show how the fiber ring is propagated down each road with variable fiber sizes based on the number of locations to be served along that route. The other major components of the network include a central office building, at least 3 remotes and 7 PON cabinets. Each of these locations include all the fiber termination equipment and electronics required to "light" the fiber. A complete listing of all the equipment is shown on Attachment 12 which includes all of our Engineering Estimates. As stated previously, we have included a map showing how the fiber network will cover all areas of the County via Attachment 5 - Propagation Map Fiber Routes.

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

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– Timeline/Project Management Plan; Attachment 7 – MOU/MOA between Applicant/Co-Applicant.

Answer:

The entire FTTH network has been completely designed by certified engineers . RSN has already had discussions with VDOT and property owners to secure the necessary right of ways and easements for Phase I and the CARES projects. Crews are already in the County "Staking" out the routes for Phase I and the two CARES projects. The County and RSN are already operating under a formalized Public Private Partnership to manage the KQVA.net wireless network. Additionally, the parties have signed agreements to cover Phase I and Phase II of the FTTH Network build out. These two agreements makeup Attachment 7. RSN is estimating a 36 month timeline to complete the FTTH network and Phase II is the last half or 18 months of that timeline. Attachment 6 provides for a breakdown of the Phase II timeline. RSN and their outside engineering firm have project managers overseeing the contractors and internal teams building out this network. These project managers will be responsible for maintaining the budgets and timeline for all phases of the KQ FTTH Network build.

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:

In addition to the \$3,757,627.00 in funds from VATI, the County and RSN are also putting matching funds. King and Queen County have approved their funding requirements for Phase II of \$1,851,413.00. RSN is providing \$1,593,240.00 of matching funds which have been approved and allocated. Additionally, RSN has approved another \$195,000.00 towards Phase II project if the RIT CARES project does not happen as planned. RSN is also using \$2,448,133 of their CAF funding during the Phase II build. When looking at the total project funding of \$17,261,693; VATI is ask to provide, \$5,777,919, KQ County is supplying \$3,118,080, RSN is supplying \$2,541,863, FCC CAF is supplying \$5,071,453, KQ CARES funds of \$681,920.68, Rappahannock Indian Tribe CARES Funds of \$195,000, RSN CARES match of \$70,458. RSN and KQ County have an agreement that covers their portion of the funding for Phase II. Additionally, RSN has verbal agreements for the two CARES projects which are in the final stages of contract negotiations.

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

Answer:

RSN is leveraging \$5,071,453 in CAF funds to build out the KQ FTTH Network. During Phase II of the project \$2,448,133 of those funds will be spent. Additionally during Phase I of the project King and Queen County is planning on leveraging \$681,920.68 in CARES funds to expedite the building of the network past their Schools, Library, and Administrative Building. Additionally, the Rappahannock Indian Tribe is leveraging \$195,000 in CARES funds to expedite the connection of their Tribal Center to the KQ FTTH Network. To ensure the expenses of project are covered when needed and the build is completed on time, RSN has allocated several million of their \$48 million USDA loan to the KQ FTTH Network project.

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12. Marketing: Describe the broadband adoption plan.

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

Based on RSN's historical operations of bringing new fiber networks online and transitioning users over to those FTTH systems, a very conservative growth rate is being used for this project. Additionally, the conservative estimates are based on customers not being connected to the network until their portion of the network is completed and connected to the "Cloud". Network engineers are forecasting that end users could be connected as early as 18 months after Phase I of the project begins. Based on the conservative approach that is being taken the first customers are not to be connected until year 3. The ProForma for the more conservative approach calls for 1.5% of the households connected by the end of the 36 months. Then a slow growth rate of 3% - 5% per year over the next 12 years. This conservative approach does not factor in any surge of customers from converting over several hundred existing KQVA.net customers. Under this conservative take rate model, the operating income of the network is forecasted to be cash flow positive in year four after the project is completed. A simplified version of the ProForma mainly showing CAF II areas has been added as Attachment 16. To assist with the acquisition of customers, RSN has an extensive marketing campaign consisting of: postcards, banners, door hangers, billboards, radio spots, press releases, neighborhood signs, social media updates. Additionally, RSN uses a "Crowd Fiber" tool that is associated with its join.buildriverstreet.com . This tool allows the user or a CSR to enter the potential customer's data into the portal and then map them so we can track interest by service areas. Additionally, if the information is being put in by an existing Internet user then we can capture their current bandwidth if they are willing to conduct a speed test that is part of the portal's questionnaire. Furthermore, RSN will offer a "Cooperative Community Partner Discount" of \$10 to any; Government workers, first responders, medical and dental employees, real estate agents, farmers, etc.. RSN has additional savings to low income individuals and families. Final incentive is that the service will come with a VOIP line that they can port their local number to so they can eliminate the cost of a landline. Information on RSN's marketing plans has been added as Attachment 14.

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.

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NAME	TITLE	PROJECT DUTIES
Tom Swartzwelder	County Administrator & Attorney	County POC and Project leader
Eric Cramer	RSN CEO	Directs all activities of RSN
Jody Call	RSN CTO	Planning & Operations of Network

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Jody Souther	RSN VP of Engineering	Oversees outside plant planning & construction
Kimberley Johnson	RSN CFO	Manages all Accounting & Recording keeping
Amanda Perry	RSN VP of Sales & Marketing	Oversees CSRs, advertising & marketing operations

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<p>Greg Coltrain</p>	<p>RSN VP of Business Development</p>	<p>Liaison with County, stakeholders, and RSN</p>
<p>Robert Taylor</p>	<p>RSN Bus Dev Mgr</p>	<p>Oversee the project until turned over to Engineering</p>

RiverStreet Networks of Virginia is a wholly-owned subsidiary of Wilkes Telephone Membership Corporation (WTMC), a rural ILEC telephone company that provides services to various locations throughout North Carolina and most of the rural areas of Wilkes County, the location of the corporate office. It obtained a \$25M 75% BIP Stimulus grant/loan from the USDA in 2009. WTMC completed an 1100 mile system-wide Fiber-To-The-Home (FTTH) network using an active fiber design for all its exchanges. High-speed Broadband, Voice, and IPTV are available to 9200 subscribers in its Wilkes County service areas. This fiber network serves the four exchanges of Champion, Boomer, Lomax, and Clingman, which is tied together with a 250-mile transport fiber ring with multiple 10G connections. A MetaSwitch Softswitch with VOIP capability is located at the Champion office. IPTV is being routed from neighboring Skyline TMC via a redundant 10G fiber ring. A total of 20Gbps internet access is provided, using two different internet service providers (10Gbps from Citizens and 10Gbps from Spirit) via redundant fiber facilities. The broadband traffic is continuously monitoring the actual service levels of every customer, and all connections are upgraded before the 15% over-subscription is reached. The service goal of Wilkes is to maintain an over-subscription level of under 10% on an ongoing basis. This entire project was completed on budget and on time over five years. Additionally, another portion of RiverStreet Networks is TriCounty Telecom (TCT) merged its operation with WTMC's last year. TCT provides Broadband, Voice, and IPTV services over an all-fiber network to about 4,000 customers in parts of Beaufort, Hyde, and Washington Counties in Eastern North Carolina. This FTTH

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network was built with a \$12M 70%BIP Stimulus grant/loan from the USFA in 2009. Over 500 mile of distribution fiber was built over five years. In 2010 TriCounty received a 14.2 Million (75% Grant/25% Loan) through the Broadband Infrastructure Program (BIP), a program developed by the USDA Rural Utilities Service due to Federal Funded Appropriations via the American Recovery and Reinvestment Act of 2009. This facilitated the construction of more than 355 miles of Fiber Optic Cable to serve rural citizens of Northeastern Beaufort County and a small portion of Washington and Hyde Counties. This project was completed within five years. In 2019 & 2020, RSN received over \$32 Million in CAF II funding and \$48 Million in USDA Loans to expand broadband services in VA and NC.

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:

Since it is very difficult to show exactly where VATI funded and CAF funded fiber routes begin and end our initial application proposed the use of a percentage basis approach to the funding request. In our first VATI application for this project last year that approach was accepted by DHCD. Modifications of the project size were made to reduce the VATI funding to support a phased approach to the total FTTH network based on those same percentages. For Phase II we plan on using the same percentage approach as we did with the initial application and the Phase I revision. To use the percentage approach, we take the total amount of the project which is \$9,650,413.00 in funds to pass 2,299 homes in the County. We compare that to what we are requesting from VATI which is \$3,757,628 in funding to pass 1,328 of those homes. This works out that we are requesting VATI to provide 38.9% of the funds to pass 57.8% of the homes in the County's Phase II project area. The additional percentage of homes pass stays well above 50% even if you subtract the small amount of overlap with ABB's new fiber routes in the County. An itemized listing of the expenses are shown on the engineering estimates and documentation of supporting cost included in Attachment 12. Also, Attachment 11 does provide some cost break down of fiber miles by the appropriate funding source.

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:
- Total VATI funding request
 - Number of serviceable units
 - Highest residential speed available in proposed project area

Answer:

Total VATI Funding request for this project is \$3,757,627.80

Total number of serviceable units for this project is 2,299 homes with 1,328 homes being funded by VATI

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Highest Residential speed available 1Gbps down & 1Gbps up (1/1 Gbps)

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.
- 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:

This project is well in line with the Commonwealth's priority and focus on providing broadband Internet services to unserved and underserved residents of Virginia. Additionally, the project is expected to be completed well within the 10 year time frame announced by the Governor. As well as providing a solution that will meet the current needs of King and Queen County residents, businesses, and institutions this new fiber infrastructure should meet their needs for decades to come. Furthermore, the building of the FTTH infrastructure in King & Queen will allow RSN a means to expand into other areas of Virginia's Middle Peninsula. Once this project is completed the business, institutions, and residents of King & Queen County will have ubiquitous broadband Internet service. This project is the culmination of Private, Local, State, Federal, and Tribal funding sources being brought together for a technology solution and service that will benefit the entire community and perhaps the region. To ensure that all members of the community are able to benefit from the service, RSN has extremely low pricing as well as cooperative and low income discounts. Once the network is brought online RSN is looking at providing free Internet service to the Telecommuting Center and setting up free WiFi Hotspots like those that they have set up in other areas in their fiber footprint as part of our COVID 19 response.

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

Application to DHCD Submitted through CAMS

King & Queen County

King & Queen County VATI 2021

Answer:

Attachment 14 - RSN Marketing Information shows RSN's OptiFi service offerings and pricing. It also contains examples of our advertising pieces and marketing materials. Additionally, it shows RSN's Crowd Fiber tool to help us track potential customers interests, registrations, and orders.

Attachment 15 - Network Overview shows details of the fiber ring to include its route, service areas, and major termination points.

Attachment 16 - Project Estimated Pro Forma

Attachment 17 - CIT Broadband Needs and VEDP Community Profile Reports (contains both the CIT and VEDP reports)

Attachments:

Map(s) of project area, including proposed infrastructure

Attachment1ProjectAreaMap813202094125.pdf

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

Attachment2DocumentationofFederalFundingArea814202095359.pdf

Documentation that proposed project area is unserved based on VATI criteria

Attachment3DocumentationUnderservedAreaVATICriteria813202020310.pdf

Passings Form (Please use template provided)

Attachment4PassingsForm814202013659.pdf

Propagation Map if Wireless Project

Attachment5PropagationMapFiberRoutes8142020101421.pdf

Timeline/Project Management Plan

Attachment6TimelineProjectManagementPlan8132020111701.pdf

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

Attachment7MOUMOAbetweenApplicantCoApplicant813202015600.pdf

Application to DHCD Submitted through CAMS

King & Queen County

King & Queen County VATI 2021

Funding Sources Table

Attachment8FundingSourceTable813202023300.pdf

Documentation for match funding

Attachment9DocumentationofMatchingFunding814202012313.pdf

Letters of Support

Attachment10LettersofSupport817202012839.pdf

Derivation of Cost (Project Budget)

Attachment11DerivationofCost8142020102633.pdf

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

Attachment12DocumentationofSupportingCostEstimates813202031843.pdf

Two most recent Form 477 submitted to FCC

Attachment13TwoMostRecentForm477813202094139.pdf

Optional

Attachment14RSNMarketingInformation817202011033.pdf

Optional

Attachment15NetworkOverview8142020105843.pdf

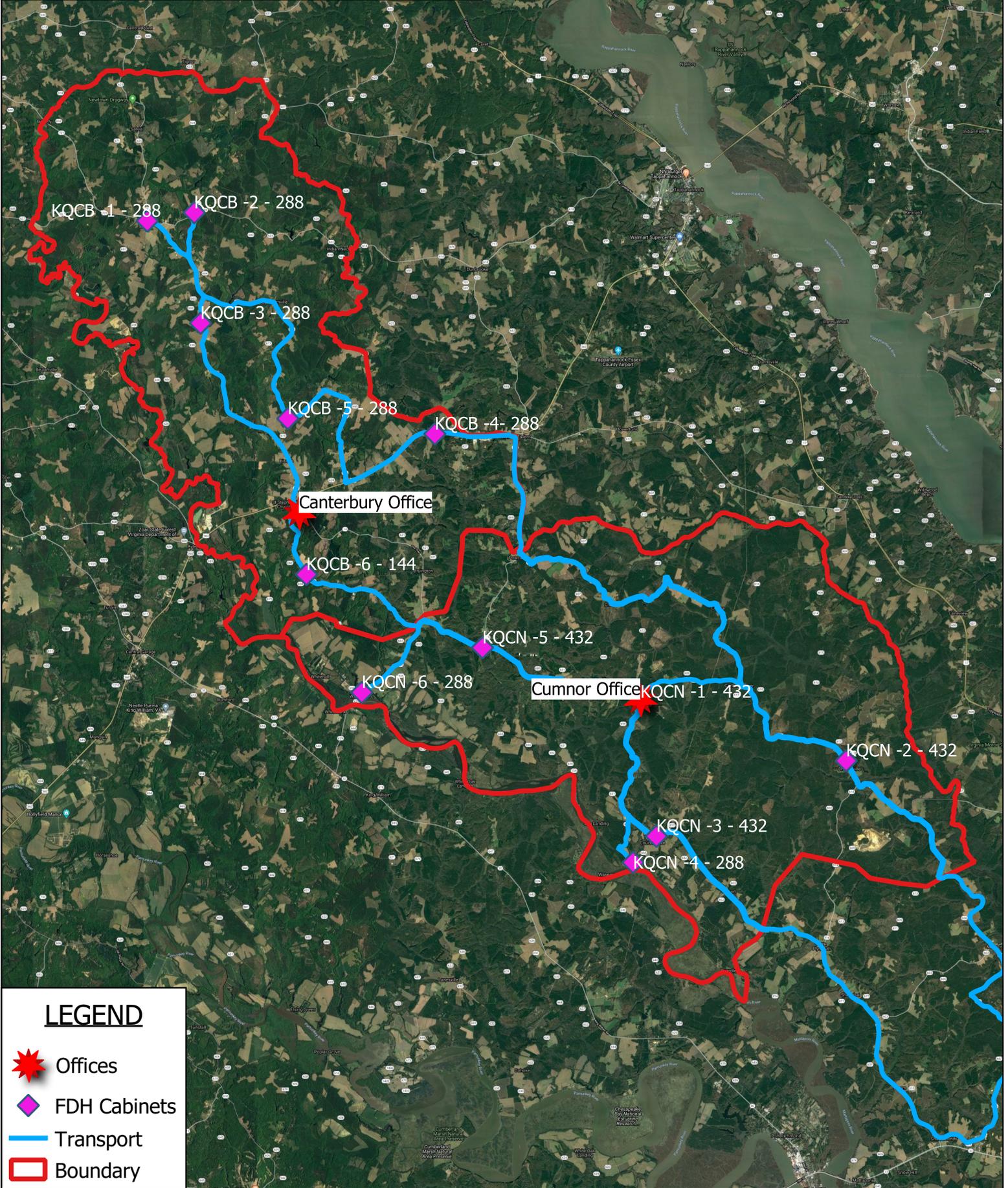
Optional

Attachment16ProjectEstimatedProForma8142020112232.pdf

Optional

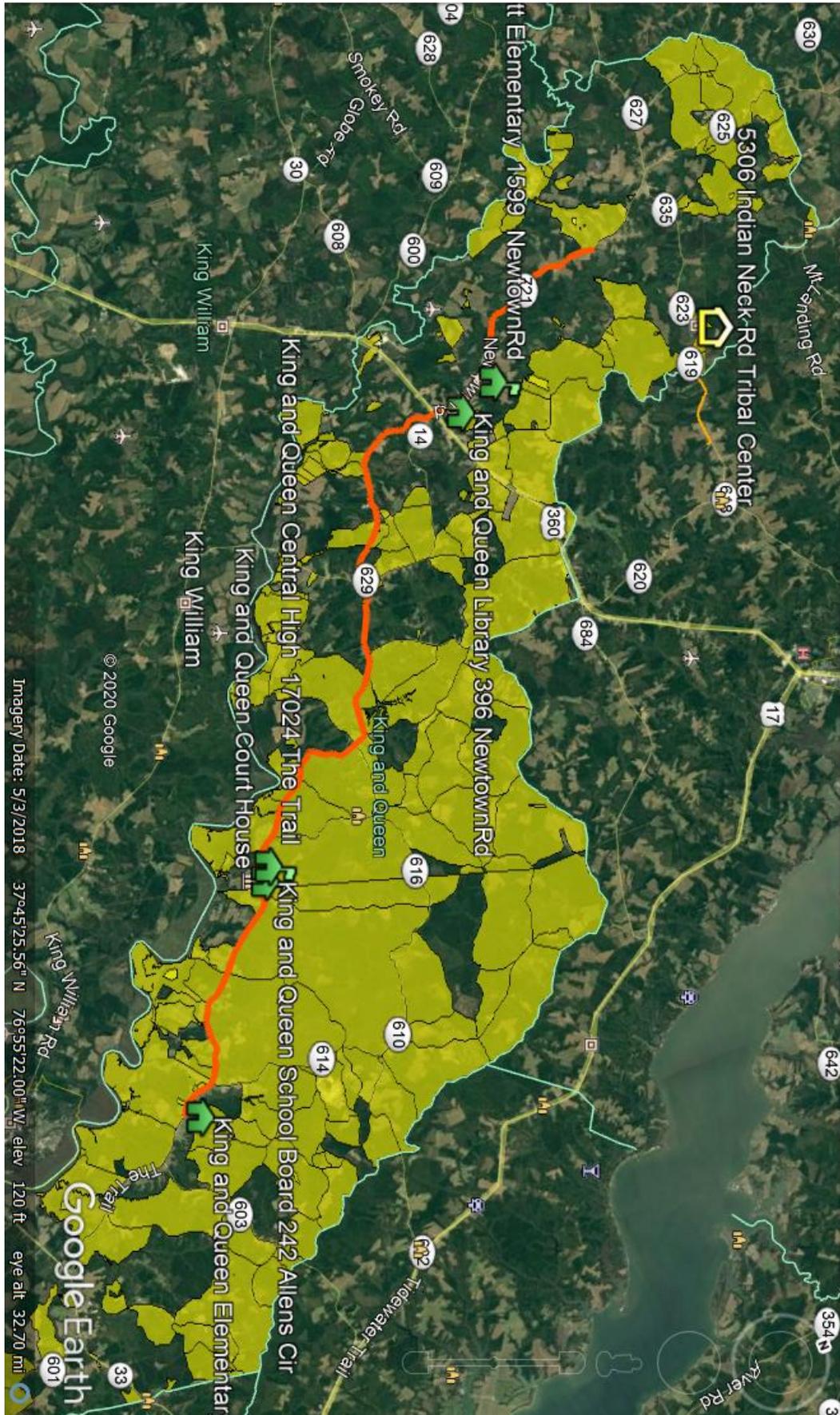
Attachment17CITBroadbandNeedsandVEDPCCommunityProfileReports817202012902.pdf

King & Queen Phase II FTTH

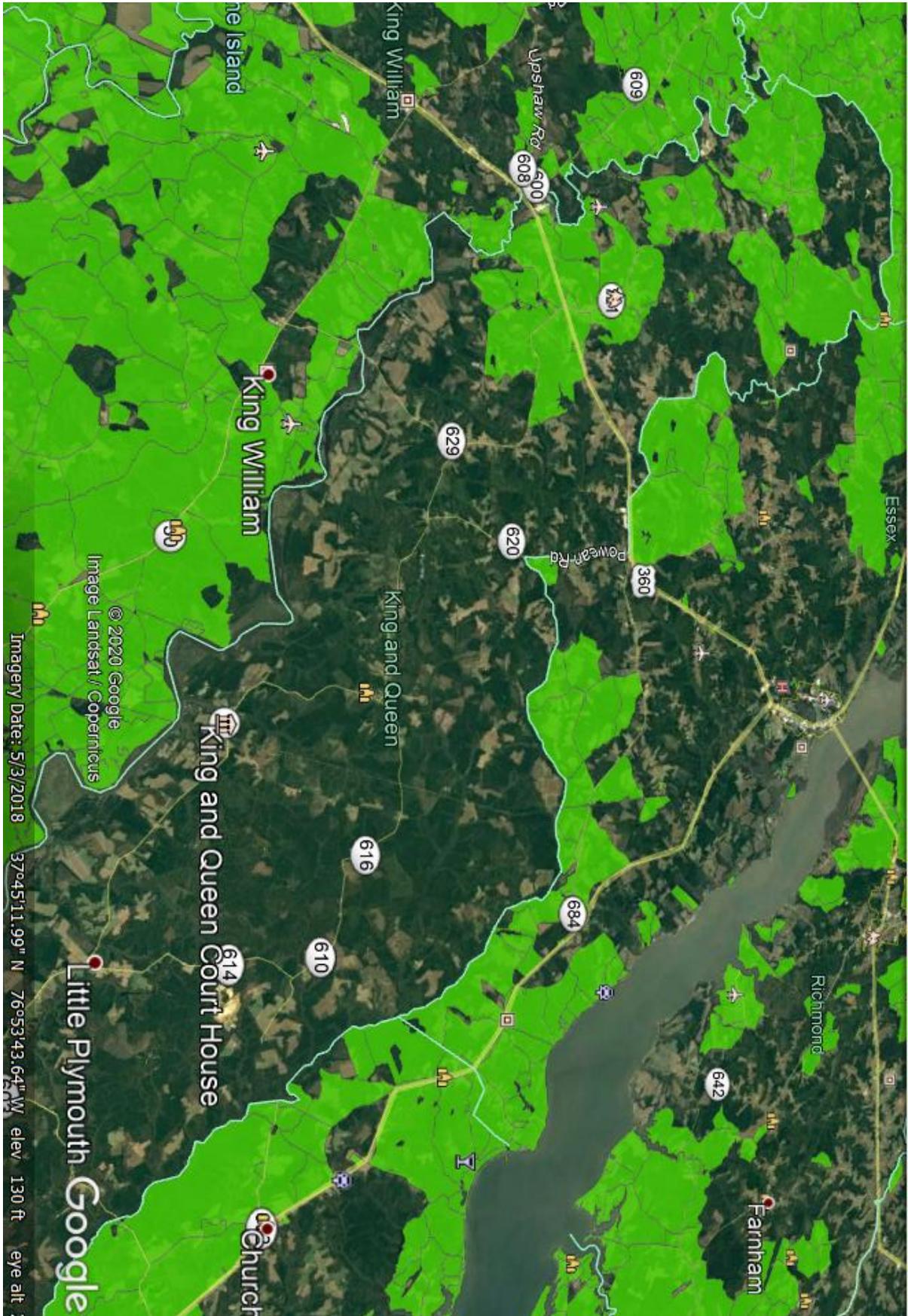


Attachment 2 – Documentation of Federal Funding Area

CAF Blocks = yellow, KQ CARES Route = dark orange, RIT CARES Route = light orange

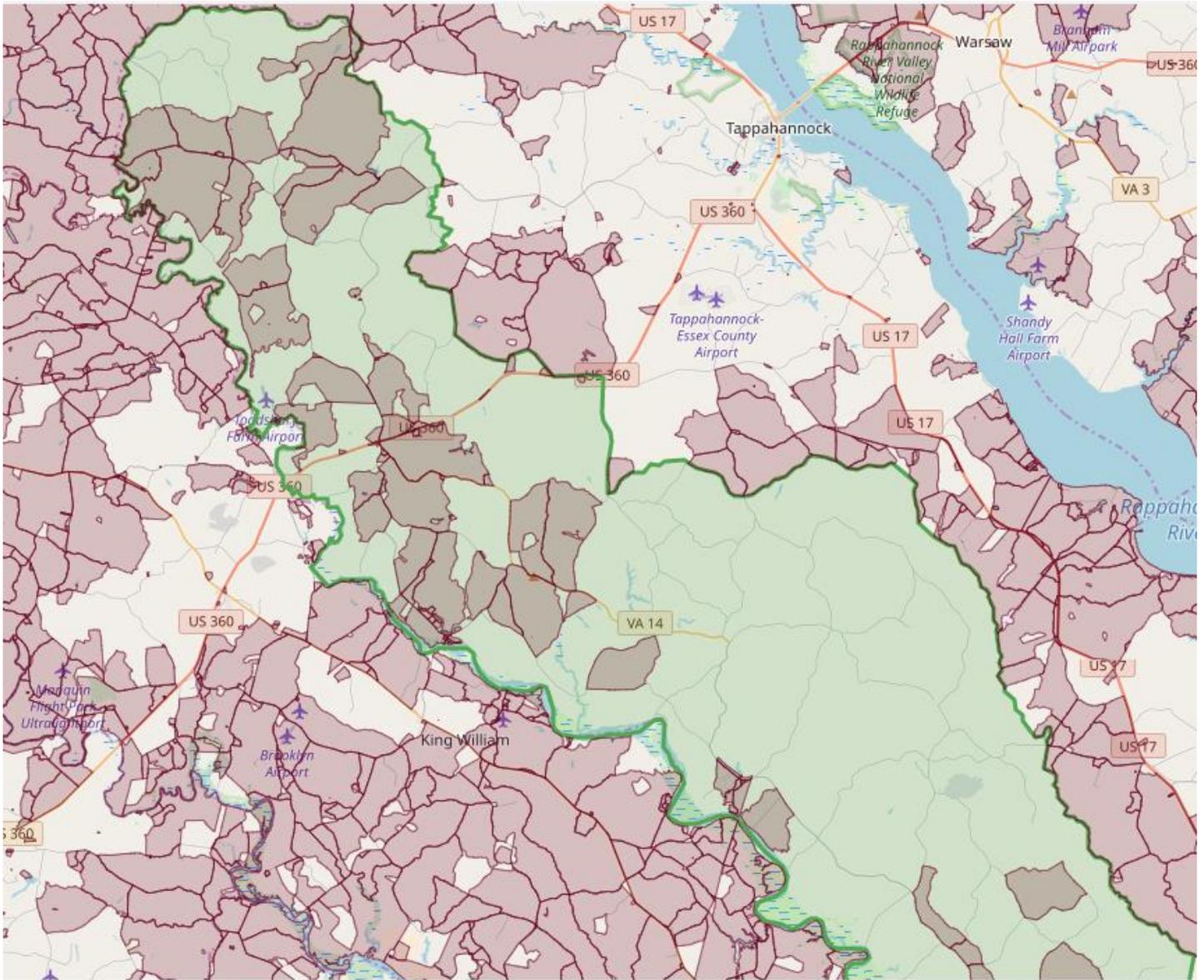


Green = Initial RDOF Auction Blocks in Project Area



Attachment 3 – Documentation of Unserved Area VATI Criteria

Project Area Outline = green, Census Blocks with Less than 25/3 per FCC = brownish



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	T= 3,832 P2 = 2,299	T=3,065 P2 = 1,839
Businesses (non-home based)	T = 96 P2 = 54	T = 77 P2 = 43
Businesses (home-based)	T = 397 P2 = 238	T = 318 P2 = 190
Community Anchors	T = 33 P2 = 15	
Non-residential	T = 35 P2 = 21	T = 28 P2 = 17
Total Number of Passings	T= 4,029 P2 =2,389	T=3,488 P2=2,089

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

T=TOTAL Project P2=PHASE II ESTIMATED

Definitions

Passing – any structure that can receive service.

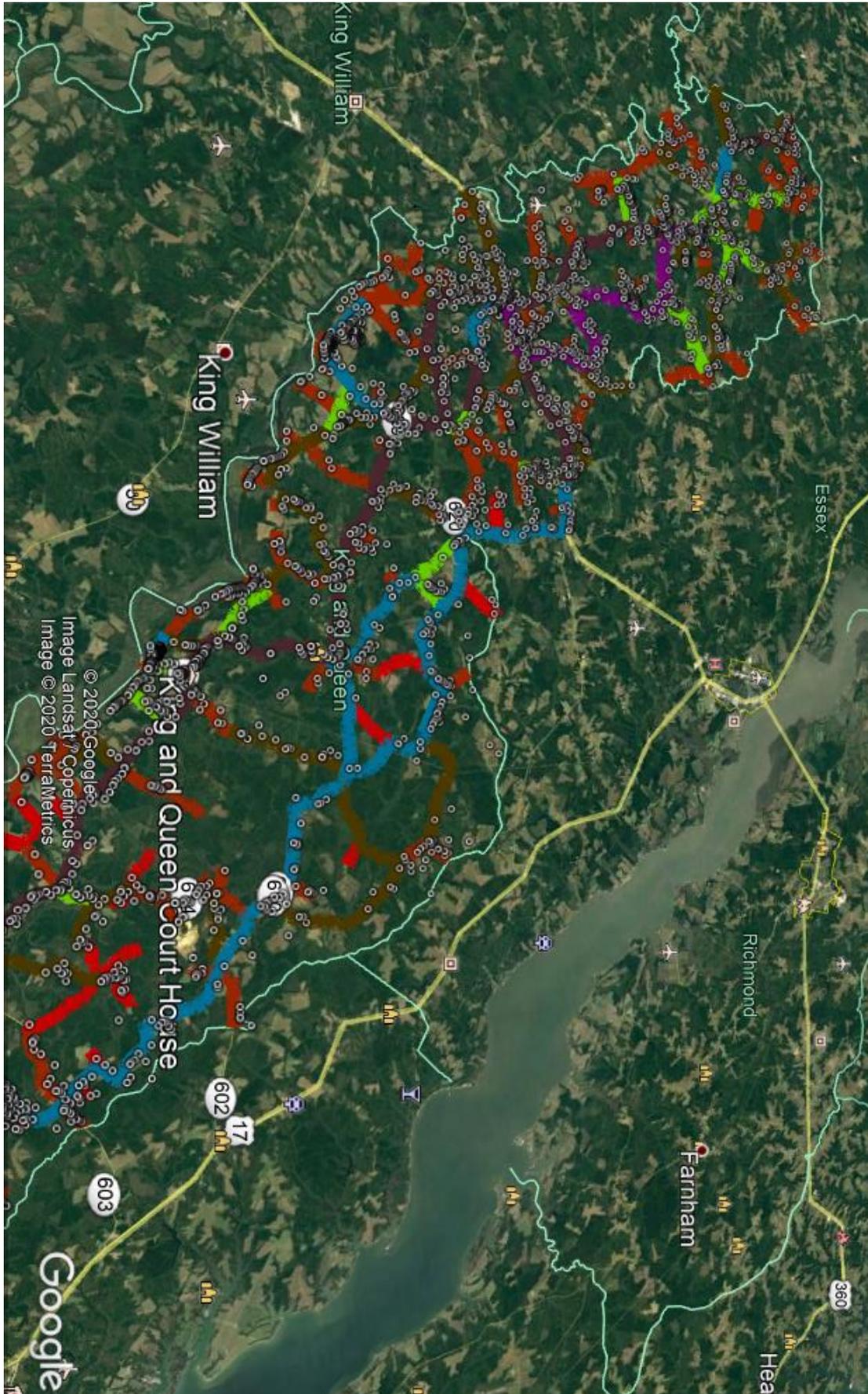
Business – An organization or entity that provides goods or services in order to generate profit. Businesses based in residential homes can count if they are a registered business (BPOL, LLC, etc.).

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.

Attachment 5 – Propagation Map (Fiber Routes)

Color lines show fiber routes based on strand count and dots = GIS addresses



Agreement for Phase 1 Expansion of Broadband in King and Queen County

This Agreement is entered into by and between the County of King and Queen, Virginia ("County" or "Grantee"), and RiverStreet Communications of Virginia, Inc. d/b/a RiverStreet Networks ("RiverStreet") as of the 2 day of June, 2020 (the "Effective Date"). The County and RiverStreet may be referred to herein individually as a "Party," and collectively as the "Parties."

WHEREAS, the County has determined that installation of a Fiber-To-The-Home ("FTTH") network in unserved and underserved areas of King and Queen County would be of significant public interest and benefit to County residents, and the County's ultimate goal is to have a FTTH network pass 90% of the residences and businesses in the County with direct access to a State maintained road ("the Project");

WHEREAS, the County has decided to move forward with Phase 1 of the Project, consisting of construction of a FTTH network ("the First Phase Network") as provided for in this Agreement (the "Phase 1 Construction");

WHEREAS, RiverStreet is a licensed contractor and provider of communications and broadband services and has the capability to engineer, install and construct the FTTH network;

WHEREAS, RiverStreet has secured an award of \$5,071,453.00 through the Federal Communications Commission's Connect America Fund II ("CAF II") auction process to provide a portion of the funding necessary to serve approximately 1,600 locations in the County, which funding will be provided to RiverStreet by the Universal Service Administration Company over a period of ten (10) years;

WHEREAS, the County was awarded a grant of \$2,020,291.00 through the Virginia Department of Housing and Community Development ("DHCD") Virginia Telecommunications Initiative ("VATI") program in 2020 ("VATI 2020 Grant"), to fund part of the cost of installing a network to provide FTTH internet access for at least 714 homes in the County. That grant will be provided to the County over a twelve (12) month period for use in funding the Phase 1 Construction as described herein; and

WHEREAS, the County is willing to provide at least \$3,800,000 in additional funding for the Project on the conditions and timeline specified herein.

THEREFORE, in consideration of the foregoing, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

- 1. Scope of Work.** In accordance with the terms of this Agreement, RiverStreet will serve as prime contractor and will perform, supervise, or manage the Phase 1 Construction of a FTTH network to consist of installation of up to 154 miles of fiber, plus all necessary terminations, cabinets, electronics, and miscellaneous hardware and software as required to light the FTTH network and offer internet access service at symmetrical minimum speeds of 100 Mbps (collectively "the FTTH Network").

2. Project Funding.

2.1 The cost of the entire Project is expected to be at least \$17,261,692.60. The cost of the Phase I Construction is expected to be at least \$6,663,902. The County agrees to provide minimum funding for the entire Project of \$3,800,000, with one-third ($\frac{1}{3}$) that amount (\$1,266,666.67) to be provided, along with the VATI 2020 Grant funding, to RiverStreet to cover the Phase I Construction.

2.2 RiverStreet agrees to make a minimum investment in the entire Project of \$2,346,334.60 by covering the cost of connecting subscribers to the Network. In addition, the CAF II funding secured by RiverStreet will cover \$2,623,320 of the cost of Phase I Construction.

2.3 Once Phase I Construction is complete, RiverStreet will begin installations as subscribers elect to receive internet access service through the FTTH Network. RiverStreet will pay all costs of labor and materials for connecting County residents subscribing to internet access service through the FTTH Network to that network, when the subscriber's premises is located within 2,000 feet of State right-of-way ("the Connection Cost"). The estimated Connection Costs for the Phase I is \$753,624, which is based on an assumption that 369 residences or businesses subscribe to internet access services through the First Phase Network. The estimated Connection Costs for the entire Project is \$2,346,334.60, which is based on a 30% penetration rate. If the penetration rate is higher than 30%, then RiverStreet's investment in the Connection Costs will be higher.

2.4 RiverStreet shall not charge any installation fee to a subscriber whose premises is located within 2,000 feet of, and has direct access to, State right-of-way. For those subscribers who have direct access to State right-of-way, but are more than 2,000 from State right-of-way, RiverStreet shall charge an installation fee based on a per foot charge for labor and materials to connect the customer to the FTTH Network. RiverStreet's ability to connect any subscriber to the FTTH Network is contingent on adequate and necessary easements or other legally sufficient rights of access from the State right-of-way to the subscriber's premises being available to RiverStreet, who shall have no obligation to secure any such easements or rights of access.

2.5 The Parties will work together cooperatively in efforts to secure additional future VATI funding as necessary to finance completion of the entire Project.

2.6 The Parties acknowledge and agree that except for the Connection Costs to be covered by RiverStreet, and \$2,623,320 in CAF II funding secured by RiverStreet, that all other costs of the Phase I Construction will be funded by the VATI 2020 Grant and the County, as provided for in Section 2.1 above.

2.7 RiverStreet shall invoice the County for labor and materials provided to the Project no more frequently than once a month, and can invoice quarterly if it chooses to do so. Subject to RiverStreet complying with the performance representations set forth in the VATI award relating to the VATI 2020 Grant, for the Phase I Construction the County will provide funding to RiverStreet in the total amount of \$3,286,957.67.

3. **Project Timeline.** Phase I Construction shall be completed within one year from the date

RiverStreet is able to commence construction, at which point the FTTH Network facilities will pass at least 714 residences, all of which are in the locations in the County that are the subject of the VATI 2020 Grant.

4. Operations and Revenue Sharing.

4.1 RiverStreet will own all equipment and facilities comprising the FTTH Network.

4.2 RiverStreet will operate that FTTH Network. RiverStreet's rates for internet access services offered in the County will be no higher than the rates charged by Wilkes Telephone Membership Corporation for comparable levels of service provided to its members.

4.3 Once construction of Phase 1 of the FTTH Network is complete, all monthly service charges paid by residents and businesses located in the County for internet access services on the FTTH Network, not including taxes and/or fees (hereinafter "Internet Revenues"), shall go to RiverStreet, until the number of County residences and businesses subscribing to internet access services reaches at least 1,150. At that point the Internet Revenues will be shared between RiverStreet and the County as follows:

Number of Subscribers	0 - 1,169	1,150 - 1,725	1,726 - 2,487	2,488 or more
County's Revenue Share	0.00%	10.00%	13.00%	16.50%

4.4 For the avoidance of doubt, and by way of illustration only, if 1,200 residences and/or businesses located in the County are subscribed to internet access services through the FTTH Network, then the County will receive ten percent (10%) of the Internet Revenues received from those subscribers for their internet access service.

5. Specific Provisions Relating to VATI Funding.

5.1 On January 22, 2020, the DHCD announced that it had offered Grantee the VATI 2020 Grant of \$2,020,291.00 in funding under the VATI program in response to the joint application of the County and RiverStreet. Pursuant to the program guidelines and statutory authority, the primary objective of the VATI is to provide financial assistance to supplement construction costs by private sector broadband providers, in partnership with local units of government to extend service to areas that presently are unserved by any broadband provider.

5.2 The grant agreement between DHCD and the County (the "DHCD Agreement"), will impose certain responsibilities on the Grantee in accepting the VATI grant. As anticipated in the joint application for funding submitted by County and RiverStreet, the Parties set forth their agreement herein as to the roles of each Party in this Agreement, now that the VATI 2020 Grant has been awarded.

5.3 Subject to RiverStreet's written acknowledgement that the terms and conditions set forth in any referenced attachments are not inconsistent with this Agreement, RiverStreet

shall perform all work described in the DHCD Agreement and Terms and Conditions (both of which are attached hereto and incorporated herein by reference), the submitted application, project management schedule and budget. To the extent not inconsistent with this Agreement, RiverStreet shall complete all Grant Activities described in the DHCD Contract Documents (including but not limited to completion of Phase 1 Construction on or before the date one year after the date RiverStreet is able to commence construction, except to the extent any failure to achieve such completion by any such date is caused by a Force Majeure event.

5.4 RiverStreet shall indemnify, defend and hold the County harmless for any failure(s) (a) to complete any Grant Activities described in the DHCD Contract Documents on or before the date twelve (12) months after the release of the VATI funds and/or (b) to achieve any project Outcomes by the agreed upon date for completion of construction of the project, unless any failure to achieve such completion by any such date is caused by a Force Majeure event. RiverStreet will provide information as to subscribers and speed package selected, as well as speed validation data to ensure that the proposed Outcomes have been met and broadband speeds meet VATI criteria. RiverStreet will submit invoices to the County for payment no more frequently than monthly. No VATI funds shall be distributed to RiverStreet unless and until (a) RiverStreet has submitted all requested documents and (b) the County has verified that pre-construction and/or construction work which is the subject of a submitted RiverStreet invoice has been completed or equipment has been ordered and received.

5.5 In their application, the Parties estimated that 3,832 serviceable units will have access to the required broadband speeds at the conclusion of the entire Project, with at least 714 homes to be passed at the conclusion of the Phase 1 Construction. County and RiverStreet will exercise due diligence and best efforts on community outreach and marketing the availability of service, which is the intent of the program. The Parties understand, however, that the actual number of customers who choose to subscribe is beyond the Parties' control. The Parties also understand that the intent of the Department of Housing and Community Development is that the Parties exercise due diligence and best efforts and that no funds will be returned to the Commonwealth nor retained by the County so long as the Parties exercise due diligence and best efforts to reach the program goals.

6. Conditions.

6.1 Failure of RiverStreet to comply with the representations set forth in the VATI application will result in delay of grant funding until said performance representations are complied with.

6.2 RiverStreet shall continue the construction and providing of broadband services as described in the VATI application upon timely receipt of each payment; and will continue as set forth in the VATI application upon each payment received on time and in full.

6.3 A facsimile of an executed agreement signed by both authorized Parties shall be valid on the latter date signed by both Parties and each Party may use such copy as if it were the original.

7. Dispute Resolution. Any documented dispute between the Parties which arises during the performance of this Agreement and which the Parties cannot then resolve, shall be subject to the following administrative remedy prior to any litigation occurring between the Parties:

7.1 Internal Resolution. Both Parties shall attempt to resolve any controversy claim, problem or dispute arising out of, or related to, this Agreement through good faith consultation in the ordinary course of business. In the event that any such matter is not resolved by the representatives of each Party, either Party may upon written notice to the other request that the matter be referred to senior management officials within each respective organization with express authority to resolve the matter ("Internal Resolution"). A written request for Internal Resolution shall be given by either Party to the other Party within thirty (30) calendar days after the Parties have been unable to resolve the dispute through good faith consultation ("Request for Internal Resolution"). Senior management officials shall meet or confer at least once in good faith, to negotiate a mutually acceptable resolution within ten (10) business days of the Request for Internal Resolution.

7.2 Notice of Request for Mediation. Senior management officials are required to only meet once, but may mutually agree to meet more than once if it appears that further meetings may successfully resolve the dispute. If the Parties do not successfully resolve the dispute by Internal Resolution, then the Party finding the Internal Resolution unsatisfactory shall provide written notice to the other Party, demanding mediation ("Request for Mediation"). The Request for Mediation may not be given prior to the first meeting for Internal Resolution, and shall not be given any later than ninety (90) calendar days following the completion of the first Internal Resolution meeting. The Request for Mediation shall be sent certified mail, return receipt requested, to the other Party, and shall set forth all of the issues that Party deems outstanding that must be submitted to mediation. The Party in receipt of the Request for Mediation shall respond within twenty (20) business days listing any issues it deems appropriate for submission to the Mediator.

7.3 Mediation. Any controversies between County and RiverStreet regarding the construction or application of this Agreement, and claims arising out of this Agreement or its breach, except those for which the appropriate remedy should be injunctive relief, shall be mediated within sixty (60) calendar days of the date on the written Request for Mediation, or the soonest date thereafter that the mediator is available.

7.4 Mediator. Within twenty (20) calendar days or less of the written Request for Mediation, the Parties shall agree on one mediator. The mediation meeting shall not exceed one day (eight (8) hours). The Parties may mutually agree in writing to extend the time allowed for mediation under this Agreement.

7.5 Costs. The costs of mediation shall be borne by the Parties equally.

7.6 Discovery. During any dispute between the Parties, either Party may request of the other any documents relating to the dispute.

7.7 Condition Precedent to Filing Suit. Mediation under this section is a condition precedent to a Party filing an action in any court, unless that Party has made demand for

mediation and the other Party has failed or refused to engage in mediation. In the event of litigation arising out of any dispute related to this Agreement, the Parties shall each pay their respective attorneys' fees, expert witness costs and cost of suit, regardless of the outcome of the litigation.

8. **Notice.** All notices given or which may be given pursuant to this Agreement must be in writing and transmitted by United States mail or by private delivery system as follows:

To County: Thomas J. Swartzwelder, County Administrator
P.O. Box 177
King and Queen C.H., Virginia 23085
E-mail: tswartzwelder@kingandqueen.co.net

To RiverStreet: Eric Cramer, President and CEO
RiverStreet Networks
1400 River Street
Wilkesboro, North Carolina 27023
E-mail: ericcramer@njriverstreet.net

Notice may also be provided to such other address as either Party may from time to time designate in writing. Any facsimile transmission by either Party must be followed up by a copy sent by mail.

9. **Assignment.** RiverStreet shall not assign this Agreement without the prior written permission of County, which shall not be unreasonably withheld. Notwithstanding the foregoing, or any other provision in this Agreement to the contrary, RiverStreet shall have the right to assign this Agreement to any parent, subsidiary, affiliate, or any person, firm, or corporation that shall control, be under the control of, or be under common control with RiverStreet (all of which are collectively and individually a "RiverStreet Affiliate"), or to any entity into which RiverStreet may have merged or be consolidated or which purchases all or substantially all of the assets of RiverStreet that are subject to this Agreement. In the event this Agreement is assigned to a RiverStreet Affiliate, or RiverStreet is purchased by a third-party, the assignee or successor shall be obligated to perform RiverStreet's obligations under this Agreement.

10. **Insurance.** RiverStreet will maintain insurance coverage in the following amounts; and shall provide the County with a Certificate of Insurance evidencing such insurance coverage, at the commencement of this Agreement.

Workmen's Compensation and Employer's Liability:	Statutory + \$1,000,000
General Liability:	\$2,000,000/occurrence \$3,000,000 aggregate
Automobile and Vehicle Liability:	\$2,000,000 combined single limit
Professional Liability:	\$2,000,000/occurrence \$2,000,000 aggregate

10.1 Any premiums for insurance in addition to the above-described coverage, to protect the County and/or others when requested by the County, shall be paid by the County.

11. Non-Discrimination. During the performance of this Agreement:

11.1 RiverStreet will not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin. RiverStreet agrees to post conspicuously in any places of business it establishes in the County, available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.

11.2 RiverStreet, in all solicitations or advertisements for employees placed by or on its behalf, will state that RiverStreet is an equal opportunity employer.

11.3 Notices, advertisements, and solicitations placed in accordance with federal law, rule, or regulation shall be deemed sufficient for meeting the requirements of this section.

11.4 RiverStreet will include the provisions of the foregoing subsections 11.1, 11.2, and 11.3 in every subcontract or purchase order over ten thousand dollars (\$10,000) relating to the work which is the subject of this Agreement, so that their provisions will be binding upon each subcontractor or vendor.

12. Drug Free Workplace. During the performance of this Agreement, RiverStreet agrees to (i) provide a drug-free workplace for the RiverStreet's employees; (ii) post in conspicuous places in any place of business it establishes in the County, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in RiverStreet's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of RiverStreet that RiverStreet maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over ten thousand dollars (\$10,000) relating to the work which is the subject of this Agreement, so that these provisions will be binding upon each subcontractor or vendor.

12.1 For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific contract or agreement awarded to RiverStreet, the employees of whom are prohibited from engaging in the manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of this Agreement.

13. Miscellaneous.

13.1 Amendments. Subject to RiverStreet's written acknowledgement that the terms and conditions set forth in any referenced attachments are not inconsistent with this Agreement, the County's Contract Addendum A is attached hereto and incorporated by reference. This Agreement may be amended from time to time. Any amendment shall be written and subscribed as herein.

13.2 Governing Law. This Agreement and the legal relations between the Parties hereto shall be governed by, and construed in accordance with, the laws of the Commonwealth of Virginia, without reference to the conflict of laws principles thereof. Jurisdiction and venue shall be in the Courts of King and Queen County, Virginia.

13.3 Counterparts. This Agreement may be executed simultaneously in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

13.4 Headings. The headings contained in this Agreement are inserted for convenience only and shall not constitute a part hereof.

13.5 Force Majeure. For purposes of this Agreement, the term "Force Majeure" shall include acts of God, floods, fires, hurricanes, lightning strikes, tornadoes, earthquakes or other severe weather conditions including but not limited to the inability or impracticability to work due to rain or snow which, while not amounting to a flood, nonetheless limits the ability of a party to accomplish a goal or meet a deadline, acts of public enemy insurrection, war, riot, sabotage, act of terrorism, epidemic, strike, freight embargoes, trade wars including but not limited to the inability to trade with all vendors of a sovereign nation where the ability to trade with such vendors existed thirty (30) days before the Effective Date, supply shortages, preferred vendors ceasing business operations or running out of supply, concealed and unknown conditions below the surface of the ground differing materially from those ordinarily encountered and generally recognized as inherent in construction or broadband network construction work or which are not reflected on current maps or drawings of underground conditions, wrongful physical obstruction by any person at any installation site, national emergencies or failure of any common carrier or third-party facility not affiliated with RiverStreet.

13.6 Entire Agreement. This Agreement, any exhibits hereto and other documents referred to herein which form a part hereof, embody the entire agreement and understanding of the Parties hereto in respect of the subject matter contained herein and supersede all prior agreements and understandings between the Parties with respect to such subject matter, whether oral or written, including, by way of illustration and not by limitation, any term sheet agreed to by the Parties hereto prior to the date hereof. There are no restrictions, promises, warranties, covenants, or undertakings other than those expressly set forth or referred to herein.

IN WITNESS WHEREOF, the Parties acknowledge and accept the terms, conditions and obligations of this Agreement as evidenced by the following signatures of their duly authorized representatives. It is the intent of the Parties that this Agreement shall become operative on the Effective Date.

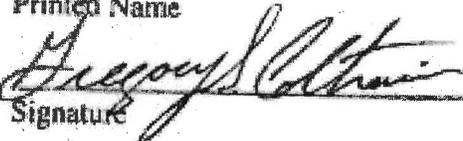
King and Queen County

**River Street Communications of Virginia, Inc.
d/b/a RiverStreet Networks**

Thomas J. Swartzwelder
Printed Name

Gregory S. Coltrain
Printed Name


Signature


Signature

County Administrator
Title

VP Business Development
Title

Agreement for Phase 2 Expansion of Broadband in King and Queen County

This Agreement is entered into by and between the County of King and Queen, Virginia ("County" or "Grantee"), and RiverStreet Communications of Virginia, Inc. d/b/a RiverStreet Networks ("RiverStreet") as of the 2 day of June, 2020 (the "Effective Date"). The County and RiverStreet may be referred to herein individually as a "Party," and collectively as the "Parties."

WHEREAS, the County has determined that installation of a Fiber-To-The-Home ("FTTH") network in unserved and underserved areas of King and Queen County would be of significant public interest and benefit to County residents;

WHEREAS, the County's goal is to ultimately have a FTTH network constructed that passes at least 90% of the residences and businesses in the County with direct access to a State-maintained road ("the Project");

WHEREAS, the County decided to move forward with constructing an initial phase of the Project, and on June 2, 2020, it contracted with RiverStreet to serve as prime contractor to perform, supervise, or manage the installation of up to 154 miles of fiber optic cable, plus all necessary terminations, cabinets, electronics, and miscellaneous hardware and software designed to make such service available to at least 714 homes in the County (the "Phase 1 Construction");

WHEREAS, the Phase 1 Construction is to be financed with a grant of \$2,020,291.00 awarded to the County in 2020 through the Virginia Department of Housing and Community Development ("DHCD") Virginia Telecommunications Initiative ("VATI") program ("VATI 2020 Grant"), together with funding to be provided by the County;

WHEREAS, the County has agreed to provide at least \$3,800,000 in funding for the entire Project, with one-third of that amount to be provided to fund Phase 1 Construction;

WHEREAS, the estimated cost of the entire Project is expected to be at least \$17,261,692.60; and

WHEREAS, RiverStreet has secured an award of \$5,071,453.00 in funding through the Federal Communications Commission's Connect America Fund II ("CAF II") auction process to cover part of the cost of making internet access available to approximately 1,600 locations in the County, which funding will be provided to RiverStreet by the Universal Service Administration Company over a period of ten (10) years.

THEREFORE, in consideration of the foregoing, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. **Scope of Work.** Over the timelines set forth below, RiverStreet will undertake work as necessary to complete the Project, which will consist of furnishing and installing the balance of the entire Project, consisting of that portion of the Project which was not completed in the Phase 1 Construction. The entire Project will yield a FTTH network consisting of up to 488.95 miles of fiber optic cable passing at least 90% of the residences and businesses in the County with direct

access to a State-maintained road, plus all necessary terminations, cabinets, electronics, and miscellaneous hardware and software as required to light the network and offer internet access service at symmetrical minimum speeds of 100Mbps (collectively "FTTH Network"). For purposes of this Agreement only, the term "FTTH Network" shall include the fiber and all facilities and equipment installed during Phase I Construction and comprising the First Phase Network, as that term is defined below.

2. **Phase 1 Construction.** The County contracted with RiverStreet to serve as prime contractor and perform, supervise, or manage the Phase I Construction of a FTTH network to consist of installation of up to 154 miles of fiber, plus all necessary terminations, cabinets, electronics, and miscellaneous hardware and software as required to light the FTTH network and offer internet access service at symmetrical minimum speeds of 100 Mbps to at least 714 homes in the County (collectively "the First Phase Network").

3. **Project Funding.**

3.1 The cost of constructing the First Phase Network is expected to be at least \$6,663,902.00. The cost of the entire Project is expected to be \$17,261,692.60, and the cost of constructing the FTTH Network and connecting subscribers to the FTTH Network will be financed as follows:

RiverStreet Connect America Fund II Award	\$5,071,453.00
RiverStreet Minimum Investment	\$2,346,334.60
County Minimum Funding	\$3,800,000.00
VATI 2020 Grant	\$2,020,291.00
VATI Application 2021	<u>\$4,023,615.00</u>
Project Cost Total	\$17,261,692.60

3.2 The County agrees to provide minimum funding for the entire Project of \$3,800,000, with one-third ($\frac{1}{3}$) of that amount (\$1,266,666.67) to be provided, along with the VATI 2020 Grant funding, to RiverStreet for the Phase I Construction.

3.3 The County agrees to pursue additional VATI grants totaling at least \$4,023,615.00 in order to fund the entire Project, and the Parties will work cooperatively in efforts to secure such additional future VATI funding. While it is hoped that such VATI grants will be awarded to the County in or after 2021 ("Future VATI Grants"), the receipt of such funding is not certain. The County therefore agrees that in the event any portion of the anticipated Future VATI Grants is not awarded to the County (a "Grant Shortfall"), then the County will provide additional funding for the Project in the amount of the Grant Shortfall, up to maximum total funding by the County for the entire Project of \$7,823,615.00 (\$3,800,000.00 in minimum funding + up to \$4,023,615.00 = \$7,823,615.00) over the next three (3) years.

3.4 RiverStreet agrees to make a minimum investment in the entire Project of \$2,346,334.60 by covering the cost of connecting all subscribers in the County to the FTTH Network ("the Connection Costs"). RiverStreet shall have no funding obligation relating to the Project beyond that amount.

3.5 Except for the Connection Costs to be covered by RiverStreet, the Parties acknowledge and agree that all other costs of the entire Project will be funded by the CAF II award, the VATI 2020 Grant and the County, as provided for in Section 2.1 above.

4. **Project Timeline.** Other than the Phase I Construction, which is the subject of a separate contract between the County and RiverStreet, the timeline for completion of the entire Project, and other terms and conditions relating thereto, will be the subject of an amendment to this Agreement to be negotiated by the Parties.

5. **Operations and Revenue Sharing.**

5.1 RiverStreet will own all equipment and facilities comprising the FTTH Network, and RiverStreet will operate the FTTH Network. RiverStreet's rates for internet access services offered in the County will be no higher than the rates charged by Wilkes Telephone Membership Corporation for comparable levels of internet access service offered to its members.

5.2 RiverStreet shall not charge any installation fee to a subscriber whose premises is located within 2,000 feet of, and has direct access to, State right-of-way. For those subscribers who have direct access to State right-of-way, but are more than 2,000 from State right-of-way, RiverStreet shall charge an installation fee based on a per foot charge for labor and materials to connect the customer to the FTTH Network. RiverStreet's ability to connect any subscriber to the FTTH Network is contingent on adequate and necessary easements or other legally sufficient rights of access from the State right-of-way to the subscriber's premises being available to RiverStreet, who shall have no obligation to secure any such easements or rights of access.

5.3 Once construction of the First Phase Network is complete to the point that RiverStreet can offer service, all monthly service charges paid by County residents and businesses subscribing to internet access services on that network, not including taxes and/or fees (hereinafter "Internet Revenues"), shall go to RiverStreet. After the entire Project is complete, and after the customer penetration rate reaches 30% of the 3,832 residences in the County, the Revenues will be shared between RiverStreet and the County as follows:

Number of Subscribers	0 - 1,149	1,150 - 1,725	1,726 - 2,487	2,488 or more
County's Revenue Share	0.00%	10.00%	13.00%	16.50%

5.4 For the avoidance of doubt, and by way of illustration only, if 1,200 residences and/or businesses located in the County are subscribed to internet access services through the FTTH Network, then the County will receive ten percent (10%) of the Internet Revenues received from those subscribers for their internet access service.

6. **Dispute Resolution.** Any documented dispute between the Parties which arises during the performance of this Agreement and which the Parties cannot then resolve, shall be subject to the following administrative remedy prior to any litigation occurring between the Parties:

6.1 Internal Resolution. Both Parties shall attempt to resolve any controversy claim, problem or dispute arising out of, or related to, this Agreement through good faith consultation in the ordinary course of business. In the event that any such matter is not resolved by the representatives of each Party, either Party may upon written notice to the other request that the matter be referred to senior management officials within each respective organization with express authority to resolve the matter ("Internal Resolution"). A written request for Internal Resolution shall be given by either Party to the other Party within thirty (30) calendar days after the Parties have been unable to resolve the dispute through good faith consultation ("Request for Internal Resolution"). Senior management officials shall meet or confer at least once in good faith, to negotiate a mutually acceptable resolution within ten (10) business days of the Request for Internal Resolution.

6.2 Notice of Request for Mediation. Senior management officials are required to only meet once, but may mutually agree to meet more than once if it appears that further meetings may successfully resolve the dispute. If the Parties do not successfully resolve the dispute by Internal Resolution, then the Party finding the Internal Resolution unsatisfactory shall provide written notice to the other Party, demanding mediation ("Request for Mediation"). The Request for Mediation may not be given prior to the first meeting for Internal Resolution, and shall not be given any later than ninety (90) calendar days following the completion of the first Internal Resolution meeting. The Request for Mediation shall be sent certified mail, return receipt requested, to the other Party, and shall set forth all of the issues that Party deems outstanding that must be submitted to mediation. The Party in receipt of the Request for Mediation shall respond within twenty (20) business days listing any issues it deems appropriate for submission to the Mediator.

6.3 Mediation. Any controversies between County and RiverStreet regarding the construction or application of this Agreement, and claims arising out of this Agreement or its breach, except those for which the appropriate remedy should be injunctive relief, shall be mediated within sixty (60) calendar days of the date on the written Request for Mediation, or the soonest date thereafter that the mediator is available.

6.4 Mediator. Within twenty (20) calendar days or less of the written Request for Mediation, the Parties shall agree on one mediator. The mediation meeting shall not exceed one day (eight (8) hours). The Parties may mutually agree in writing to extend the time allowed for mediation under this Agreement.

6.5 Costs. The costs of mediation shall be borne by the Parties equally.

6.6 Discovery. During any dispute between the Parties, either Party may request of the other any documents relating to the dispute.

6.7 Condition Precedent to Filing Suit. Mediation under this section is a condition precedent to a Party filing an action in any court, unless that Party has made demand for mediation and the other Party has failed or refused to engage in mediation. In the event of litigation arising out of any dispute related to this Agreement, the Parties shall each pay their

respective attorneys' fees, expert witness costs and cost of suit, regardless of the outcome of the litigation.

7. **Notice.** All notices given or which may be given pursuant to this Agreement must be in writing and transmitted by United States mail or by private delivery system as follows:

To County: Thomas J. Swartzwelder, County Administrator
P.O. Box 177
King and Queen C.H., Virginia 23085
E-mail: tswartzwelder@kingandqueenco.net

To RiverStreet: Eric Cramer, President and CEO
RiverStreet Networks
1400 River Street
Wilkesboro, North Carolina 27023
E-mail: ericcramer@myriverstreet.net

Notice may also be provided to such other address as either Party may from time to time designate in writing. Any facsimile transmission by either Party must be followed up by a copy sent by mail.

8. **Assignment.** RiverStreet shall not assign this Agreement without the prior written permission of County, which shall not be unreasonably withheld. Notwithstanding the foregoing, or any other provision in this Agreement to the contrary, RiverStreet shall have the right to assign this Agreement to any parent, subsidiary, affiliate, or any person, firm, or corporation that shall control, be under the control of, or be under common control with RiverStreet (all of which are collectively and individually a "RiverStreet Affiliate"), or to any entity into which RiverStreet may have merged or be consolidated or which purchases all or substantially all of the assets of RiverStreet that are subject to this Agreement. In the event this Agreement is assigned to a RiverStreet Affiliate, or RiverStreet is purchased by a third-party, the assignee or successor shall be obligated to perform RiverStreet's obligations under this Agreement.

9. **Insurance.** RiverStreet will maintain insurance coverage in the following amounts; and shall provide the County with a Certificate of Insurance evidencing such insurance coverage, at the commencement of this Agreement.

Workmen's Compensation and Employer's Liability:	Statutory + \$1,000,000
General Liability:	\$2,000,000/occurrence \$3,000,000 aggregate
Automobile and Vehicle Liability:	\$2,000,000 combined single limit
Professional Liability:	\$2,000,000/occurrence \$2,000,000 aggregate

10.1 Any premiums for insurance in addition to the above-described coverage, to protect the County and/or others when requested by the County, shall be paid by the County.

10. Non-Discrimination. During the performance of this Agreement:

10.1 RiverStreet will not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin. RiverStreet agrees to post conspicuously in any places of business it establishes in the County, available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.

10.2 RiverStreet, in all solicitations or advertisements for employees placed by or on its behalf, will state that RiverStreet is an equal opportunity employer.

10.3 Notices, advertisements, and solicitations placed in accordance with federal law, rule, or regulation shall be deemed sufficient for meeting the requirements of this section.

10.4 RiverStreet will include the provisions of the foregoing subsections 10.1, 10.2, and 10.3 in every subcontract or purchase order over ten thousand dollars (\$10,000) relating to the work which is the subject of this Agreement, so that their provisions will be binding upon each subcontractor or vendor.

11. Drug Free Workplace. During the performance of this Agreement, RiverStreet agrees to (i) provide a drug-free workplace for the RiverStreet's employees; (ii) post in conspicuous places in any place of business it establishes in the County, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in RiverStreet's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of RiverStreet that RiverStreet maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over ten thousand dollars (\$10,000) relating to the work which is the subject of this Agreement, so that these provisions will be binding upon each subcontractor or vendor.

11.1 For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific contract or agreement awarded to RiverStreet, the employees of whom are prohibited from engaging in the manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of this Agreement.

12. Miscellaneous.

12.1 Amendments. This Agreement may be amended from time to time. Any amendment shall be written and subscribed as herein.

12.2 Governing Law. This Agreement and the legal relations between the Parties hereto shall be governed by, and construed in accordance with, the laws of the Commonwealth of Virginia, without reference to the conflict of laws principles thereof. Jurisdiction and venue shall be in the Courts of King and Queen County, Virginia.

12.3 Counterparts. This Agreement may be executed simultaneously in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

12.4 Headings. The headings contained in this Agreement are inserted for convenience only and shall not constitute a part hereof.

12.5 Force Majeure. For purposes of this Agreement, the term "Force Majeure" shall include acts of God, floods, fires, hurricanes, lightning strikes, tornadoes, earthquakes or other severe weather conditions including but not limited to the inability or impracticability to work due to rain or snow which, while not amounting to a flood, nonetheless limits the ability of a party to accomplish a goal or meet a deadline, acts of public enemy insurrection, war, riot, sabotage, act of terrorism, epidemic, strike, freight embargoes, trade wars including but not limited to the inability to trade with all vendors of a sovereign nation where the ability to trade with such vendors existed thirty (30) days before the Effective Date, supply shortages, preferred vendors ceasing business operations or running out of supply, concealed and unknown conditions below the surface of the ground differing materially from those ordinarily encountered and generally recognized as inherent in construction or broadband network construction work or which are not reflected on current maps or drawings of underground conditions, wrongful physical obstruction by any person at any installation site, national emergencies or failure of any common carrier or third-party facility not affiliated with RiverStreet.

12.5 Entire Agreement. This Agreement, any exhibits hereto and other documents referred to herein which form a part hereof, embody the entire agreement and understanding of the Parties hereto in respect of the subject matter contained herein and supersede all prior agreements and understandings between the Parties with respect to such subject matter, whether oral or written, including, by way of illustration and not by limitation, any term sheet agreed to by the Parties hereto prior to the date hereof. There are no restrictions, promises, warranties, covenants, or undertakings other than those expressly set forth or referred to herein.

IN WITNESS WHEREOF, the Parties acknowledge and accept the terms, conditions and obligations of this Agreement as evidenced by the following signatures of their duly authorized representatives. It is the intent of the Parties that this Agreement shall become operative on the Effective Date.

King and Queen County

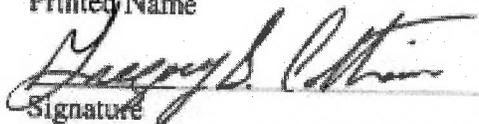
River Street Communications of Virginia, Inc.
d/b/a RiverStreet Networks

Thomas J. Swartzwelder
Printed Name


Signature

County Administrator
Title

Gregory S. Coltrain
Printed Name


Signature

VP Business Development
Title

VATI FUNDING SOURCES TABLE

Please fill in the chart below with a description of the project funding source (local, federal, state, private, other), the amount from that source, the percentage of total project funding that source represents, and a description of the current status of the funds (pending, secured, etc.).

Source	Amount	%	Status
REQUESTED VATI	\$ 3,757,627.00	38.9	Pending
KQ COUNTY	\$ 1,851,413.00	19.2	BOARD APPROVED
RSN	\$ 1,593,240.00	16.5	APPROVED & ALLOCATED
CAF	\$ 2,448,133.00	25.4	APPROVED & BEING DISPERSED
	\$		
	\$		
	\$		
TOTAL	\$ 9,650,413.00	1000 %	



King and Queen County
Founded 1691 in Virginia

Office of the County Administrator
P.O. Box 177 • King and Queen Courthouse, Virginia 23085
Phone: (804) 785-5975 • (804) 769-5000
Fax: (804) 785-5999 • (804) 769-5070

8-14-2020

Rob Taylor
Business Development Manager
Riverstreet Networks
Via E-Mail

RE: 2021 VATI Application

Dear Rob:

As you know the King and Queen County Board of Supervisors (the "BOS") has appropriated the full local match for Phase I of our fiber to the home project. In regard to this current application for Phase II, the BOS has publically discussed the costs, has the funds available and stands fully prepared to provide local funding in the amount of \$1,851,413. These funds will be considered by the Board for appropriation once the grant is approved.

We are very pleased with what we are accomplishing in Phase I and anxious to move into Phase II which will result in ubiquitous fiber broadband for King and Queen County.

Thank you for your continued partnership with King and Queen County.

Regards

Thomas J. Swartzwelder
County Administrator

Gregory S. Coltrain
RiverStreet Networks
1400 River Street, Wilkesboro NC 28697

October 13, 2020

Virginia DHCD
600 E Main Street, Suite 300
Richmond, VA 23219

Re: King and Queen County Phase II Fiber-to-the-Home Network

Dear Dr. Tamarah Holmes:

RiverStreet Networks is excited with the opportunity to submit a proposal to expand broadband services throughout King and Queen County. Our existing operations of KQVA.net for the WSA and our years of experience in building and maintaining Fiber-to-the-Home networks will make for a quick-to-market solution for an entire County so desperately in need of broadband.

Our confidence in providing exceptional products and service is supported by our commitment to match the grant funds for Phase II with \$1,788,239. These Funds have been approved and allocated.

Please accept this correspondence as our notification to match the funding.

Sincerely,



Gregory S. Coltrain
VP of Business Development



MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

August 13, 2020

COMMISSIONERS

Essex County

Hon. Edwin E. Smith, Jr.

Hon. John C. Magruder

Mr. Don Blanton

Mr. Michael A. Lombardo

Town of Tappahannock

Hon. Roy M. Gladding

Gloucester County

Hon. Ashley C. Chriscoe

(Vice-Chairman)

Hon. Michael R.

Winebarger

Dr. William G. Reay

Mr. J. Brent Fedors

King and Queen County

Hon. Sherrin C. Alsop

Hon. R. F. Bailey

Mr. Thomas J.

Swartzwelder

(Chairman)

King William County

Hon. Ed Moren, Jr.

Hon. Travis J. Moskalski

(Treasurer)

Mr. Otto O. Williams

Town of West Point

Hon. James Pruett

Mathews County

Hon. Michael C. Rowe

Hon. Melissa Mason

Mr. Thornton Hill

Middlesex County

Hon. Wayne H. Jessie, Sr.

Hon. Reggie Williams, Sr.

Mr. Gordon E. White

Mr. Matthew L. Walker

Town of Urbanna

Hon. Diane Gravatt

Ms. Holly Gailey

Secretary/Director

Mr. Lewis L. Lawrence

Virginia Department of Housing and
Community Development
600 E Main Street, Suite 300
Richmond, VA 23219

RE: Letter of Support for 2020 VATI Application for King and Queen County's VATI
Application (PHASE 2)

Dear DHCD Staff,

The Middle Peninsula Planning District Commission (MPPDC) is writing in support of RiverStreet Communications of Virginia, Inc/RiverStreet Networks and their Phase 2 proposal for building Fiber-to-the-Premise (FTTP) in the northern half King and Queen County, Virginia. We recognize the importance of broadband to citizens within the Middle Peninsula region. Additionally, such improvements will support virtual educational needs and economic growth in the region.

King and Queen County has championed broadband services within the region since 2012 by leveraging County assets and shared infrastructure to serve the county and expand internet service to its citizens. To this effect the County serves as a model to both rural and urban localities in Virginia and throughout the nation needing improved broadband access. Consequently, King and Queen County has been recognized in 2016 by the Virginia Association of Counties upon receipt of the Best Achievement Winner for broadband internet. Then in 2018 King and Queen County earned a National Achievement Award for its program titled "Rural Broadband Internet" in the category of Information Technology.

Thank you for your consideration of this application. If you have any additional questions please feel free to contact me by phone at 804-758-2311 or by email at llawrence@mppdc.com.

Sincerely,

Lewis Lawrence
Executive Director



COMMONWEALTH OF VIRGINIA
HOUSE OF DELEGATES
RICHMOND

M. KEITH HODGES
POST OFFICE BOX 928
URBANNA, VIRGINIA 23175

NINETY-EIGHTH DISTRICT

August 14, 2020

COMMITTEE ASSIGNMENTS:
COUNTIES, CITIES AND TOWNS
HEALTH, WELFARE AND INSTITUTIONS
COMMUNICATIONS, TECHNOLOGY
AND INNOVATION

Virginia Department of Housing and
Community Development
600 E Main Street, Suite 300
Richmond, VA 23219

RE: Letter of Support for 2020 VATI Application for King and Queen County's VATI

Dear DHCD Staff:

I am writing to lend my strong support for the King and Queen County VATI application. King and Queen County has been a leader in developing strategies for rural broadband. The VATI funding received in 2020 has assisted King and Queen in the implementation of a fiber to the home (FTTH) project for the southern half of the County. VATI funding in 2021 will allow them to complete the project countywide. This will be a game changer for the citizens and businesses in King and Queen and for my district.

My district remains largely unserved by Broadband. The build out of the King and Queen Fiber network runs almost through the center of the district and will serve as a springboard for the neighboring counties to connect.

The Middle Peninsula Planning District Commission (MPPDC) is writing in support of RiverStreet Communications of Virginia, Inc/RiverStreet Networks and their Phase 2 proposal for building Fiber-to-the-Premise (FTTP) in the northern half King and Queen County, Virginia. We recognize the importance of broadband to citizens within the Middle Peninsula region. Additionally, such improvements will support virtual educational needs and economic growth in the region.

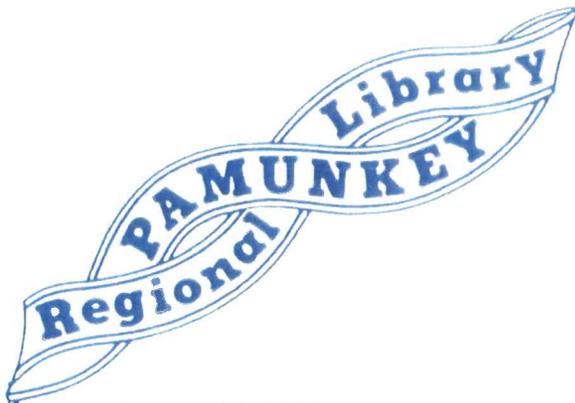
King and Queen County has championed broadband services within the region since 2012 by leveraging County assets and shared infrastructure to serve the county and expand internet service to its citizens. To this effect the County serves as a model to both rural and urban localities in Virginia and throughout the nation needing improved broadband access. Consequently, King and Queen County has been recognized in 2016 by the Virginia Association of Counties upon receipt of the Best Achievement Winner for broadband internet. Then in 2018 King and Queen County earned a National Achievement Award for its program titled "Rural Broadband Internet" in the category of Information Technology.

Thank you for your consideration of this application.

Sincerely

A handwritten signature in black ink, appearing to read "M. Keith Hodges".

M. Keith Hodges



August 14, 2020

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

RE: Virginia Telecommunications Initiative (VATI) 2020 - "Delivery of Technology – King and Queen (Fiber to the Home Phase 2)"

Dear Dr Holmes,

I am writing to convey my support of the application submitted by King and Queen County, in partnership with RiverStreet Networks. The project, known as "Fiber to the Home," will allow King and Queen County to install necessary middle and last mile fiber from Route 614 north, delivering fiber to every home and business in the Phase II area. The project allows King and Queen County to continue the first phase of the project that has brought fiber to Route 614 from the lower part of the County. King and Queen County is an area designated as unserved and underserved by the FCC and truly needs this infrastructure for business develop and home access to broadband.

As I understand it, the goal of VATI is to create strong, competitive communities throughout the Commonwealth by preparing those communities to build, utilize, and capitalize on telecommunications infrastructure. This project is an innovative collaboration that will help the Commonwealth achieve those goals.

As the regional public library partner with King and Queen County, the Pamunkey Regional Library fully supports this project. Public libraries leverage services for citizens from all walks of life, and we have tried to provide customers with Internet access and digital services that are needed today. We have leased dark fiber in other localities and we lend hot spots to customers, but we cannot offer services in King and Queen that we cannot obtain ourselves. The library has not been able to acquire better service for the King and Queen Branch Library because the service simply does not exist. This fiber project will make a huge difference for businesses, homes and the public library in King and Queen.

Sincerely,

A handwritten signature in blue ink, appearing to read "Tom Shepley".

Tom Shepley.
Director



King and Queen County Public Schools

Carol B. Carter Ed. D., Division Superintendent
P.O. Box 97 · King and Queen Courthouse, Virginia 23085
Phone: (804) 785-5981 or (804) 769-5007
Fax: (804) 785-5686 or (804) 769-5007

August 14, 2020

To whom it may concern:

King and Queen County Public Schools (KQPS) strongly supports the installation of fiber running between all of our schools. The three schools within our system (Central High School (8-12), King and Queen Elementary School (PK-7), and Lawson Marriott Elementary School (PK-7) would benefit greatly from this new resource for our students and staff. Each day KQPS provides nearly 670 students with a quality education. We are a small rural county, about 70 miles long and 10 miles wide, with three schools that serve our ethnically diverse students. Internet access is a huge factor for current quality education.

One of our central beliefs is "Student achievement and continuous growth are the core priorities of our school division." With this new fiber internet, we will be able to provide instruction for our students through Google Classroom, Canvas, ZOOM, and many other internet interventions to assist in our students moving forward. Our mission statement states, "The King and Queen County Public School Division strives to provide a quality education that challenges each student to maximize their full potential by offering programs that foster the skills of communication, critical thinking, resiliency and collaboration needed to compete in our global society." With this new high-speed internet access, our students will be able to compete in a global society with all the challenges facing them through the COVID-19 pandemic.

We are so appreciative of this new collaboration opportunity for our students. We look forward to the opportunity to continue this partnership.

Thank you in advance,

A handwritten signature in cursive script that reads "Carol B. Carter, Ed. D.".

Carol B. Carter, Ed. D.
Division Superintendent



King and Queen County
Founded 1691 in Virginia

Office of the County Administrator
P.O. Box 177 • King and Queen Courthouse, Virginia 23085
Phone: (804) 785-5975 • (804) 769-5000
Fax: (804) 785-5999 • (804) 769-5070

August 17, 2020

Virginia Department of Housing
And Community Development
600 E. Main Street, Suite 300
Richmond, VA 23210

RE: Letter of Support for 2021 VATI Application for King and Queen County's VATI Application

DHCD Staff:

On behalf of the King and Queen County Board of Supervisors, I am writing in support of RiverStreet Communications of Virginia, Inc/RiverStreet Networks and their proposal for building Phase II Fiber-to-the-Premise (FTTP) in King and Queen County, Virginia. Because we recognize the importance of broadband to citizens in our County, we have made a significant financial investment in wireless technology to provide service to citizens in portions of the County. The wireless network was 100% County funded. The County, in partnership with Riverstreet has a proven track record of maintaining and operating a network in a fiscally responsible manner. In 2016, the County was awarded the prestigious "Best Achievement Award" by the Virginia Associations of Counties for these efforts. As you know, we have continued in our efforts by the Phase one FTTP build currently underway with the much appreciated assistance we received in our 2020 VATI grant.

We stand prepared to take the next step and fully implement this FTTP project. This project will dramatically increase coverage and delivery speed. Many of our children will for the first time have internet access at home. Our schools will have the speed necessary to support the modern classroom, SOL testing and fiber connectivity between the three schools and the Central Office.

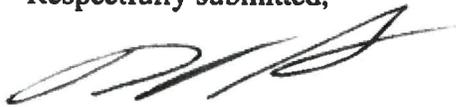
FTTP opens the door for business development and job creation in our County. It is important to note that the County was awarded a large Opportunity Zone to bring jobs and investment to the County. Without FTTP, development in that Zone will be a

challenge. FTTP is the key for the County and the Commonwealth to fully capitalize and reap the benefits of this Opportunity Zone designation.

FTTP will for the first time bring internet access to the Federally recognized Native American Rappahannock Tribal grounds and information center <http://www.rappahannocktribe.org/> located in the County opening the door for educational opportunities, outreach, innovation and job creation.

Thank you in advance for considering our application; together we can change lives.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'T. Swartzwelder', written in a cursive style.

Thomas J. Swartzwelder
County Administrator



King and Queen County
Founded 1691 in Virginia

Economic Development Authority
P.O. Box 177 • King and Queen Courthouse, Virginia 23085
Phone: (804) 785-5975 • (804) 769-5000
Fax: (804) 785-5999 • (804) 769-5070

August 17, 2020

Virginia Department of Housing and
Community Development
600 E Main Street, Suite 300
Richmond, VA 23219

RE: Letter of Support for 2020 VATI Application for King and Queen County's VATI Application

DHCD Staff,

I am writing on behalf of the King and Queen Economic Development Authority in support of RiverStreet Communications of Virginia, Inc/RiverStreet Networks and their proposal for building Fiber-to-the-Premise (FTTP) in King and Queen County, Virginia. Our Board frequently discusses the importance of broadband not only to the citizens in our County but also to the entire Region. Such improvements will increase educational opportunities and economic growth in the County. The proposed investment in broadband infrastructure utilizing VATI funds with matching County and RSN funds would greatly improve the opportunities only faster broadband can afford.

On a personal note, I am a lifetime resident of King and Queen County and also work with many small businesses on a routine basis in my profession as a Banker. Rural counties such as ourselves tend to have limited availability to infrastructure such as water and sewer that many larger companies demand. However, there are many other opportunities with smaller businesses that do not require that infrastructure but access to reliable and efficient broadband is non-negotiable. It really is the key to the future success of rural areas in terms of economic growth as well as attracting people to the area to settle and raise their families.

We respectfully ask that you consider the application and know we stand in support of their efforts.

Sincerely,

George Longest, Chairman

King and Queen Economic Development Authority



King and Queen County

Founded 1691 in Virginia

Office of the Zoning Administrator
P.O. Box 177 • King and Queen Court House, Virginia 23085
Phone: (804) 785-5985 • Fax: (804) 785-5999

August 17, 2020

Virginia Department of Housing
and Community Development
600 E Main Street, Suite 300
Richmond, Virginia 23219

**RE: Letter of Continued Support for 2020 VATI Application for King & Queen County's
VATI Application**

DHCD Staff,

We are again writing in continued support of RiverStreet Communications of Virginia, Inc/RiverStreet Networks and their proposal for building Fiber-to-the-Premise (FTTP) in King and Queen County, Virginia. We recognize the importance of broadband to the citizens in our County. Additionally, such improvements will increase educational opportunities, especially in light of the pandemic in which we live and the economic growth in the County. Their proposed investment in broadband infrastructure utilizing VATI funds with matching County and RSN funds would greatly improve the opportunities that only faster broadband can afford. Please consider their application and know we stand in support of their efforts.

Sincerely,

Donna Elliott Sprouse on behalf of the
King & Queen County Planning Commission

Attachment 11 - Derivation of Cost KQ VATI Phase II									
Product	Total	VATI	County	CAF	RSN	RIT	Source of Estimate	Date	
Phase 1 Cost	\$ 6,663,902	\$ 2,020,291	\$ 1,266,667	\$ 2,623,320	\$ 753,624	\$ -			
Phase 2 Cumnor (KQCN) Remote Area 2021									
Phase 2 Eng for Design, Field Staking & Permits	\$ 336,310	\$ 336,310					Mid-South Consulting Eng	8/12/2020	
Phase 2 KQCN Dist/Trans Fiber VATI 161.41 mi.	\$ 1,863,710	\$ 657,043	\$ 1,206,667				Mid-South Consulting Eng	8/12/2020	
Phase 2 KQCN Dist/Trans Fiber CAF 90.98 mi.	\$ 1,575,515			\$ 1,224,067	\$ 351,448		Mid-South Consulting Eng	8/12/2020	
Phase 2 KQCN Access/Switching Equip w/Eng	\$ 49,824	\$ 250,000			\$ 49,824		Mid-South Consulting Eng	8/12/2020	
Phase 2 KQCN Remote Building VATI	\$ 60,000		\$ 60,000				Mid-South Consulting Eng	8/12/2020	
Phase 2 KQCN ONT's & Drops 345@ \$2040	\$ 703,800				\$ 703,800		Mid-South Consulting Eng	8/12/2020	
Cares Contribution	\$ (473,689)		\$ (340,960.34)		\$ (35,229)	\$ (97,500)			
Phase 2 KQCN Subtotal	\$ 4,365,470	\$ 1,243,353	\$ 925,707	\$ 1,224,067	\$ 1,069,844	\$ (97,500)			
Phase 2 Canterbury(KQCB) Remote Area 2022									
Phase 2 Eng for Design, Field Staking & Permits	\$ 336,838	\$ 336,838					Mid-South Consulting Eng	8/12/2020	
Phase 2 KQCB Dist/Trans Fiber VATI 93.97 mi.	\$ 3,134,104	\$ 1,927,437	\$ 1,206,667				Mid-South Consulting Eng	8/12/2020	
Phase 2 KQCB Dist/Trans Fiber CAF 63.93 mi.	\$ 1,224,066			\$ 1,224,066			Mid-South Consulting Eng	8/12/2020	
Phase 2 KQCB Access/Switching Equip w/Eng	\$ 299,824	\$ 250,000			\$ 49,824		Mid-South Consulting Eng	8/12/2020	
Phase 2 KQCB Remote Building VATI	\$ 60,000		\$ 60,000				Mid-South Consulting Eng	8/12/2020	
Phase 2 KQCB ONT's & Drops 345@ \$2040	\$ 703,800				\$ 703,800		Mid-South Consulting Eng	8/12/2020	
Cares Contribution	\$ (473,689)		\$ (340,960.34)		\$ (35,229)	\$ (97,500)			
Phase 2 KQCB Subtotal	\$ 5,284,943	\$ 2,514,275	\$ 925,707	\$ 1,224,066	\$ 718,396	\$ (97,500)			
Phase 2 Grand Total	\$ 9,650,413	\$ 3,757,628	\$ 1,851,413	\$ 2,448,133	\$ 1,788,239	\$ (195,000)			
Both Phases Total	\$ 16,314,315	\$ 5,777,919	\$ 3,118,080	\$ 5,071,453	\$ 2,541,863	\$ (195,000)			
	\$ 17,261,693	Old Budget							
	\$ (947,378)	Diff.							

Derivation of Cost - Total Initial Build

Product	Total	VATI	Non-VATI	Source of Estimate	Date
EXAMPLE					
<u>Construction</u>					
200 LF of fiber @\$150/LF	\$30,000.00	\$15,000.00	\$15,000.00	Company A	9/5/2016
Tower	\$100,000.00	\$80,000.00	\$20,000.00	Company B	9/5/2016
Engineering	\$20,000.00	\$0.00	\$20,000.00	ABC Engineering Firm	9/5/2016
Product	Total	VATI	Non-VATI	Source of Estimate	Date
AERIAL INSTALLATION					
SECTION A - POLE UNITS LABOR	\$6,120.00	\$2,479.91	\$3,640.09	Engineering Estimates	08/29/19
SECTION A - POLE UNITS MATERIAL	\$1,712.00	\$693.73	\$1,018.27	Engineering Estimates	08/29/19
SECTION PE & PF - GUY AND ANCHOR ASSEMBLY UNITS LABOR	\$4,000.00	\$1,620.85	\$2,379.15	Engineering Estimates	08/29/19
SECTION PE & PF - GUY AND ANCHOR ASSEMBLY UNITS MATERIAL	\$620.96	\$251.62	\$369.34	Engineering Estimates	08/29/19
SECTION PM - MISCELLANEOUS ASSEMBLY UNITS LABOR	\$1,204.00	\$487.88	\$716.12	Engineering Estimates	08/29/19
SECTION PM - MISCELLANEOUS ASSEMBLY UNITS MATERIAL	\$955.76	\$387.29	\$568.47	Engineering Estimates	08/29/19
BURIED INSTALLATION					
SECTION BA - BURIED PLANT HOUSING STUB POLE UNITS LABOR	\$54,752.88	\$22,186.61	\$32,566.27	Engineering Estimates	08/29/19

SECTION BA - BURIED PLANT HOUSING STUB POLE UNITS MATERIAL	\$52,727.02	\$21,365.70	\$31,361.32	Engineering Estimates	08/29/19
SECTION BDO - BURIED PLANT FIBER OPTIC HOUSING ASSEMBLY UNITS LABOR	\$292,015.33	\$118,328.57	\$173,686.77	Engineering Estimates	08/29/19
SECTION BDO - BURIED PLANT FIBER OPTIC HOUSING ASSEMBLY UNITS MATERIAL	\$576,449.53	\$233,585.15	\$342,864.37	Engineering Estimates	08/29/19
SECTION BFO - BURIED FILLED FIBER OPTIC CABLE ASSEMBLY UNITS LABOR	\$4,810,943.80	\$1,949,459.56	\$2,861,484.24	Engineering Estimates	08/29/19
SECTION BFO - BURIED FILLED FIBER OPTIC CABLE ASSEMBLY UNITS MATERIAL	\$1,913,904.62	\$775,540.06	\$1,138,364.55	Engineering Estimates	08/29/19
SECTION BH - BURIED HANDHOLE ASSEMBLY UNITS LABOR	\$61,136.21	\$24,773.22	\$36,362.99	Engineering Estimates	08/29/19
SECTION BH - BURIED HANDHOLE ASSEMBLY UNITS MATERIAL	\$97,667.29	\$39,576.11	\$58,091.18	Engineering Estimates	08/29/19
SECTION BM - MISCELLANEOUS ASSEMBLY UNITS LABOR	\$2,735,562.58	\$1,108,486.99	\$1,627,075.59	Engineering Estimates	08/29/19
SECTION BM - MISCELLANEOUS ASSEMBLY UNITS MATERIAL	\$371,943.69	\$150,716.62	\$221,227.07	Engineering Estimates	08/29/19
SPLICING INSTALLATION					
SECTION HBFO- BURIED SPLICE CLOSURE ASSEMBLY UNITS LABOR	\$33,279.70	\$13,485.38	\$19,794.31	Engineering Estimates	08/29/19
SECTION HBFO- BURIED SPLICE CLOSURE ASSEMBLY UNITS MATERIAL	\$77,655.48	\$31,467.05	\$46,188.43	Engineering Estimates	08/29/19

SECTION HO- FIBER OPTIC SPLICING ASSEMBLY UNITS LABOR	\$880,525.60	\$356,800.89	\$523,724.71	Engineering Estimates	08/29/19
SECTION HO- FIBER OPTIC SPLICING ASSEMBLY UNITS MATERIAL	\$0.00	\$0.00	\$0.00	Engineering Estimates	08/29/19
CENTRAL OFFICE BUILDING & EQUIPMENT					
SECTION COE- CENTRAL OFFICE EQUIPMENT LABOR	\$402,368.00	\$163,044.96	\$239,323.04	Engineering Estimates	08/29/19
SECTION COE- CENTRAL OFFICE EQUIPMENT MATERIAL	\$1,123,798.36	\$455,378.31	\$668,420.05	Engineering Estimates	08/29/19
CENTRAL OFFICE ANNUAL MAINTENANCE					
SECTION COAM- CENTRAL OFFICE ANNUAL MAINTENANCE LABOR	\$98,210.33	\$39,796.15	\$58,414.17	Engineering Estimates	08/29/19
SECTION COAM- CENTRAL OFFICE ANNUAL MAINTENANCE MATERIAL	\$0.00	\$0.00	\$0.00	Engineering Estimates	08/29/19
ENGINEERING INSPECTION					
SECTION EI- ENGINEERING INSPECTION LABOR	\$1,317,805.88	\$533,992.78	\$783,813.10	Engineering Estimates	08/29/19
SECTION EI- ENGINEERING INSPECTION MATERIAL	\$0.00	\$0.00	\$0.00	Engineering Estimates	08/29/19
DROPS/CUSTOMER PREMISES EQUIPMENT					

CDBG Derivation of Cost

Derivation

SECTION SE- SERVICE ENTRY LABOR	\$1,310,544.00	\$0.00	\$1,310,544.00	Engineering Estimates	08/29/19
SECTION SE- SERVICE ENTRY MATERIAL	\$317,289.60	\$0.00	\$317,289.60	Engineering Estimates	08/29/19
SECTION NID- NETWORK INTERFACE DEVICE LABOR	\$344,880.00	\$0.00	\$344,880.00	Engineering Estimates	08/29/19
SECTION NID- NETWORK INTERFACE DEVICE MATERIAL	\$373,620.00	\$0.00	\$373,620.00	Engineering Estimates	08/29/19
TOTALS	\$17,261,692.60	\$6,043,905.00	\$11,217,787.60		

Appalachian Utilities Inc.
PO Box 1498
Jefferson, NC 28640

May 20, 2019

RiverStreet Networks Stokes
1400 River Street
Wilkesboro, NC 28697

Outside Plant Project: County Phase 3

Invoice

Estimate - Billing #23

Gross Billing per Attached Unit Sheets 1 thru 3	\$ 127,534.14
Less Materials	<u>\$ (36,435.84)</u>
Sub-Total	\$ 91,098.30
Less 5% Retainage	<u>\$ (4,554.92)</u>
Net Invoice Amount	<u>\$ 86,543.39</u>

Total Invoice Amount Due

APPROVED:

DATE:

**Walnut Cove Exchange
Walnut Cove Remote
WO #15-OSPSTOK-102**

May 20, 2019

SECTION A - POLE UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
30-6 Pole		382.50	107.00	489.50	0.00

TOTAL, SECTION A 0.00

SECTION BA - BURIED PLANT HOUSING STUB POLE UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
BA3		30.00	28.89	58.89	0.00

TOTAL, SECTION BA 0.00

SECTION BDO - BURIED PLANT FIBER OPTIC HOUSING ASSEMBLY UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
BDO5	12	80.00	81.28	161.28	1,935.36
BDO7		120.00	407.68	527.68	0.00
BDO Pro12		102.00	159.43	261.43	0.00

TOTAL, SECTION BDO 1,935.36

SECTION BFO - BURIED FILLED FIBER OPTIC CABLE ASSEMBLY UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
BFO12		1.10	0.30	1.40	0.00
BFO24R	1,468	1.10	0.42	1.52	2,231.36
BFO24R (single plow)		2.00	0.42	2.42	0.00
BFO48R	2,056	2.00	0.56	2.56	5,263.36
BFO72R		2.00	0.63	2.63	0.00
BFO96R		2.00	0.88	2.88	0.00
BFO144R		2.00	1.11	3.11	0.00
BFO216R		2.00	1.44	3.44	0.00
BFO288R		2.00	2.14	4.14	0.00
BFO432R		2.00	2.43	4.43	0.00
BFO576R		2.00	3.24	5.24	0.00
BFO864R	6,354	2.00	4.80	6.80	43,207.20
BFO48LT		1.10	0.55	1.65	0.00
BFO144LT		1.10	1.11	2.21	0.00

TOTAL, SECTION BFO 50,701.92

SECTION BH - BURIED HANDHOLE ASSEMBLY UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
BHF (36x72x36)		555.00	1,479.31	2,034.31	0.00
BHF (30x52x43)RD	5	370.00	576.20	946.20	4,731.00
BHF (22x36x18)		168.00	326.74	494.74	0.00

TOTAL, SECTION BH 4,731.00

**Walnut Cove Exchange
Walnut Cove Remote
WO #15-OSPSTOK-102**

**SECTION BM - MISCELLANEOUS ASSEMBLY UNITS -
BURIED PLANT & SERVICE ENTRANCE INSTALLATIONS**

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
BM2	12	20.00	23.88	43.88	526.56
BM2A	5	14.00	5.16	19.16	95.80
BM6M		3.00	1.00	4.00	0.00
BM53F		20.00	38.52	58.52	0.00
BM60(5x2") PIPE		0.00	5.00	5.00	0.00
BM60(4x2") PIPE		0.00	4.00	4.00	0.00
BM60(3x2") PIPE		0.00	3.00	3.00	0.00
BM60(2x2") PIPE		0.00	2.00	2.00	0.00
BM60(1x2") PIPE		0.00	1.00	1.00	0.00
BM60(1x2")PD	248	10.00	1.00	11.00	2,728.00
BM60(2x2")PD	1,059	12.50	2.00	14.50	15,355.50
BM60(3x2")PD		16.00	3.00	19.00	0.00
BM60(4x2")PD		19.00	4.00	23.00	0.00
BM60(5x2")PD	400	23.00	5.00	28.00	11,200.00
BM60(2x4")PD		20.00	8.00	28.00	0.00
BM60 (1x4")PD	1,818	16.00	4.00	20.00	36,360.00
BM71		9.00	0.00	9.00	0.00
BM72		15.00	0.00	15.00	0.00
BM73		18.00	0.00	18.00	0.00
BM81		20.00	20.47	40.47	0.00
BM82		25.00	27.07	52.07	0.00
BM CULV		225.00	0.00	225.00	0.00
BMLOC		80.00	0.00	80.00	0.00
BM MAXCELL		1.50	11.80	13.30	0.00
BM SK		1.50	3.85	5.35	0.00
BM WL		35.00	15.00	50.00	0.00
BM-WL(B)		38.00	20.00	58.00	0.00
BM WM		60.00	0.00	60.00	0.00

TOTAL, SECTION BM 66,265.86

SECTION CO - AERIAL FILLED FIBER OPTIC CABLE ASSEMBLY UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
CO72R / 6M		1.80	0.88	2.68	0.00
CO288R / 6M		1.98	2.39	4.37	0.00
CO144LT / 6M		1.98	1.36	3.34	0.00
CO144R / E		1.12	1.11	2.23	0.00
CO72R / E		1.12	0.63	1.75	0.00

TOTAL, SECTION CO 0.00

SECTION PE - GUY ASSEMBLY UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
PE1-2G (5/16"EHS)		100.00	28.01	128.01	0.00

TOTAL, SECTION PE 0.00

SECTION PF - ANCHOR ASSEMBLY UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
PF1-3 (5/8"x7')		150.00	10.80	160.80	0.00

TOTAL, SECTION PF 0.00

**Walnut Cove Exchange
Walnut Cove Remote
WO #15-OSPSTOK-102**

**SECTION PM - MISCELLANEOUS ASSEMBLY UNITS -
UNDERGROUND AND AERIAL PLANT**

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
PM2		20.00	23.88	43.88	0.00
PM 2A		14.00	5.16	19.16	0.00
PM11		10.00	5.54	15.54	0.00
PM12		100.00	34.94	134.94	0.00
PM92S		50.00	45.99	95.99	0.00
PM92L		75.00	54.63	129.63	0.00
TOTAL, SECTION PM					<u>0.00</u>

SECTION SE - SERVICE ENTRANCE ASSEMBLY UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
SEBO-4		0.95	0.23	1.18	0.00
SEAO-4		0.95	0.23	1.18	0.00
SEBO-12		0.95	0.28	1.23	0.00
SEAO-12		0.95	0.28	1.23	0.00
TOTAL, SECTION SE					<u>0.00</u>

SECTION UD - UNDERGROUND CONDUIT ASSEMBLY UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
UD (2-4")DB		8.00	8.06	16.06	0.00
UD (4-4")DB		12.00	16.12	28.12	0.00
UD (2x2")		6.00	2.00	8.00	0.00
UD (3-2")		7.00	3.00	10.00	0.00
UD (5x2")	300	8.00	5.00	13.00	3,900.00
TOTAL, SECTION UD					<u>3,900.00</u>

SECTION W - REARRANGEMENT UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
WC1		90.00	0.00	90.00	0.00
		0.00	0.00	0.00	0.00
TOTAL, SECTION W					<u>0.00</u>

SUMMARY SHEET

SECTION A	0.00
SECTION BA	<u>0.00</u>
SECTION BDO	<u>1,935.36</u>
SECTION BFO	<u>50,701.92</u>
SECTION BH	<u>4,731.00</u>
SECTION BM	<u>66,265.86</u>
SECTION CO	<u>0.00</u>
SECTION PE	<u>0.00</u>
SECTION PF	<u>0.00</u>
SECTION PM	<u>0.00</u>
SECTION SE	<u>0.00</u>
SECTION UD	<u>3,900.00</u>
SECTION W	<u>0.00</u>
TOTAL	<u>127,534.14</u>

SECTION A - POLE UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
30-6 Pole		0.00	107.00	107.00	0.00

TOTAL, SECTION A 0.00

SECTION BA - BURIED PLANT HOUSING STUB POLE UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
BA3		0.00	28.89	28.89	0.00

TOTAL, SECTION BA 0.00

SECTION BDO - BURIED PLANT FIBER OPTIC HOUSING ASSEMBLY UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
BDO5	12	0.00	81.28	81.28	975.36
BDO7		0.00	407.68	407.68	0.00
BDO Pro12		0.00	159.43	159.43	0.00

TOTAL, SECTION BDO 975.36

SECTION BFO - BURIED FILLED FIBER OPTIC CABLE ASSEMBLY UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
BFO12		0.00	0.30	0.30	0.00
BFO24R	1,468	0.00	0.42	0.42	616.56
BFO24R (single plow)		0.00	0.42	0.42	0.00
BFO48R	2,056	0.00	0.56	0.56	1,151.36
BFO72R		0.00	0.63	0.63	0.00
BFO96R		0.00	0.88	0.88	0.00
BFO144R		0.00	1.11	1.11	0.00
BFO216R		0.00	1.44	1.44	0.00
BFO288R		0.00	2.14	2.14	0.00
BFO432R		0.00	2.43	2.43	0.00
BFO576R		0.00	3.24	3.24	0.00
BFO864R	6,354	0.00	4.80	4.80	30,499.20
BFO48LT		0.00	0.55	0.55	0.00
BFO144LT		0.00	1.11	1.11	0.00

TOTAL, SECTION BFO 32,267.12

SECTION BH - BURIED HANDHOLE ASSEMBLY UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
BHF (36x72x36)		0.00	1,479.31	1,479.31	0.00
BHF (30x52x43)RD	5	0.00	576.20	576.20	2,881.00
BHF (22x36x18)		0.00	326.74	326.74	0.00

TOTAL, SECTION BH 2,881.00

**SECTION BM - MISCELLANEOUS ASSEMBLY UNITS -
BURIED PLANT & SERVICE ENTRANCE INSTALLATIONS**

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
BM2	12	0.00	23.88	23.88	286.56
BM2A	5	0.00	5.16	5.16	25.80
BM6M		0.00	1.00	1.00	0.00
BM53F		0.00	38.52	38.52	0.00
BM81		0.00	20.47	20.47	0.00
BM82		0.00	27.07	27.07	0.00

TOTAL, SECTION BM 312.36

SECTION CO - AERIAL FILLED FIBER OPTIC CABLE ASSEMBLY UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
CO72R / 6M		0.00	0.88	0.88	0.00
CO288R / 6M		0.00	2.39	2.39	0.00
CO144LT / 6M		0.00	1.36	1.36	0.00
CO144R / E		0.00	1.11	1.11	0.00
CO72R / E		0.00	0.63	0.63	0.00

TOTAL, SECTION CO 0.00

SECTION PE - GUY ASSEMBLY UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
PE 1-2G(5/16"EHS)		0.00	28.01	28.01	0.00

TOTAL, SECTION PE 0.00

SECTION PF - ANCHOR ASSEMBLY UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
PF 1-3(5/8"x7')		0.00	10.80	10.80	0.00

TOTAL, SECTION PF 0.00

SECTION PM - MISCELLANEOUS ASSEMBLY UNITS -
UNDERGROUND AND AERIAL PLANT

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
PM2		0.00	23.88	23.88	0.00
PM2A		0.00	5.16	5.16	0.00
PM11		0.00	5.54	5.54	0.00
PM12		0.00	34.94	34.94	0.00
PM92S		0.00	45.99	45.99	0.00
PM92L		0.00	54.63	54.63	0.00

TOTAL, SECTION PM 0.00

SECTION SE - SERVICE ENTRANCE ASSEMBLY UNITS

UNITS	# OF UNITS	UNIT PRICE			EXTENDED PRICE LABOR & MATERIALS
		LABOR	MATERIALS	LABOR & MATERIALS	
SEBO-4		0.00	0.23	0.23	0.00
SEAO-4		0.00	0.23	0.23	0.00
SEBO-12		0.00	0.28	0.28	0.00
SEAO-12		0.00	0.28	0.28	0.00

TOTAL, SECTION SE 0.00

TOTAL MATERIALS \$ 36,435.84

(RETAIN FOR YOUR RECORDS)
Form 477 Filing Summary

FRN: 0028007763 | Data as of: Jun 30, 2019 | Operations: Non-ILEC | Submission Status: Original - Submitted | Last Updated: Sep 4, 2019 08:11:33

Filer Identification

Section	Question	Response
Filer Information	Company Name	Gamewood Technology Group, Inc. dba RiverStreet Networks
	Holding Company Name	Wilkes Telephone Membership Corporation
	SAC ID	
	499 ID	830377
Data Contact Information	Data Contact Name	Tim Tribble
	Data Contact Phone Number	(336) 973-6164
	Data Contact E-mail	timtribble@myriverstreet.net
Emergency Operations Contact Information	Emergency Operations Name	Jody R Call
	Emergency Operations Phone Number	(336) 973-6164
	Emergency Operations E-mail	timtribble@myriverstreet.net
Certifying Official Contact Information	Certifying Official Name	Eric S Cramer
	Certifying Official Phone Number	(336) 973-6112
	Certifying Official E-mail	ericcramer@myriverstreet.net

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	KQVA FBBD.csv	Aug 27, 2019 06:41:08	146
	ADSL FBBD.csv	Aug 27, 2019 06:40:44	6
	GAMEWOOD FBBD.csv	Aug 27, 2019 06:39:10	192
Fixed Broadband Subscription	KQVA FBBS.csv	Aug 27, 2019 06:45:32	35
	GAMEWOOD FBBS.csv	Aug 27, 2019 06:45:00	171
	ADSL FBBS.csv	Aug 27, 2019 06:44:34	6
Fixed Voice Subscription	GAMEWOOD VOIP.csv	Aug 27, 2019 06:48:19	9

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
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Fixed Broadband Deployment

State	DBA Name	Technology	Blocks
North Carolina	KQVA.net	Terrestrial Fixed Wireless	2
Virginia	Gamewood	Asymmetric xDSL	6
		Optical Carrier/Fiber to the End User	171
		Terrestrial Fixed Wireless	21
	KQVA.net	Terrestrial Fixed Wireless	143
Wisconsin	KQVA.net	Terrestrial Fixed Wireless	1
Total			344

Fixed Broadband Subscription

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

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
North Carolina	Terrestrial Fixed Wireless	3	5	0	5
Virginia	Asymmetric xDSL	6	6	0	6
	Optical Carrier/Fiber to the End User	159	220	195	415
	Terrestrial Fixed Wireless	43	286	27	313
Wisconsin	Terrestrial Fixed Wireless	1	1	0	1
Total		212	518	222	740

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
0.500	0.200	10	0	10
0.500	0.250	1	0	1
0.750	0.250	1	0	1
0.750	0.375	4	0	4
0.750	0.750	25	1	26
1.000	0.500	30	0	30
1.500	0.500	5	2	7
1.500	0.750	1	4	5
1.500	1.500	6	0	6
2.000	1.000	145	8	153
2.500	2.500	0	2	2
3.000	0.750	2	1	3
3.000	1.500	9	2	11
3.000	3.000	34	2	36

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
5.000	5.000	0	4	4
6.000	4.000	17	10	27
6.000	6.000	42	9	51
6.500	3.500	0	1	1
8.000	1.000	0	1	1
8.000	4.000	0	1	1
10.000	5.000	0	11	11
10.000	10.000	0	10	10
12.000	4.000	0	3	3
12.000	6.000	0	2	2
14.000	7.000	0	1	1
16.000	2.000	0	1	1
16.000	4.000	0	3	3
16.000	8.000	0	3	3
18.000	5.000	0	2	2
18.000	9.000	0	19	19
20.000	4.000	1	5	6
20.000	10.000	0	5	5
20.000	20.000	0	5	5
25.000	12.000	26	2	28
25.000	25.000	25	25	50
25.000	100.000	0	2	2
30.000	15.000	0	2	2
30.000	30.000	0	1	1
50.000	10.000	0	7	7
50.000	25.000	19	21	40
50.000	50.000	28	5	33
75.000	15.000	0	4	4
75.000	25.000	12	7	19
75.000	30.000	0	1	1
75.000	50.000	0	1	1
75.000	75.000	24	1	25
100.000	25.000	26	7	33

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
100.000	50.000	0	8	8
100.000	100.000	18	1	19
125.000	125.000	2	0	2
150.000	25.000	0	4	4
150.000	50.000	0	1	1
150.000	150.000	5	2	7
200.000	200.000	0	1	1
200.000	400.000	0	1	1
Total		518	222	740

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

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
Asymmetric xDSL	0.500	0.250	1	0	1
	0.750	0.250	1	0	1
	0.750	0.375	4	0	4
Optical Carrier/Fiber to the End User	1.500	0.500	5	2	7
	1.500	0.750	1	4	5
	2.500	2.500	0	2	2
	3.000	0.750	2	1	3
	3.000	1.500	9	2	11
	5.000	5.000	0	4	4
	6.000	4.000	17	10	27
	6.500	3.500	0	1	1
	8.000	1.000	0	1	1
	8.000	4.000	0	1	1
	10.000	5.000	0	11	11
	10.000	10.000	0	7	7
	12.000	4.000	0	3	3
	12.000	6.000	0	2	2
	14.000	7.000	0	1	1
	16.000	2.000	0	1	1
16.000	4.000	0	3	3	
16.000	8.000	0	3	3	

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	18.000	5.000	0	2	2
	18.000	9.000	0	18	18
	20.000	4.000	1	5	6
	20.000	10.000	0	5	5
	20.000	20.000	0	5	5
	25.000	12.000	26	2	28
	25.000	25.000	25	22	47
	25.000	100.000	0	2	2
	30.000	15.000	0	2	2
	30.000	30.000	0	1	1
	50.000	10.000	0	7	7
	50.000	25.000	19	21	40
	50.000	50.000	28	5	33
	75.000	15.000	0	4	4
	75.000	25.000	12	7	19
	75.000	30.000	0	1	1
	75.000	50.000	0	1	1
	75.000	75.000	24	1	25
	100.000	25.000	26	7	33
	100.000	50.000	0	8	8
	100.000	100.000	18	1	19
	125.000	125.000	2	0	2
	150.000	25.000	0	4	4
	150.000	50.000	0	1	1
	150.000	150.000	5	2	7
	200.000	200.000	0	1	1
	200.000	400.000	0	1	1
Terrestrial Fixed Wireless	0.500	0.200	10	0	10
	0.750	0.750	25	1	26
	1.000	0.500	30	0	30
	1.500	1.500	6	0	6
	2.000	1.000	145	8	153

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Business /		Total
			Consumer	Govt	
	3.000	3.000	34	2	36
	6.000	6.000	42	9	51
	10.000	10.000	0	3	3
	18.000	9.000	0	1	1
	25.000	25.000	0	3	3
Total			518	222	740

Fixed Voice Subscription

VGE Lines and VoIP Subscriptions by State and End-user Type

State	Total VGE Lines	Consumer VGE Lines	Total VoIP Subscriptions	Consumer VoIP Subscriptions
North Carolina	0	0	1	0
Virginia	0	0	106	80
Total	0	0	107	80

Fixed Voice Subscription (iVoIP)

Over-the-top VoIP Subscriptions by State and End-user Type

State	Total	Consumer	Business / Govt
North Carolina	1	0	1
Virginia	106	80	26
Total	107	80	27

All other VoIP Subscriptions by State, End-user Type, Bundle and Last-mile Medium

State	Total	by End-user Type		by Bundle		by Last-mile Medium			
		Consumer	Business / Government	Sold w/ Internet	Sold w/o Internet	FTTP	Coax	Fixed Wireless	Copper
North Carolina	0	0	0	0	0	0	0	0	0
Virginia	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0

(RETAIN FOR YOUR RECORDS)
Form 477 Filing Summary

FRN: 0003718426 | Data as of: Jun 30, 2019 | Operations: ILEC | Submission Status: Revised - Submitted | Last Updated: Nov 14, 2019 07:57:20

Filer Identification

Section	Question	Response
Filer Information	Company Name	WILKES TELEPHONE MEMBERSHIP CORP
	Holding Company Name	Wilkes Telephone Membership Corporation
	SAC ID	230510
	499 ID	803832
Data Contact Information	Data Contact Name	Tim Tribble
	Data Contact Phone Number	(336) 973-6164
	Data Contact E-mail	timtribble@myriverstreet.net
Emergency Operations Contact Information	Emergency Operations Name	Jody R Call
	Emergency Operations Phone Number	(336) 973-6186
	Emergency Operations E-mail	jodycall@myriverstreet.net
Certifying Official Contact Information	Certifying Official Name	Eric S Cramer
	Certifying Official Phone Number	(336) 973-6112
	Certifying Official E-mail	ericcramer@myriverstreet.net

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	WTMC FBBD Rev 11-13-2019.csv	Nov 14, 2019 07:53:50	1910
Fixed Broadband Subscription	WTMC FBBS Rev 11.1.2019.csv	Nov 14, 2019 07:52:23	73
Fixed Voice Subscription	WTMC FVS.csv	Nov 14, 2019 07:52:23	26

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
North Carolina	Wilkes Communications Inc.	Asymmetric xDSL	6
		Optical Carrier/Fiber to the End User	1904
Total			1910

Fixed Broadband Subscription

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

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
North Carolina	Asymmetric xDSL	1	17	0	17
	Optical Carrier/Fiber to the End User	72	6016	319	6335
Total		73	6033	319	6352

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
6.000	0.512	17	0	17
10.000	1.000	2124	67	2191
12.000	2.000	2	0	2
25.000	3.000	3069	176	3245
35.000	5.000	1	0	1
50.000	10.000	735	62	797
100.000	10.000	79	12	91
250.000	25.000	5	2	7
1000.000	100.000	1	0	1
Total		6033	319	6352

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

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
Asymmetric xDSL	6.000	0.512	17	0	17
	10.000	1.000	2124	67	2191
Optical Carrier/Fiber to the End User	12.000	2.000	2	0	2
	25.000	3.000	3069	176	3245
	35.000	5.000	1	0	1
	50.000	10.000	735	62	797
	100.000	10.000	79	12	91
	250.000	25.000	5	2	7
	1000.000	100.000	1	0	1
Total			6033	319	6352

Fixed Voice Subscription

VGE Lines and VoIP Subscriptions by State and End-user Type

State	Total VGE Lines	Consumer VGE Lines	Total VoIP Subscriptions	Consumer VoIP Subscriptions
North Carolina	8614	7884	50	0
Total	8614	7884	50	0

VGE Lines Provided to Unaffiliated Providers by State

**Fixed Voice
Subscription
(VGE Lines)**

State	Wholesale	UNE-L
North Carolina	0	0
Total	0	0

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

State	Total	by Bundle		by Product Type			
		Sold w/ Internet	Sold w/o Internet	Consumer		Bus-Govt	
				& No PIC	& PIC	& No PIC	& PIC
North Carolina	8614	6557	2057	1156	6728	223	507
Total	8614	6557	2057	1156	6728	223	507

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

State	Total	by Ownership			by Last-mile Medium			
		Owned	UNE-L	Resale	FTTP	Coax	Fixed Wireless	Copper
North Carolina	8614	8614	0	0	8589	0	0	25
Total	8614	8614	0	0	8589	0	0	25

**Fixed Voice
Subscription
(iVoIP)**

Over-the-top VoIP Subscriptions by State and End-user Type

State	Total	Consumer	Business / Govt
North Carolina	0	0	0
Total	0	0	0

All other VoIP Subscriptions by State, End-user Type, Bundle and Last-mile Medium

State	Total	by End-user Type		by Bundle		by Last-mile Medium			
		Consumer	Business / Government	Sold w/ Internet	Sold w/o Internet	FTTP	Coax	Fixed Wireless	Copper
North Carolina	50	0	50	50	0	50	0	0	0
Total	50	0	50	50	0	50	0	0	0



**(RETAIN FOR YOUR RECORDS)
Form 477 Filing Summary**

FRN: 0028007763 | Data as of: Dec 31, 2019 | Operations: Non-ILEC | Submission Status: Revised - Submitted | Last Updated: Mar 2, 2020 09:57:55

Filer Identification

Section	Question	Response
Filer Information	Company Name	Gamewood Technology Group, Inc.
	Holding Company Name	Wilkes Telephone Membership Corporation
	SAC ID	
	499 ID	830377
Data Contact Information	Data Contact Name	Tim Tribble
	Data Contact Phone Number	(336) 973-6164
Emergency Operations Contact Information	Data Contact E-mail	ttribble@myriverstreet.net
	Emergency Operations Name	Jody R. Call
	Emergency Operations Phone Number	(336) 973-6186
	Emergency Operations E-mail	jodycall@myriverstreet.net
Certifying Official Contact Information	Certifying Official Name	Eric S Cramer
	Certifying Official Phone Number	(336) 973-6112
	Certifying Official E-mail	ericcramer@myriverstreet.net

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	GTG FCC 477 03022020 Wireless FBBD.csv	Mar 2, 2020 09:56:12	135
	GTG FCC 477 03022020 DSL FBBD.csv	Mar 2, 2020 09:54:50	4
	GTG FCC 477 03022020 Fiber FBBD.csv	Mar 2, 2020 09:54:50	171
Fixed Broadband Subscription	GTG FCC 477 03022020 DSL FBBS.csv	Mar 2, 2020 09:54:50	2
	GTG FCC 477 03022020 Wireless FBBS.csv	Mar 2, 2020 09:54:50	34
Fixed Voice Subscription	GTG FCC 477 03022020 Fiber FBBS.csv	Mar 2, 2020 09:54:50	173
	GTG FCC 477 03022020 VOIP.csv	Mar 2, 2020 09:54:50	10

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	RiverStreet Wireless of VA	Terrestrial Fixed Wireless	135
	RS Comm VA	Asymmetric xDSL	4
Optical Carrier/Fiber to the End User			171
Total			310

Fixed Broadband Subscription

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

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Virginia	Asymmetric xDSL	2	4	0	4
	Optical Carrier/Fiber to the End User	173	235	190	425
	Terrestrial Fixed Wireless	34	258	25	283
Total		209	497	215	712

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
1.000	0.500	19	0	19
1.500	0.500	3	3	6
1.500	0.750	3	6	9
2.000	0.750	128	8	136
2.000	1.000	6	2	8
2.000	2.000	1	4	5
2.500	2.500	0	2	2
3.000	0.750	2	0	2
3.000	1.500	7	4	11
3.000	3.000	31	3	34
4.000	4.000	0	3	3
5.000	0.750	4	0	4
5.000	5.000	0	2	2
6.000	4.000	15	7	22
6.000	6.000	37	8	45
6.500	3.000	0	1	1
8.000	1.000	0	1	1
8.000	4.000	0	1	1
10.000	5.000	1	8	9
10.000	10.000	0	8	8
12.000	4.000	0	1	1
12.000	6.000	0	3	3
12.000	12.000	0	1	1
15.000	25.000	0	1	1
16.000	2.000	0	1	1
16.000	4.000	1	1	2

16,000	8,000		0	1	1	1
18,000	5,000		1	0	0	1
18,000	9,000		3	7	7	10
20,000	4,000		0	4	4	4
20,000	10,000		0	5	5	5
20,000	20,000		1	4	4	5
25,000	4,000		1	0	0	1
25,000	12,000		14	1	1	15
25,000	25,000		34	15	15	49
30,000	15,000		0	3	3	3
30,000	30,000		0	1	1	1
40,000	40,000		0	1	1	1
50,000	10,000		0	10	10	10
50,000	25,000		7	21	21	28
50,000	50,000		47	15	15	62
75,000	15,000		1	0	0	1
75,000	25,000		3	6	6	9
75,000	30,000		0	3	3	3
75,000	50,000		0	2	2	2
75,000	75,000		30	0	0	30
100,000	25,000		18	5	5	23
100,000	50,000		0	3	3	3
100,000	100,000		31	5	5	36
125,000	125,000		2	0	0	2
150,000	25,000		1	3	3	4
150,000	50,000		0	1	1	1
150,000	150,000		4	2	2	6
200,000	200,000		0	1	1	1
200,000	400,000		0	1	1	1
250,000	25,000		0	1	1	1
250,000	250,000		3	14	14	17
500,000	500,000		0	1	1	1
Total			497	215	215	712

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

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
			497	215	712

Technology	Mbps)	Mbps)	Consumer	Govt	Total
Asymmetric xDSL	5,000	0,750	4	0	4
	1,500	0,500	3	3	6
Optical Carrier/Fiber to the End User	1,500	0,750	3	6	9
	2,000	2,000	1	4	5
	2,500	2,500	0	2	2
	3,000	0,750	2	0	2
	3,000	1,500	7	4	11
	3,000	3,000	2	0	2
	4,000	4,000	0	3	3
	5,000	5,000	0	2	2
	6,000	4,000	15	7	22
	6,500	3,000	0	1	1
	8,000	1,000	0	1	1
	8,000	4,000	0	1	1
	10,000	5,000	1	8	9
	10,000	10,000	0	8	8
	12,000	4,000	0	1	1
	12,000	6,000	0	3	3
	12,000	12,000	0	1	1
15,000	25,000	0	1	1	
16,000	2,000	0	1	1	
16,000	4,000	1	1	2	
16,000	8,000	0	1	1	
18,000	5,000	1	0	1	
18,000	9,000	3	7	10	
20,000	4,000	0	4	4	
20,000	10,000	0	5	5	
20,000	20,000	0	2	2	
25,000	4,000	1	0	1	
25,000	12,000	14	1	15	
25,000	25,000	34	15	49	
30,000	15,000	0	3	3	
30,000	30,000	0	1	1	
50,000	10,000	0	10	10	
50,000	25,000	7	21	28	

Technology	Mbps)	Mbps)	Consumer	Govt	Total
	50,000		47	14	61
	75,000		1	0	1
	75,000		3	6	9
	75,000		0	3	3
	75,000		0	2	2
	75,000		30	0	30
	100,000		18	5	23
	100,000		0	3	3
	100,000		31	5	36
	125,000		2	0	2
	150,000		1	3	4
	150,000		0	1	1
	150,000		4	2	6
	200,000		0	1	1
	200,000		0	1	1
	250,000		0	1	1
	250,000		3	14	17
	500,000		0	1	1
	0.500		38	0	38
	1,000		19	0	19
	2,000		128	8	136
	2,000		6	2	8
	3,000		29	3	32
	6,000		37	8	45
	20,000		1	2	3
	40,000		0	1	1
	50,000		0	1	1
Total			487	215	712
Terrestrial Fixed Wireless					

**Fixed Voice
Subscription**

VGE Lines and VoIP Subscriptions by State and End-user Type

State	Total VGE Lines	Consumer VGE Lines	Total VoIP Subscriptions	Consumer VoIP Subscriptions
Virginia	0	0	118	74
Total	0	0	118	74



**(RETAIN FOR YOUR RECORDS)
Form 477 Filing Summary**

FRN: 0003718426

Data as of: Dec 31, 2019

Operations: ILEC

Submission Status: Revised - Submitted

Last Updated: Mar 1, 2020 15:04:01

Filer Identification

Section	Question	Response
Filer Information	Company Name	Wilkes Telephone Membership Corporation
	Holding Company Name	Wilkes Telephone Membership Corporation
	SAC ID	230510
Data Contact Information	499 ID	803832
	Data Contact Name	Tim Tribble
	Data Contact Phone Number	(336) 973-6164
Emergency Operations Contact Information	Data Contact E-mail	timtribble@myriverstreet.net
	Emergency Operations Name	Jody R Call
	Emergency Operations Phone Number	(336) 973-6164
Certifying Official Contact Information	Emergency Operations E-mail	jodycall@myriverstreet.net
	Certifying Official Name	Eric S Cramer
	Certifying Official Phone Number	(336) 973-6112
	Certifying Official E-mail	ericcramer@myriverstreet.net

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	WTMC FBBD.csv	Mar 1, 2020 14:51:39	1913
Fixed Broadband Subscription	WTMC FBBS.csv	Mar 1, 2020 14:51:39	96
Fixed Voice Subscription	WTMC FVS.csv	Mar 1, 2020 14:52:50	21

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
North Carolina	Wilkes Communications Inc.	Asymmetric xDSL	6
		Optical Carrier/Fiber to the End User	1907
Total			1913

Fixed Broadband Subscription

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

State	Technology	Census Tracts	Consumer	Business / Govt	Total
North Carolina					

State	Technology	Census Tracts	Consumer	Business / Govt	Total
	Optical Carrier/Fiber to the End User	95	6182	324	6506
Total		96	6198	324	6522

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
6.000	0.512	16	0	16
10.000	1.000	1715	52	1767
12.000	2.000	2	0	2
25.000	3.000	2666	185	2851
35.000	5.000	1	0	1
50.000	10.000	572	57	629
100.000	10.000	57	18	75
100.000	100.000	1090	8	1098
250.000	25.000	8	2	10
250.000	250.000	66	1	67
500.000	50.000	1	0	1
1000.000	100.000	3	0	3
1000.000	1000.000	1	1	2
Total		6198	324	6522

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

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
Asymmetric xDSL	6.000	0.512	16	0	16
	10.000	1.000	1715	52	1767
Optical Carrier/Fiber to the End User	12.000	2.000	2	0	2
	25.000	3.000	2666	185	2851
	35.000	5.000	1	0	1
	50.000	10.000	572	57	629
	100.000	10.000	57	18	75
	100.000	100.000	1090	8	1098
	250.000	25.000	8	2	10
	250.000	250.000	66	1	67
	500.000	50.000	1	0	1
	1000.000	100.000	3	0	3
1000.000	1000.000	1	1	2	
Total		6198	324	6522	

Fixed Voice Subscription

VGE Lines and VoIP Subscriptions by State and End-user Type

State	Total VGE Lines	Consumer VGE Lines	Total VoIP Subscriptions	Consumer VoIP Subscriptions
North Carolina	7396	6673	56	0
Total	7396	6673	56	0

Fixed Voice Subscription (VGE Lines)

VGE Lines Provided to Unaffiliated Providers by State

State	Wholesale	UNE-L
North Carolina	0	0
Total	0	0

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

State	Total	by Bundle			by Product Type		
		Sold w/ Internet	Sold w/o Internet	Consumer & No PIC	Consumer & No PIC	Bus-Govt & No PIC	Bus-Govt & No PIC
North Carolina	7396	6057	1339	753	5920	213	510
Total	7396	6057	1339	753	5920	213	510

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

State	Total	by Ownership			by Last-mile Medium		
		Owned	Resale	FTTP	Coax	Fixed Wireless	Copper
North Carolina	7396	7396	0	0	7374	0	22
Total	7396	7396	0	0	7374	0	22

Fixed Voice Subscription (iVoIP)

Over-the-top VoIP Subscriptions by State and End-user Type

State	Total	Consumer	Business / Govt
North Carolina	0	0	0
Total	0	0	0

All other VoIP Subscriptions by State, End-user Type, Bundle and Last-mile Medium

State	Total	by End-user Type			by Bundle			by Last-mile Medium		
		Consumer	Business / Government	Total	Sold w/ Internet	Sold w/o Internet	FTTP	Coax	Fixed Wireless	Copper
North Carolina	56	0	56	56	0	56	0	0	0	0
Total	56	0	56	56	0	56	0	0	0	0



MARKETING FOR SUCCESS

RIVERSTREET NETWORKS

PUBLIC PRIVATE PARTNERSHIPS - MARKETING

DIRECT MAIL - POSTCARD

DOOR HANGERS



**FULL
STREAM
AHEAD**

**RiverStreet
NETWORKS**



**FIBER
is here.**

**RiverStreet
NETWORKS**

**YOUR NEIGHBORHOOD IS NEXT IN LINE FOR
FIBER.**

RiverStreet Networks is building a fiber network in your area. Experience amazing, reliable technology that will change your life.

HIGH SPEED INTERNET
Up to 1 Gig (1,000 Mbps)

SECURITY
Peace of mind you can trust

VOICE
Crystal clear & reliable

**RESERVE
YOUR
SPOT
TODAY!**



**RiverStreet
NETWORKS**
844.238.0131 | rsinfo@rsnet.org
myriverstreet.net

**ALMOST
THERE...**

**We installed the fiber connection
outside your home today!**

There's just one more step left – installation inside. Contact us today to schedule an appointment for a RiverStreet technician to install the fiber connection inside your home. This includes switching all services from your current copper connection and ensuring the WiFi network is up and running.

But wait!

Don't forget to secure your home with the best security system in town. Call us for a free quote on a complete security solution with monitoring plans as little as \$20/mo.

**SOMETHING TO
CELEBRATE!**

In honor of our new office opening in Danbury, we are offering our Stokes customers a FREE Roku TV when you connect your home by bundling our internet TV and phone services! Bundle internet or TV with phone, and receive a free Roku stick!



FREE ROKU DEVICES WITH BUNDLE!

myriverstreet.net | 844.238.0131

*Offer only available to Stokes customers who sign up for internet TV and phone services by bundling internet or TV with phone. Offer ends 12/31/16.

**RiverStreet
NETWORKS**
105 Sheep Rock Rd Danbury, NC 27016

**RiverStreet
NETWORKS**

844.238.0131 | myriverstreet.net | 10/2016-12/16

RIVERSTREET NETWORKS

PUBLIC PRIVATE PARTNERSHIP- MARKETING

POST CARD MAILING



Join the Crowd!
BRING FIBER TO YOUR AREA

What could fiber do for you?

Your electric co-op, in partnership with RiverStreet Networks, wants to bring life-changing fiber internet to your neighborhood if there's demand for it. RiverStreet has decades of experience serving communities with fiber just like ours.

Fiber will deliver a faster, more reliable connection to stream, work from home, game and whatever else you use the internet for. So, join the crowd to bring fiber here. Tell your neighbors too!

Are you ready for fiber?
join.buildriverstreet.com

RiverStreet NETWORKS Powered by **YourLOGO?**

VERTICAL BANNER



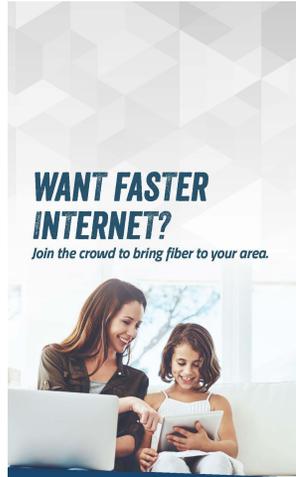
WANT FASTER INTERNET?
Join the crowd to bring fiber to your area.

Reliable | Fast - 1,000 Mbps! | Unlimited
Imagine enough bandwidth for all your devices at once...

join.buildriverstreet.com

RiverStreet NETWORKS Powered by **YourLOGO?**

DOOR HANGERS



WANT FASTER INTERNET?
Join the crowd to bring fiber to your area.

Fiber will deliver a faster, more reliable connection to stream movies, work from home, game and whatever else you use the internet for.

- Reliable, high quality connection
- Faster connection speeds
- Enough bandwidth to use all your devices at once
- Unlimited Internet usage (no data caps!) ...and more!

Join the crowd to bring fiber here and tell your neighbors too!

join.buildriverstreet.com

RiverStreet NETWORKS Powered by **YourLOGO?**

RIVERSTREET NETWORKS

PUBLIC PRIVATE PARTNERSHIPS - MARKETING

BILLBOARDS



RADIO

Make memories with RiverStreet Networks and enjoy a free month with new internet or upgrade!

Because t'is the season to stream holiday favorites with family and friends! And you'll just have a better experience with RiverStreet Networks.

A free month of internet from RiverStreet Networks. With fiber optic technology everyone gets up to 1 gig.

Offer ends 12/31/2018. Call RiverStreet Networks now at 844-238-0131 or visit online at myriverstreet.net.

RIVERSTREET NETWORKS

PUBLIC PRIVATE PARTNERSHIPS - UPDATED INTERNET PRICING



RiverStreet NETWORKS
A Division of Public Private Partnerships, Inc.

RESIDENTIAL PRICING

Reliable. Safe. Fast. High-speed Internet.

CHOOSE A PLAN THAT'S RIGHT FOR YOUR FAMILY

Streaming movies to downloading music—no matter how you stay connected, we have the perfect High Speed Internet package for you. Bundles include unlimited data, local phone features, and unlimited long distance. Start saving more when you bundle Internet and Phone Service with RiverStreet Networks. Choose a plan that best fits your family needs and we'll take care of the rest.

\$75	\$90	\$120
Per Month	Per Month	Per Month
Phone Service Included	Phone Service Included	Phone Service Included
25M/5M	50M/10M	100M/10M
<ul style="list-style-type: none"> ✓ Unlimited Data ✓ 15GB Email with storage ✓ 24/7 Tech Support ✓ 4 Email Accounts 	<ul style="list-style-type: none"> ✓ Unlimited Data ✓ 15GB Email with storage ✓ 24/7 Tech Support ✓ 4 Email Accounts 	<ul style="list-style-type: none"> ✓ Unlimited Data ✓ 15GB Email with storage ✓ 24/7 Tech Support ✓ 4 Email Accounts

844.238.0131 | myriverstreet.net



OPTI-FI

RESIDENTIAL PRICING

Keeping you connected

OPTI-FI YOUR HOME WITH A PLAN THAT'S RIGHT FOR YOUR FAMILY

OPTI-FI has a multitude of benefits that are tailored to fit every families needs. From streaming movies to live video chatting—no matter how you stay connected, we have the perfect High Speed Internet plan for you. With our advanced fiber optic network there's nothing off limits.

\$75	\$100	\$200
Per Month	Per Month	Per Month
100M/100M	250M/250M	1GIG/1GIG
<ul style="list-style-type: none"> ✓ Unlimited Data ✓ Free WIFI ✓ Free Phone Service ✓ 24/7 Tech Support 	<ul style="list-style-type: none"> ✓ Unlimited Data ✓ Free WIFI ✓ Free Phone Service ✓ 24/7 Tech Support 	<ul style="list-style-type: none"> ✓ Unlimited Data ✓ Free WIFI ✓ Free Phone Service ✓ 24/7 Tech Support

RiverStreet NETWORKS | Powered by **YourLOGO?**

RIVERSTREET NETWORKS

PUBLIC PRIVATE PARTNERSHIPS - INTERNET PRICING

FIBER BASELINE PRICING

100M / 100M - \$75+\$5 = \$80

Less Cooperative Discount

\$70.00

Less \$9.25 Low Income Lifeline discount

\$60.75

WIRELESS BASELINE PRICING

Up To 25M / 3M - \$50+\$5 = \$55

Less Cooperative Discount

\$45.00

Less \$9.25 Low Income Lifeline discount

\$35.75

The image displays three pricing cards for internet services, arranged from left to right. Each card is white with a blue border and a blue bar at the bottom. The cards are set against a background of a blue and white geometric pattern.

- Card 1:** \$75 Per Month, 100M/100M. Features: Unlimited Data, Free WiFi, Free Phone Service, 24/7 Tech Support.
- Card 2:** \$100 Per Month, 250M/250M. Features: Unlimited Data, Free WiFi, Free Phone Service, 24/7 Tech Support.
- Card 3:** \$200 Per Month, 1GIG/1GIG. Features: Unlimited Data, Free WiFi, Free Phone Service, 24/7 Tech Support.

RIVERSTREET NETWORKS

PUBLIC PRIVATE PARTNERSHIPS - INTERNET PRICING

FIBER BASELINE PRICING

100M / 100M - \$75+\$5 = \$80

Less Cooperative Discount

\$70.00

Less \$9.25 Low Income Lifeline discount

\$60.75

WIRELESS BASELINE PRICING

Up To 25M / 3M - \$50+\$5 = \$55

Less Cooperative Discount

\$45.00

Less \$9.25 Low Income Lifeline discount

\$35.75

WIRELESS TIER II PRICING

Up to 50M / 3M- \$70+\$5 = \$80

Less Cooperative Discount

\$70

Less \$9.25 Low Income Lifeline Discount

\$60.75

The image shows three pricing cards for Fiber service, each with a price per month and a list of features. The cards are arranged horizontally. The first card is for \$75 per month (100M/100M), the second for \$100 per month (250M/250M), and the third for \$200 per month (1GIG/1GIG). All cards include Unlimited Data, Free WiFi, Free Phone Service, and 24/7 Tech Support.

Price Per Month	Service	Features
\$75	100M/100M	✓ Unlimited Data ✓ Free WiFi ✓ Free Phone Service ✓ 24/7 Tech Support
\$100	250M/250M	✓ Unlimited Data ✓ Free WiFi ✓ Free Phone Service ✓ 24/7 Tech Support
\$200	1GIG/1GIG	✓ Unlimited Data ✓ Free WiFi ✓ Free Phone Service ✓ 24/7 Tech Support

AVERAGE COST OF 25/3 SERVICE BY POPULATION DENSITY

Decile	Max Population Density	Mean Lowest Price	Median Lowest Price
1	147,807	\$50.07	\$49.99
2	3,713.81	\$51.78	\$49.99
3	1,658.13	\$53.56	\$49.99
4	649.62	\$54.38	\$49.99
5	274.90	\$56.44	\$50.00
6	129.81	\$58.14	\$59.95
7	74.09	\$59.06	\$60.00
8	44.41	\$60.26	\$63.99
9	24.70	\$61.53	\$60.95
10	9.22	\$68.69	\$64.95

SOURCE: BROADBAND
NOW

RIVERSTREET NETWORKS

PUBLIC PRIVATE PARTNERSHIPS - BUNDLE PRICING

Voice Data Plans – Residential Bundle Pricing

Plan	Internet	Voice	SLC	Total
25/3	\$45.00	\$30.00	\$6.50	\$81.50
50/10	\$60.00	\$30.00	\$6.50	\$96.50
100/10	\$90.00	\$30.00	\$6.50	\$126.50
250/25	\$150.00	\$30.00	\$6.50	\$186.50

Data Only Plans – Residential (includes unlimited voice, features, wireless routing, tech support)

Plan	Internet	Voice	Reg Fee	Total
100/100	\$75.00	\$0.00	\$5.00	\$80.00
250/250	\$100.00	\$0.00	\$5.00	\$105.00
1000/1000	\$200.00	\$0.00	\$5.00	\$205.00

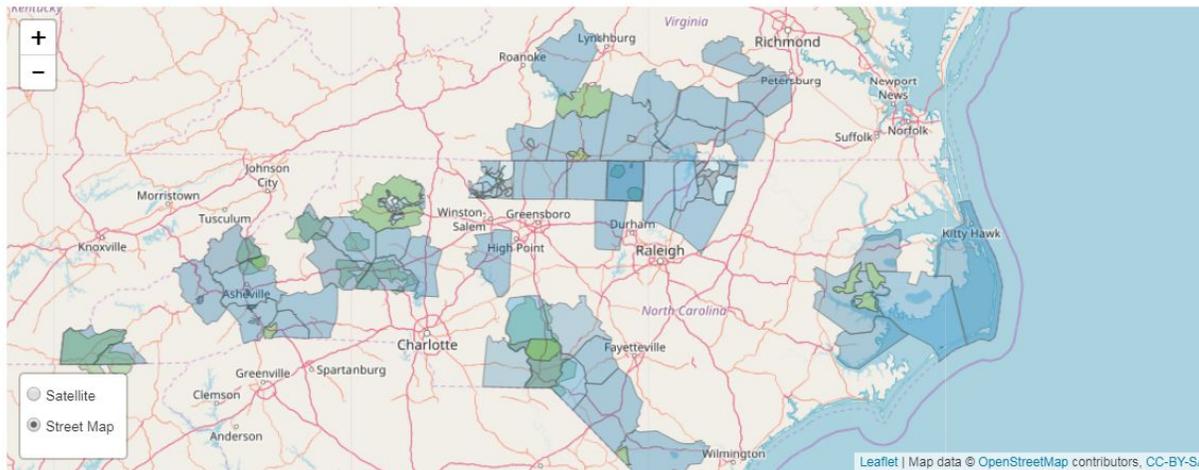
Plan	"Co-op" Discount	Disc Rate	Lifeline Discount*	Lowest Possible
100/100	-\$10.00	\$70.00	-\$9.25	\$60.75
250/250	-\$10.00	\$95.00	-\$9.25	\$85.75
1000/1000	-\$40.00	\$165.00	-\$9.25	\$155.75



Help extend fiber to your neighborhood!

Register your address, and we'll let you know if you can receive service. Become a supporter and spread the word!

Service Areas



Areas In Service

Areas where service is currently available.

ACTIVITY DASHBOARD



Eric

Dashboard

Map

Tasks

Addresses

Contacts

Sales

Products

Zones

Documents

Engagement

Users

Settings

Integrations

Support

Updates

7

0 this month

0 this year

Create new update

Emails

4,447

132 opened this month

224 opened last month

Create new email

Direct Mail

0

0 sent this month

0 sent last month

Create new mail

Leads

2,813

140 this month

190 last month

Contacts

2,251

25 this month

45 last month

Orders

1,311

26 this month

41 last month

Key Trends



Lead-to-Order Conversion Rate

19%

Month to date

▼ -18%

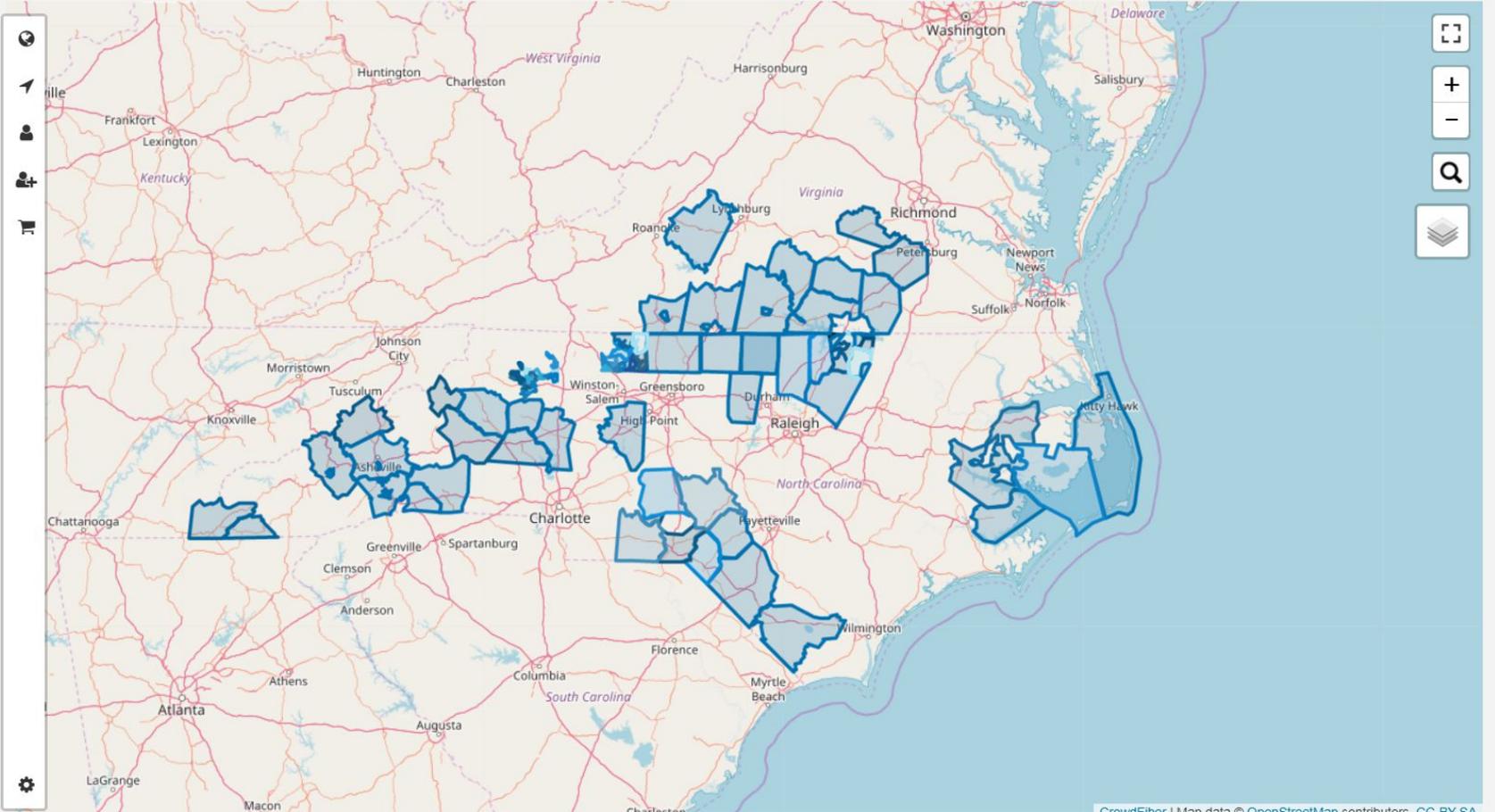
Compared to this time last month



PRE-REGISTRATION AREAS

Eric

- Dashboard
- Map**
- Tasks
- Addresses
- Contacts
- Sales <
- Products
- Zones
- Documents
- Engagement <
- Users
- Support** <



CUSTOMER SERVICE AND SUPPORT

RIVERSTREET NETWORKS

PUBLIC PRIVATE PARTNERSHIPS - CUSTOMER SUPPORT

CUSTOMER SERVICE

- Average time to answer a call
34 seconds
- Average call duration 3.30
minutes

TECHNICAL SUPPORT

- Average After Hours Tech
Support call 10.10 mins
- Average RiverStreet Network
Support call time is 3.9 mins
- 76% first call trouble
resolution
- 24% escalated to our Tier II
or truck Roll
- Outages and duration > .40%
- 99.6% up-time

RIVERSTREET NETWORKS

PUBLIC PRIVATE PARTNERSHIPS - DISPATCH SUPPORT CALLS

RESIDENTIAL TROUBLE TICKETS

- Overall average duration from call to completion - 22 hours
- Time to clear a trouble of ticket - 1.25 hours
- Repeat troubles on Copper - 9.3%
- Repeat troubles on Fiber - 3.7%

RIVERSTREET NETWORKS

PUBLIC PRIVATE PARTNERSHIPS - NET PROMOTER SCORE

% RATED EXCELLENT

- Customer Service - 97%
- Install & Repair - 100%
- Tech Support - 96%

LIKELIHOOD TO RECOMMEND

- Customer Service - 88%
- Install & Repair - 90%
- Tech Support - 88%

RIVERSTREET NETWORKS

PUBLIC PRIVATE PARTNERSHIPS - KEY METRICS ON FIBER

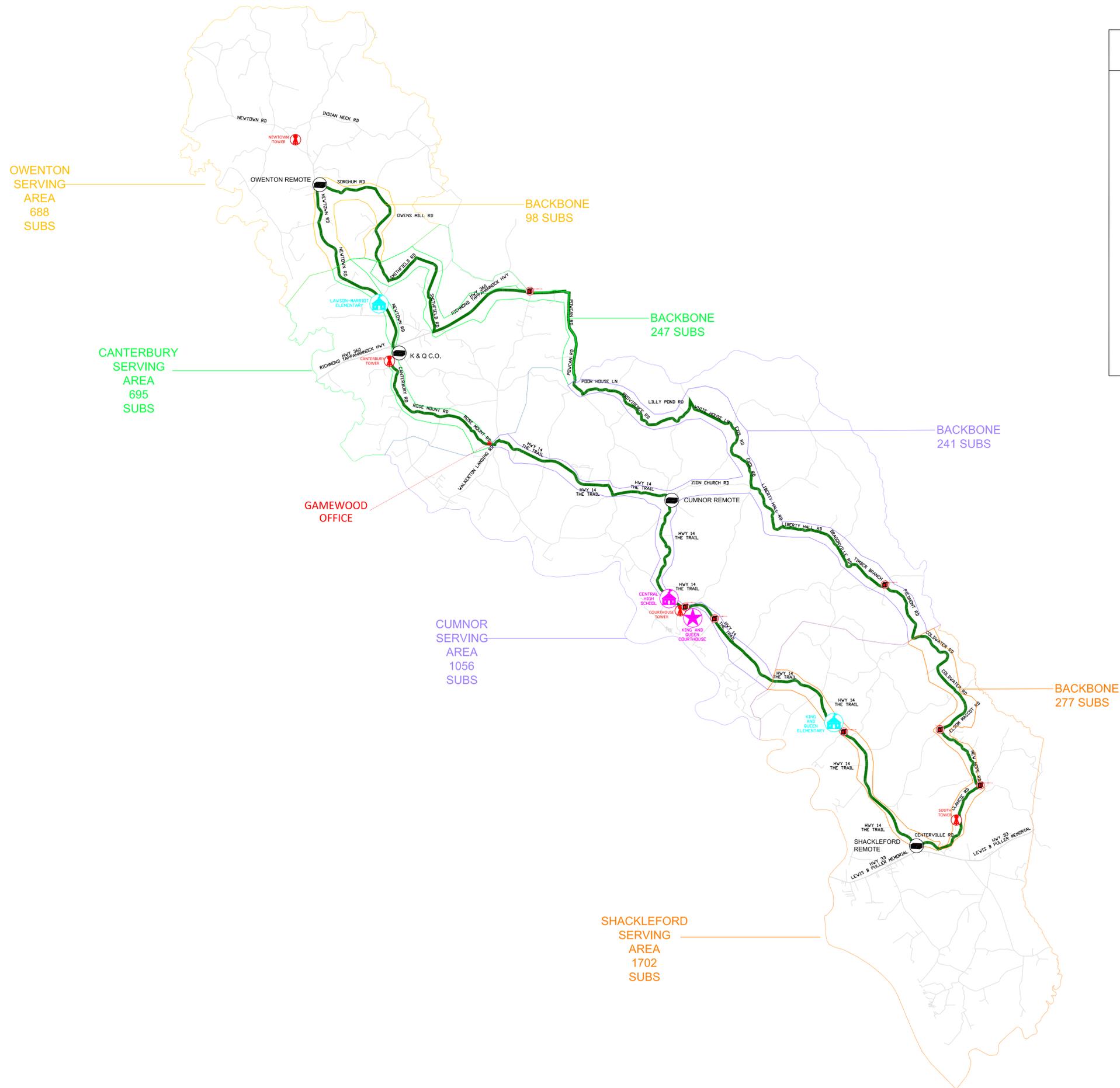
BROADBAND CHURN RATE - .50%

GROSS WRITE OFFS - .21%

NET WRITE OFFS - .06%

ARPA - RESIDENTIAL \$103.54 / BUSINESS - \$241.61

KING AND QUEEN COUNTY



LEGEND

-  CELL TOWERS (4)
-  COURTHOUSE
-  ELEMENTARY SCHOOLS (2)
-  HIGH SCHOOLS (1)
-  PON CABINET
-  REMOTE
-  FIBER BACKBONE

RiverStreet Communications of VA
CAF II Pro Forma
King & Queen County

Take Rate Per Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	62	186	393	600	807	1,015	1,222	1,429	1,636	1,843	1,988	2,071
	1.5%	4.5%	9.5%	14.5%	19.5%	24.5%	29.5%	34.5%	39.5%	44.5%	48.0%	50.0%
ARPA	\$ 120.00	\$ 120.00	\$ 120.00	\$ 120.00	\$ 120.00	\$ 120.00	\$ 120.00	\$ 120.00	\$ 120.00	\$ 120.00	\$ 120.00	\$ 120.00
Annual Gross Revenue	\$ 89,446	\$ 268,337	\$ 566,489	\$ 864,641	\$ 1,162,793	\$ 1,460,945	\$ 1,759,097	\$ 2,057,249	\$ 2,355,401	\$ 2,653,553	\$ 2,862,259	\$ 2,981,520
EBITDA Margin	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Operating EBITDA	\$ 67,084	\$ 201,253	\$ 424,867	\$ 648,481	\$ 872,095	\$ 1,095,709	\$ 1,319,323	\$ 1,542,937	\$ 1,766,551	\$ 1,990,165	\$ 2,146,694	\$ 2,236,140
								10%	10%	10%	13%	13%
Revenue Share	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (205,725)	\$ (235,540)	\$ (265,355)	\$ (372,094)	\$ (387,598)
Depreciation Expense	(274,298)	(361,312)	(445,007)	(525,502)	(582,914)	(578,155)	(553,702)	(530,332)	(507,996)	(486,643)	(466,226)	(446,702)
Operating Income	(207,213)	(160,059)	(20,140)	122,978	289,180	517,554	765,621	806,879	1,023,015	1,238,167	1,308,375	1,401,840
	-232%	-60%	-4%	14%	25%	35%	44%	39%	43%	47%	46%	47%
Interest Expense	(167,793)	(153,664)	(138,813)	(123,201)	(106,791)	(89,542)	(71,410)	(52,350)	(32,315)	(16,414)	(5,897)	0
Net Income	(375,006)	(313,723)	(158,953)	(223)	182,389	428,012	694,211	754,529	990,700	1,221,753	1,302,478	1,401,840
	-419%	-117%	-28%	0%	16%	29%	39%	37%	42%	46%	46%	47%
Principal	\$ 276,155	\$ 290,283	\$ 305,135	\$ 320,746	\$ 337,156	\$ 354,406	\$ 372,538	\$ 391,597	\$ 411,632	\$ 205,560	\$ 216,077	\$ -



King and Queen County Broadband Needs Assessment



King and Queen County



Virtual IT, Inc.

May 14, 2014
v1.0.3

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1. Introduction

Virginia's Center for Innovative Technology(CIT) is working with King and Queen County to foster awareness of the benefits of broadband services and access to the Internet along with working to increase overall adoption and use of broadband services by local households and businesses.

The project involves three phases including Assessment, Adoption and Utilization. The Assessment Phase will focus on identifying important demographic information about King and Queen County and its residents along with identifying the current state of broadband adoption learning who is and who is not online and if they are not, then why. This phase will also assess current digital literacy programs within the County. During Assessment, we will also work to identify key stakeholders in terms of who would benefit from broadband, who will be important partners to foster the adoption and who will be important to help influence the awareness. The ultimate goal of the Assessment Phase will be to identify community needs and opportunities as they relate to broadband adoption.

During the Adoption Phase of the project, we will take the needs and opportunities identified during Assessment and define the programs which will be needed within the County to increase overall broadband adoption and define an implementation plan for moving these programs forward.

The final phase, Utilization, will evaluate the use and strategic plans to ensure the community is positioned to leverage broadband to improve the community life and foster improved utilization. We will discuss current use of broadband and plans for future use within local businesses (the Chamber), education and in local government. Research finds the community's leverage of technology and broadband influences the constituent's utilization. The outcomes of these discussions will be documented to serve as an overall strategic broadband utilization strategy for the community.



2. Community Information

King and Queen County is a county located in the Middle Peninsula of the Commonwealth of Virginia. As of the 2010 census, the population was 6,945 and is estimated to be 7046 as of 2013. The county seat is King and Queen Court House. Demographic characteristics of the region have a material impact on overall broadband adoption. Characteristics such as age and disability and employment are factors which can contribute to either high or low levels of adoption. Other factors such as language, education level within the household and economic characteristics of the household also impact whether families are getting online at home.



2.1 Demographic Information

In order to understand current levels of broadband adoption as well as to be able to plan specific types of adoption strategies, it is important to understand the demographics of the County.

The following information was obtained from the 2010 Census.

2.1.1 Sex and Age

Subject	Number	Percent
Total population	6,945	100.0
Median age (years)	45.2	(X)
16 years and over	5,668	81.6
18 years and over	5,503	79.2
21 years and over	5,277	76.0
62 years and over	1,489	21.4
65 years and over	1,203	17.3
Male population	3,454	49.7
Female population	3,491	50.3

2.1.2 Race

Subject	Number	Percent
Total population	6,945	100.0
One Race	6,821	98.2
White	4,663	67.1
Black or African American	1,975	28.4
American Indian and Alaska Native	111	1.6
Asian	17	0.2

Subject	Number	Percent
Filipino	6	0.1
Other Asian [1]	5	0.1
Some Other Race	55	0.8
Two or More Races	124	1.8
White; American Indian and Alaska Native [3]	29	0.4
White; Asian [3]	15	0.2
White; Black or African American [3]	50	0.7
White; Some Other Race [3]	6	0.1

2.1.3 Housing Information

Subject	Number	Percent
Total households	2,882	100.0
Family households	1,972	68.4
With own children under 18 years	658	22.8
Husband-wife family	1,427	49.5
With own children under 18 years	449	15.6
Male householder, no wife present	168	5.8
With own children under 18 years	64	2.2
Female householder, no husband present	377	13.1
With own children under 18 years	145	5.0
Nonfamily households	910	31.6
Householder living alone	764	26.5
Male	380	13.2
65 years and over	114	4.0
Female	384	13.3
65 years and over	237	8.2
Households with individuals under 18 years	790	27.4
Households with individuals 65 years and over	920	31.9
Average household size	2.41	(X)
Average family size	2.89	(X)
HOUSING OCCUPANCY		
Total housing units	3,414	100.0
Occupied housing units	2,882	84.4
Vacant housing units	532	15.6
For rent	33	1.0
Rented, not occupied	6	0.2
For sale only	41	1.2
Sold, not occupied	13	0.4
For seasonal, recreational, or occasional use	193	5.7
All other vacants	246	7.2
Homeowner vacancy rate (percent) [8]	1.7	(X)
Rental vacancy rate (percent) [9]	5.5	(X)

Subject	Number	Percent
HOUSING TENURE		
Occupied housing units	2,882	100.0
Owner-occupied housing units	2,325	80.7
Population in owner-occupied housing units	5,495	(X)
Average household size of owner-occupied units	2.36	(X)
Renter-occupied housing units	557	19.3
Population in renter-occupied housing units	1,450	(X)
Average household size of renter-occupied units	2.60	(X)

"Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

The information in the following sections was obtained from the American Community Survey and reflects estimates based on a sample of households over a 5-year period.

2.1.4 Education

Subject	Number	Percent
SCHOOL ENROLLMENT		
Population 3 years and over enrolled in school	1,141	1,141
Nursery school, preschool	52	4.6%
Kindergarten	17	1.5%
Elementary school (grades 1-8)	532	46.6%
High school (grades 9-12)	350	30.7%
College or graduate school	190	16.7%
EDUCATIONAL ATTAINMENT		
Population 25 years and over	5,051	5,051
Less than 9th grade	401	7.9%
9th to 12th grade, no diploma	556	11.0%
High school graduate (includes equivalency)	2,124	42.1%
Some college, no degree	1,164	23.0%
Associate's degree	170	3.4%
Bachelor's degree	426	8.4%
Graduate or professional degree	210	4.2%
Percent high school graduate or higher	(X)	81.1%
Percent bachelor's degree or higher	(X)	12.6%

An important point to note from the information presented above is that there is a small percentage of the population who have obtained education past a high school diploma. Research has shown a direct correlation between level of education and broadband adoption rates. As the population becomes more educated, adoption rates tend to rise. This presents an opportunity to leverage digital literacy training and education to increase overall adoption rates.

2.1.5 Disability Status

Subject	Number	Percent
Total Civillian Noninstitutionalized Population	6,968	6,968
With a disability	756	10.8%
Under 18 years	1,400	1,400
With a disability	13	0.9%
18 to 64 years	4,322	4,322
With a disability	472	10.9%
65 years and over	1,246	1,246
With a disability	271	21.7%

2.1.6 Language

Subject	Number	Percent
Population 5 years and over	6,566	100%
English only	6,302	96.0%
Language other than English	264	4.0%
Speak English less than "very well"	183	2.8%
Spanish	221	3.4%
Speak English less than "very well"	160	2.4%
Other Indo-European languages	11	0.2%
Speak English less than "very well"	0	0.0%
Asian and Pacific Islander languages	21	0.3%
Speak English less than "very well"	12	0.2%
Other languages	11	0.2%
Speak English less than "very well"	11	0.2%

2.1.7 Employment Status

Subject	Number	Percent
Population 16 years and over	5,818	5,818
In labor force	3,626	62.3%
Civillian labor force	3,626	62.3%
Employed	3,418	58.7%
Unemployed	208	3.6%
Armed Forces	0	0.0%
Not in labor force	2,192	37.7%

Subject	Number	Percent
Civilian labor force	3,626	3,626
Percent Unemployed	(X)	5.7%
Females 16 years and over	2,937	2,937
In labor force	1,669	56.8%
Civilian labor force	1,669	56.8%
Employed	1,580	53.8%
Own children under 6 years	456	456
All parents in family in labor force	350	76.8%
Own children 6 to 17 years	884	884
All parents in family in labor force	546	61.8%

2.1.8 Income and Benefits(2012 Inflation Adjusted Dollars)

Subject	Number	Percent
Total households	2,924	2,924
Less than \$10,000	101	3.5%
\$10,000 to \$14,999	165	5.6%
\$15,000 to \$24,999	263	9.0%
\$25,000 to \$34,999	389	13.3%
\$35,000 to \$49,999	569	19.5%
\$50,000 to \$74,999	636	21.8%
\$75,000 to \$99,999	505	17.3%
\$100,000 to \$149,999	230	7.9%
\$150,000 to \$199,999	23	0.8%
\$200,000 or more	43	1.5%
Median household income (dollars)	49,410	(X)
Mean household income (dollars)	58,979	(X)

One point to note from the information presented above is that the median household income for King and Queen County is \$49,410 which is 22% below the median household income for the State of Virginia which was \$64,043 for the same period. This statistic supports information from the citizen survey which cited cost as one of the barriers to adoption. This presents an opportunity to look for ways to reduce the cost to increase adoption.

2.2 Schools and Libraries

Schools and libraries are critical assets in any community when we talk about digital literacy programs. The following is a summary of the school and library information for King and Queen County.

Schools

- King and Queen Elementary
24667 The Trail, Mattaponi, VA 23110



Phone: (804) 785-5830; Fax: (804) 785-3611
Dr. Carol B. Carter, Principal

- **Lawson-Marriott Elementary**
1599 Newtown Road, St. Stephens Church, VA 23148
Phone: (804) 769-3116; Fax: (804) 769-4091
Cora B. Coefield, Principal
- **Central High School**
17024 The Trail, King and Queen Court House, VA 23085
Phone: (804) 785-6102 or (804) 769-2444
Fax: (804) 785-5129
Antione Monroe, Principal

Library

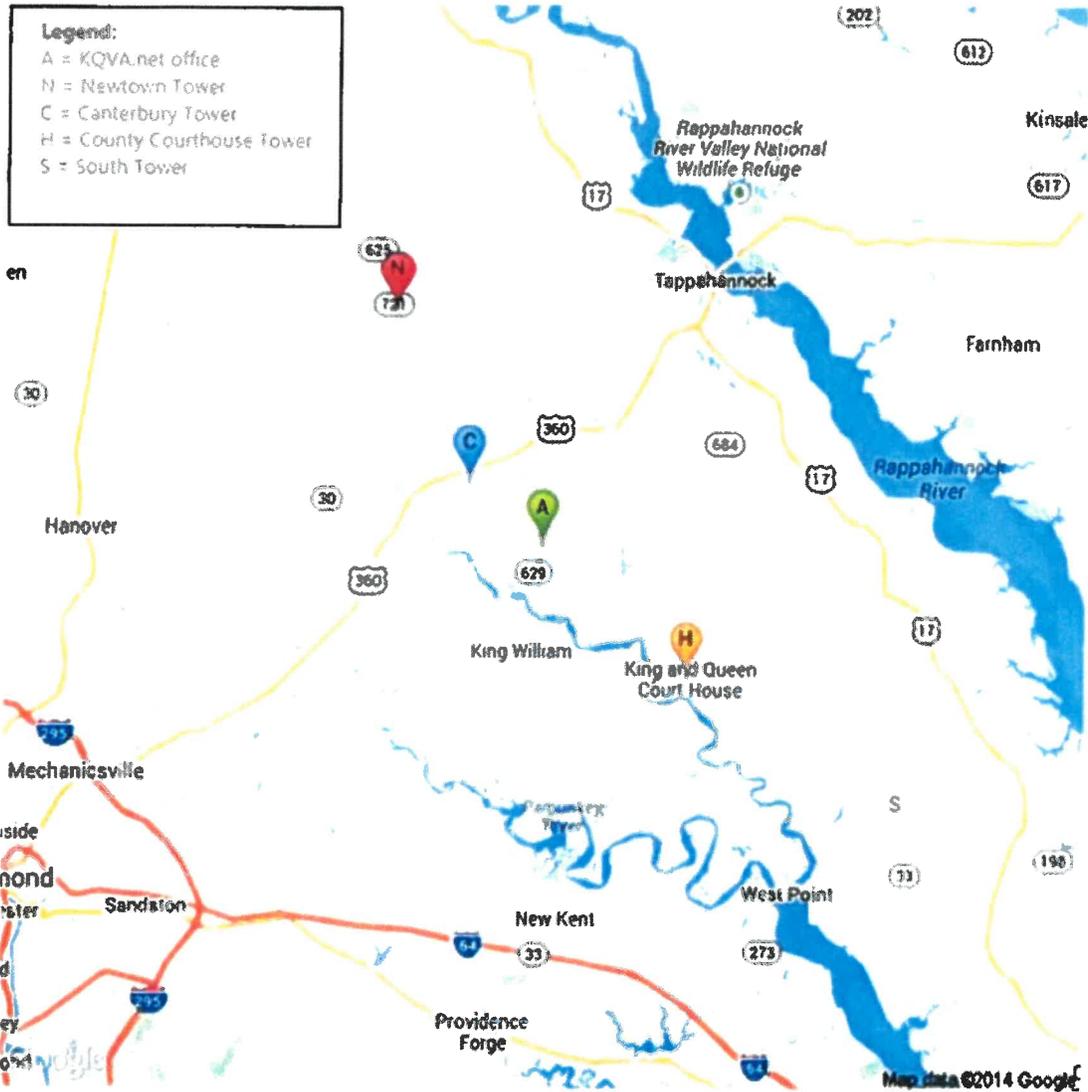
King and Queen County is served by the Pamunkey Regional Library with the King and Queen Branch Library located at 396 Newtown Road, St. Stephen's Church, Virginia 23148.

2.3 Broadband/Internet Infrastructure and Access Services

King and Queen County established the King and Queen County Wireless Authority with the goal of providing wireless Internet access to citizens. King and Queen County partnered with Gamewood Technology Group who is responsible for service delivery and support for the wireless Internet service. The following shows the current coverage map for the service.



The following map shows the location of the towers which are utilized to provide the wireless Internet services.



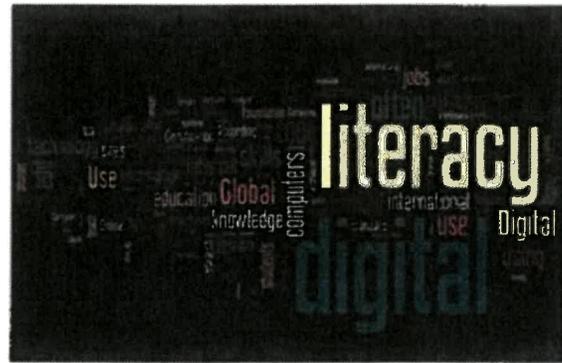
The following table provides a summary of the bandwidth options offered by KQVA.net.

Wireless Service Products			
Price/Month	Download Speed	Upload Speed	Product Description
\$29.99	512 kb/s	128 kb/s	Basic - Best Effort
\$39.99	1.0 mb/s	512 kb/s	Standard
\$49.99	2.0 mb/s	768 kb/s	Enhanced
\$69.99	3.0 mb/s	3.0 mb/s	Premium
\$89.99	6.0 mb/s	6.0 mb/s	Supreme



3. Digital Literacy Posture

Lack of computer or digital literacy skills among non-adopters is a key barrier that must be overcome to promote broadband adoption. Some non-adopters may be open to the idea of using the Internet, but may not know how to use a browser, conduct an Internet search, or send an email. Others may have basic skills and may be open to taking advantage of more advanced opportunities, such as social networking or photo editing.



The following table reflects the current Digital Literacy Inventory of King and Queen County based on information provided by the Library and Rappahannock Community College. Based on the low attendance of these classes, there is a need to market these offerings as much as possible and couple that marketing with broadband awareness events.

Brief Description	How many offerings per year?	Typical Schedule (day of week/time of day)	Total Graduates through the program in past 12 months?	Level of attendance? (full, medium attendance, low attendance)
King & Queen Branch Library				
Computer Basics I This class covers beginning computer skills like finding out about the parts of a computer, learning how to use a mouse, beginning to explore & search the Internet, and setting up a web-based e-mail account.	1	Thursday, June 27, 2013, 5:30 p.m.	0	low
Computer Basics II This class covers how to create and save documents with Microsoft Word 2007 and how to surf the Web with Internet Explorer.	2	Thursday, July 25, 2013, 5:30 p.m.	6	Low/medium
		Thursday, February 27, 2014, 5:30 p.m.		
Learning Microsoft Word In this class you'll learn how to complete basic tasks in Microsoft Word 2007, like editing and saving a document, how to add formatting, and more.	2	Thursday, February 28, 2013, 5:30 p.m.	8	medium
		Thursday, August 29, 2013, 5:30 p.m.		
How to Borrow eBooks Would you like to learn how to borrow eBook or eAudiobooks on your eReader, tablet, or other mobile device? Find out the steps to getting your favorite titles in this informative class using OverDrive.	1	Tuesday, January 21, 2014, 6:30 p.m.	0	Low
		(session cancelled due to inclement weather)		
Rappahannock Community College Workforce				



Brief Description	How many offerings per year?	Typical Schedule (day of week/time of day)	Total Graduates through the program in past 12 months?	Level of attendance? (full, medium attendance, low attendance)
<p>ITEC 1067 Computers for Seniors Designed for the new user, or the person who is simply not that comfortable with technology, this 9-hour course will begin with basic computer operating fundamentals for both hardware and software. Follow-on sessions will develop competency in key boarding, file/folder organization and management, internet usage, email usage and managing various file formats including photos.</p>	<p>>12</p>	<p>9-12PM ; 1-4PM</p>		
<p>ITEC 1164 Excel for Office 2010 - Intro Designed to teach the basic principles of MS Excel including, workbook and spreadsheet creation, task bar familiarity, cell formatting, basic formulas, and data sorting. Basic charting and graphing are also covered.</p>	<p>10-12 (?)</p>	<p>9-4PM</p>		
<p>ITEC 1239 iPad for New Users If you have recently purchased and iPad or are planning on purchasing one, this class is for you. Gain proficiency in using your iPad for sending/receiving email, taking pictures and videos, accessing social media and downloading apps. iPad are provided in class; students are welcome to bring their own.</p>	<p>4-6 (?)</p>	<p>9-3PM</p>		
<p>ITEC 1719 Making Social Media Work for You Friending, tweeting, or linking. Everyone seems to be on Facebook, Twitter, LinkedIn, or some other social networking site that you may have never heard about. What is Social Media? What do you need to know about it before you become a participant? Learn to navigate your way around the more popular social media applications, how to set up your profile, post information, photos and most importantly how to manage who, what, and how others see the information you are posting.</p>	<p>8 (?)</p>	<p>5-7PM ; 1-3PM</p>		
<p>ITEC 1720 Are You Smarter than your SMARTPhone? If you have a smartphone and would like to use it for more than just making and receiving calls, this class is for you. Learn how to get the most of your phone's capability including sending e-mail, downloading and sending photos,</p>	<p>4 (?)</p>	<p>9-12PM; 4-7PM</p>		

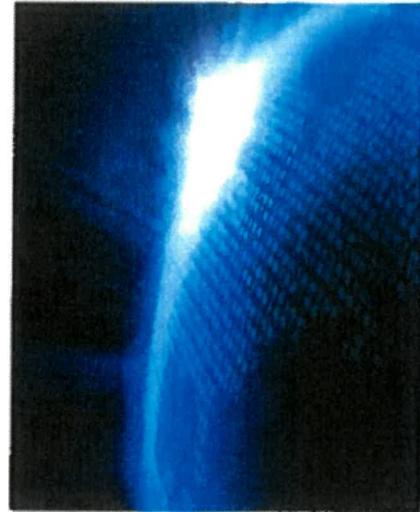


Brief Description	How many offerings per year?	Typical Schedule (day of week/time of day)	Total Graduates through the program in past 12 months?	Level of attendance? (full, medium attendance, low attendance)
accessing social networking sites, maps, weather, search engines and so much more!				
<p>ITEC 1721 Intro to Windows 8 PC Operating System (OS) Considering upgrading to Windows 8 OS? Or just purchased a new desktop or laptop with Windows 8 installed? This class will provide a basic overview of the capabilities of Windows 8 OS, the changes in functions and navigation from Windows 7 and earlier OS versions.</p>	1-2?	9-4pm		



4. Broadband Adoption and Community Needs and Opportunities

One of the most important aspects of this project is to understand who IS online as well as who IS NOT. For those who are not, we want to understand why. In order to gather this information, we developed a survey which was sent to approximately 2900 households in King and Queen County. Another goal of the survey was to better understand needs and wants of the community. These needs wants along with problems which were identified serve as the basis for establishing an implementation plan for moving people who are not online into the online community.



NTIA research has found that there are a number of barriers that keep individuals from adopting broadband. The following is a summary of the five primary barriers which typically exist.

- **Access and Availability:** While not the most prevalent factor, lack of access and availability still remain a key barrier to adoption. Access is a barrier for households in areas where high-speed Internet is not available, especially in rural areas of the country. According to NTIA's 2011 Digital Nation report, 40 percent of rural Americans did not subscribe to broadband at home, with 9.4 percent (compared to 1 percent in urban areas) noting a lack of broadband availability as the primary barrier to adoption.
- **Cost:** Rural and urban populations alike cite the high cost of broadband subscriptions as a reason for non-adoption. Nonadopters also may have concerns about the confusing and unpredictable nature of broadband subscription costs, or find that the cost of purchasing and maintaining a computer is a barrier to connecting to broadband service.
- **Perception:** Many non-adopters have not experienced the benefits of being online and are apprehensive about the Internet. They perceive the Internet as unknown and dangerous, potentially compromising privacy, the safety of their children, and their financial security. They may not be aware of opportunities to learn how to protect themselves on the Internet or to be part of a social network that includes people with the expertise to help them.
- **Relevance:** Non-adopters often do not believe that broadband Internet is relevant to their lives. These Americans are used to performing tasks and accessing services without using the Internet, and they do not think that there is anything on the Internet that would improve or enhance their lives.



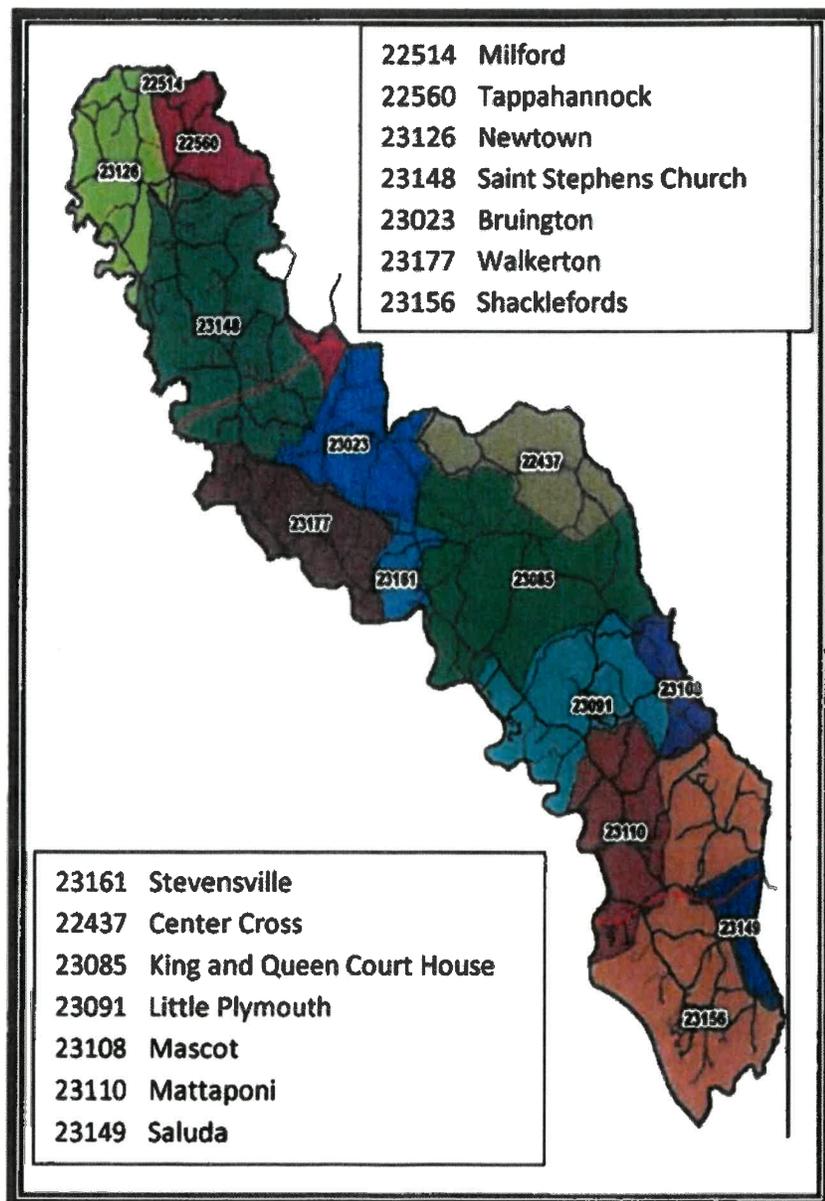
- **Skills:** Many non-adopters, especially older, less-educated, and lower-income Americans, do not have the digital literacy skills needed to use online tools and services effectively. They may own computers and/or have broadband available to them, but they are not comfortable, confident users.

This section of the document sets forth the details of the survey and the information which was garnered through the survey process.

4.1 About the Survey

There were two conduits which were utilized to elicit information from citizens of King and Queen County. First, a survey was sent to approximately 2900 households in King and Queen County. The basis for the addresses for this survey was the personal property addresses utilized for tax billing for King and Queen County. This list of addresses was then filtered utilizing information from the County's Geographic Information System(GIS) to ensure only addresses that are within the County were utilized.

The second conduit utilized was King and Queen County Public Schools. Surveys were sent home to all students at King and Queen Elementary, Lawson-Marriott Elementary and Central High School. Households receiving two surveys were asked to only complete and return one so we would not double count results.



4.2 Summary of Responses

The following is a summary of survey responses which were received. Overall, we were very pleased with the number of responses. Based on the number of responses, we can garner a relatively high degree of confidence in our assumptions from the areas highlighted in red.

Zip code	City	Survey Responses	Confidence Level	Variance (+/- Points)
22437	Center Cross	10		
22560	Tappahannock	16		
23023	Bruington	28		
23085	King and Queen Court House	38	95	14
23091	Little Plymouth	29	95	16
23108	Mascot	14		
23110	Mattaponi	63	99	15
23126	Newtown	36		
23148	Saint Stephens Church	89	95	10
23149	Saluda	10		
23156	Shacklefords	136	95	7.7
23161	Stevensville	12		
23177	Walkerton	52	95	13
TOTALS		534	99	5.36

4.2.1 Percentage of Households Responding by Town

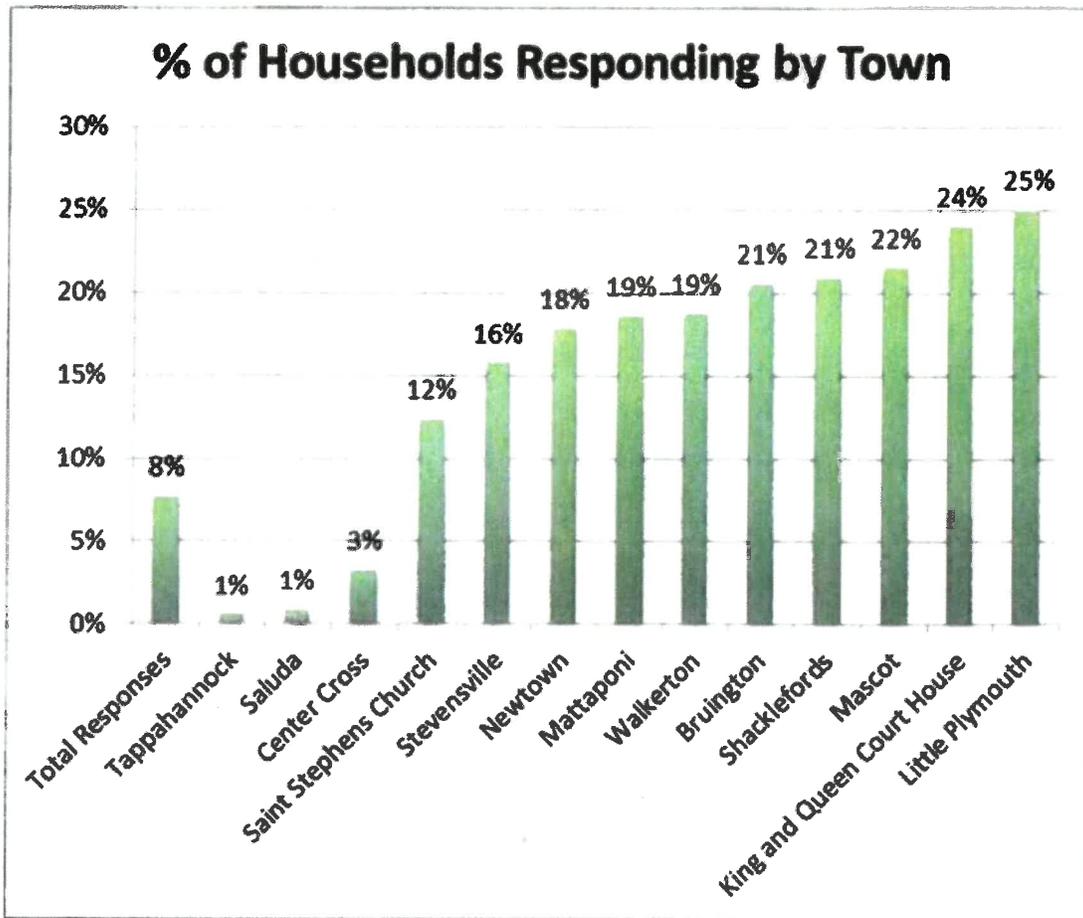


Figure 1 – % of Households Responding by Town

4.2.2 Respondents by Age

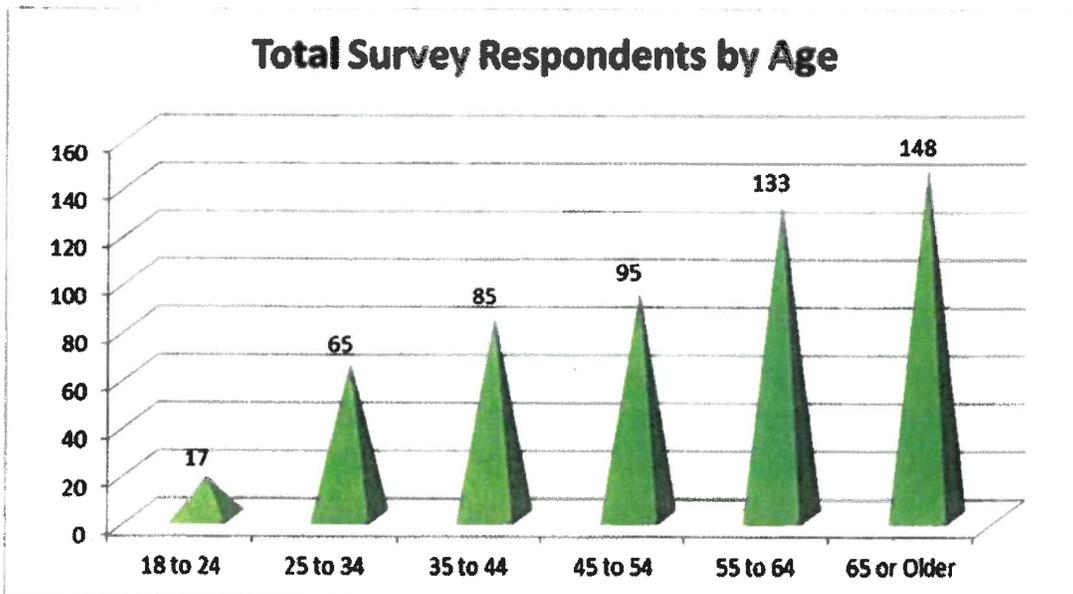


Figure 2 – Total Survey Respondents by Age



4.2.3 Persons in Household by Town

The following chart provides a summary of the number of persons in each household for the individuals who responded to the survey.

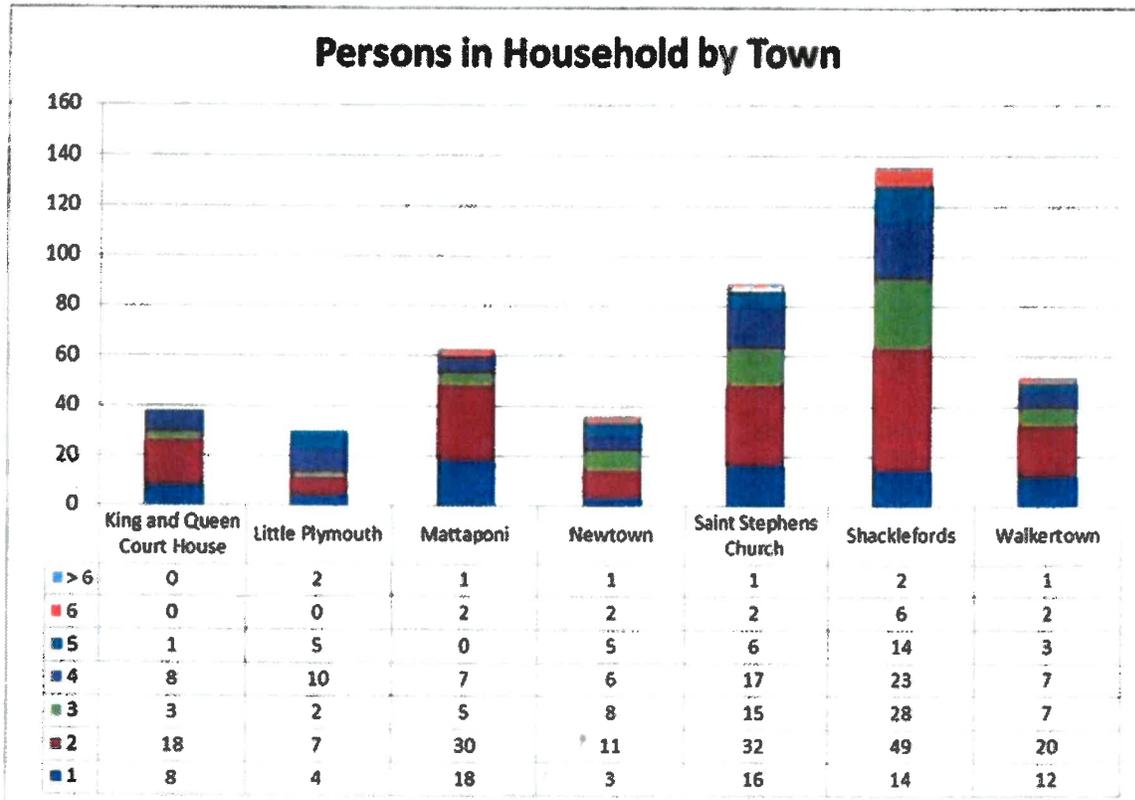


Figure 3 – Number of Persons in Household by Town

4.2.4 Predominant Language in the Home

Based on the results from the survey, English was by far the predominant language spoken in most homes with only 4 homes who did not speak English. The only other languages spoken were as follows:

- Spanish
- Chinese
- French

4.2.5 Computer Usage in the Home

91% of the respondents said they had utilized a computer at home, at work, or at school. 83% responded that they have a computer in their home with 17% who do not. Below is a summary of the reasons which were cited for not having a computer in the home.

Reasons for Not Having a Computer in the Home	Percentage
Concern about Children's Access	1%
Cost/Too Expensive	47%

Reasons for Not Having a Computer in the Home	Percentage
Do not know how to use it	29%
Sufficient access elsewhere	5%
Don't want it or no interest	16%

66% of the respondents said that they utilize a cellphone or tablet to access the Internet in their home.

4.2.6 Respondents with Disabilities

13% of the respondents or 72 households identified some type of disability, handicap, or chronic disease that keeps them from participating fully in work, school, housework, or other activities? Of these 72 households, 31 or 43% do not have Internet access.

4.2.7 How People Using the Internet

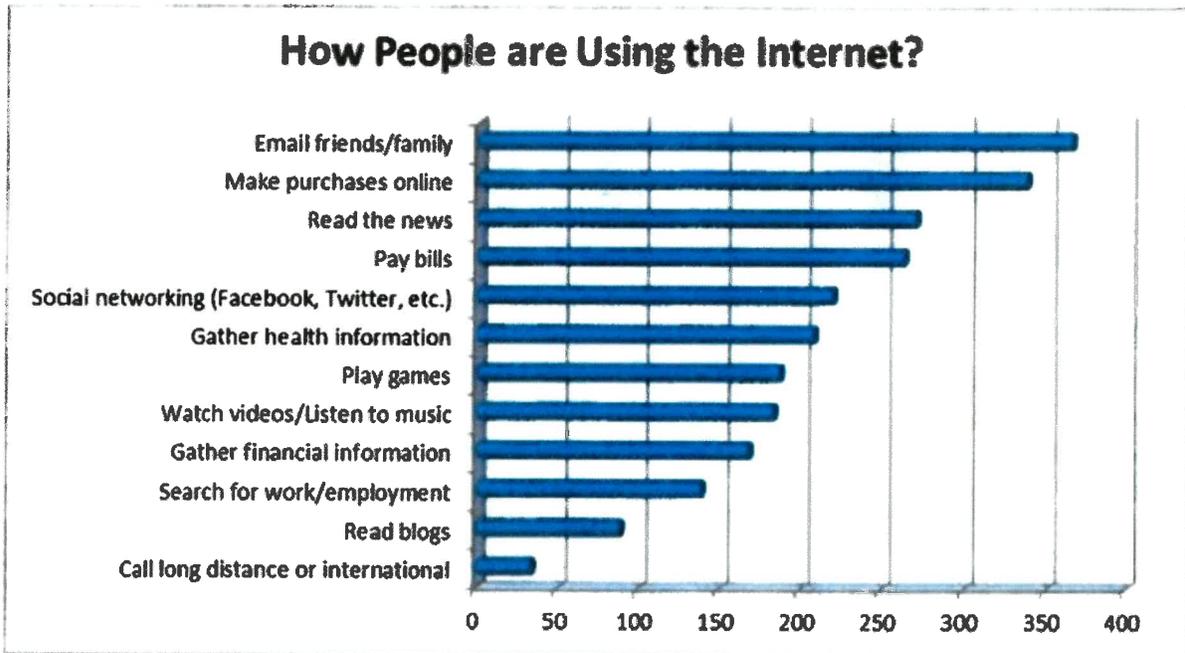


Figure 4 – How People are Using the Internet?



4.3 Internet Access

This section of the report details information about whether the respondents had Internet access along with additional details about the type of access. This information is broken down by town based on the zip code provided in the survey.

The following chart shows a breakdown of the age groups and the percentage of respondents within each age group who have Internet access. With the exception of the 18 to 24 age group, over 60% of the individuals in each age group have Internet access.

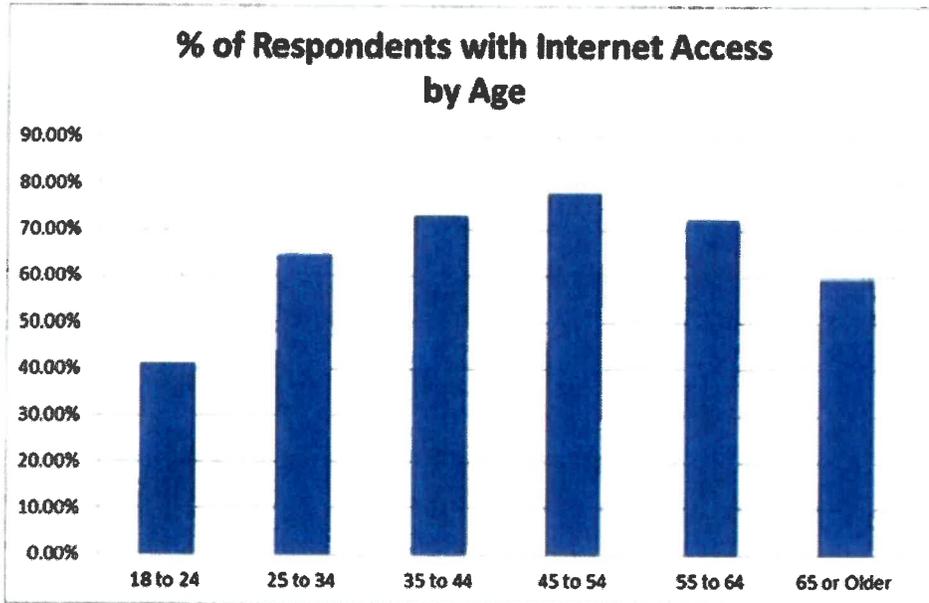


Figure 5 – Respondents with Internet Access by Age

In addition to looking at age, another key factor evaluated was access based upon where the respondent lives.

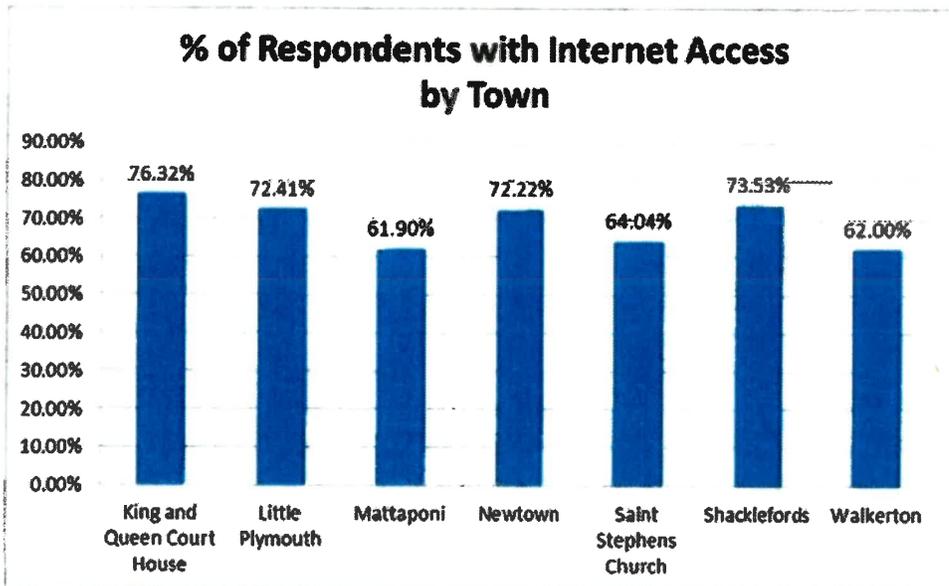


Figure 6 – Respondents with Internet Access by Town

Figure 6 shows that 60% of the individuals living in the towns with the greatest response, have Internet access.

Age is a key factor in evaluating not only access but also in identifying the groups who do not have access that we may need to target for follow up. The following figure shows the percentage of respondents within each age group who have Internet access based on the town where they live.

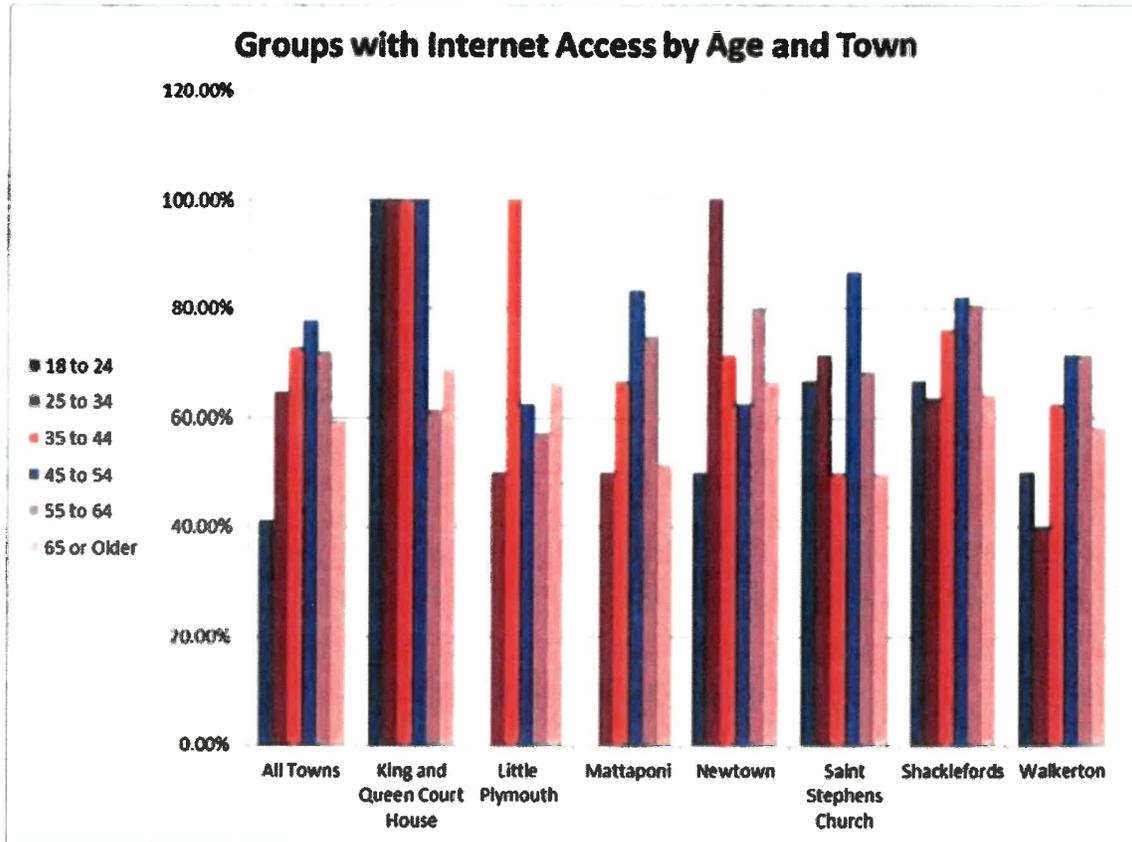


Figure 7 –Groups with Internet Access by Town and Age

One of the goals of this study is to better understand the groups that do not have Internet access and establish strategies for increasing this access. The following figure, Figure 8, shows a detail of the age groups who do not have Internet access. Between Figure 7 and Figure 8, there are a few conclusions that should be noted:

- The age group with the most access is the 45 to 54 group.
- The group with the least amount of access is the 65 or Older group followed closely by the 55 to 64 age group.



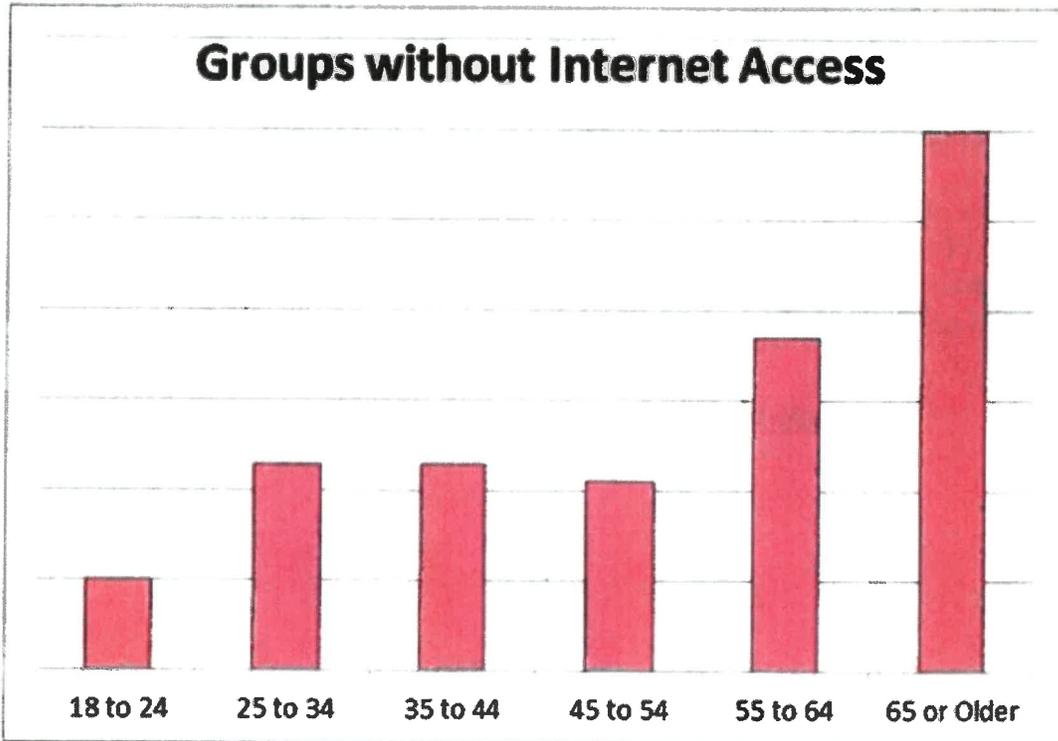


Figure 8 –Groups without Internet Access

4.3.1 Type of Access

69% of survey respondents have Internet Access. Of these respondents, wireless was the predominant type of access as reflected by the figure below.

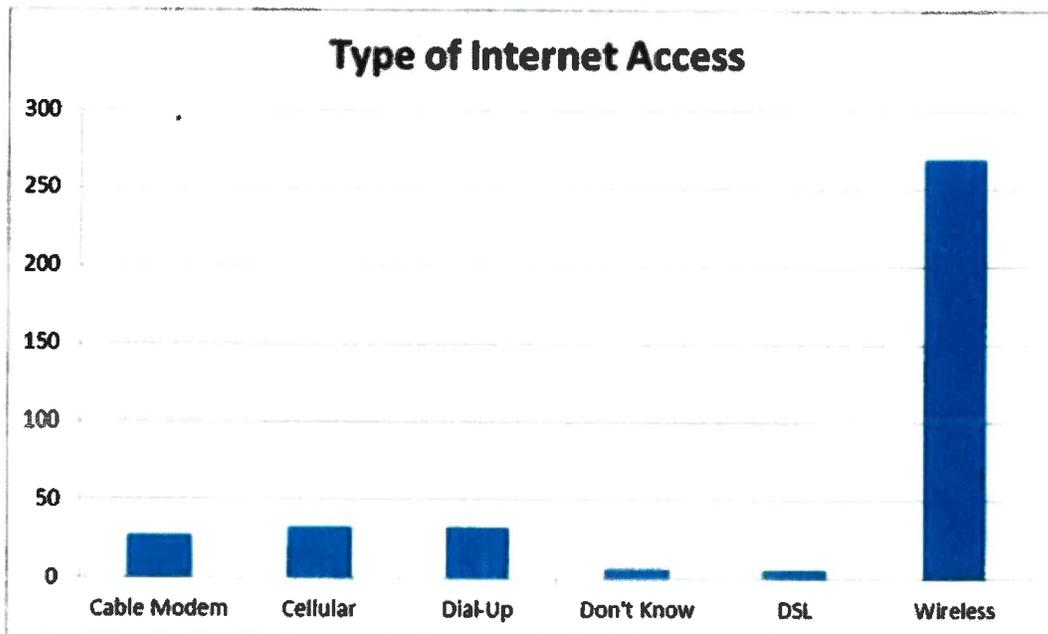


Figure 9 –Type of Internet Access

This can be further broken down by town as shown in the following figure. This figure reflects the type of Internet access utilized by the respondents who have Internet



access. It is interesting to note that Shacklesford has some cable modem but also has the greatest number of responses reporting "wireless". This may be skewed by citizens responding "wireless" because their access is wireless within the home, not thinking about the connection to their home. This is often a common misunderstanding in broadband surveys.

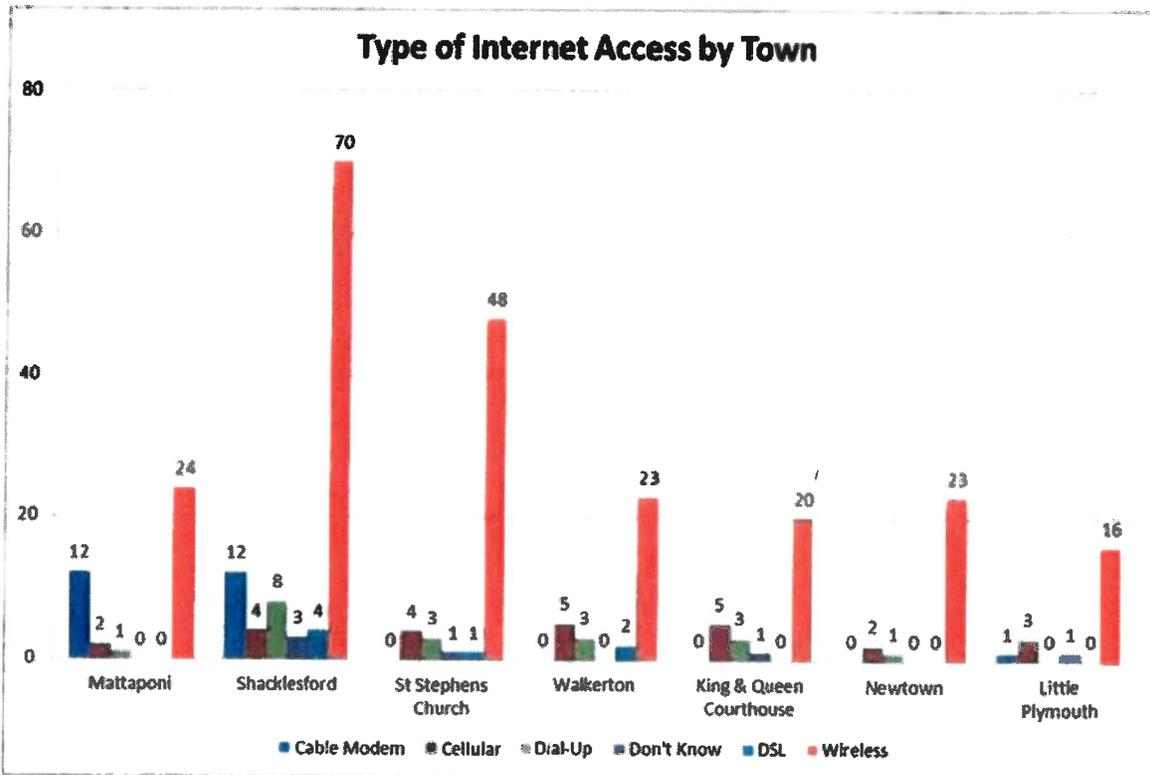


Figure 10 – Type of Internet Access by Town

4.3.2 Barriers to Access

One of the goals of the survey was to identify why the people that do not have Internet access do not have it. The following figure provides a summary of the reasons which were given by the respondents who do not have Internet access. One of the reasons identifying these barriers is important is to allow us to identify strategies for removing the barriers if possible. Based on the information presented below, a few important points should be noted:

- Cost is the #1 barrier identified by respondents. One of our goals will be to determine options to remove or reduce this barrier.
- Another barrier noted is that respondents do not know how to use the Internet. This presents an opportunity in that if we can educate this group, then we will be able to remove this barrier. Based on the digital literacy training classes offered by the library and the low attendance, there is definitely an opportunity to increase



marketing of these classes and consider the time of day they are offered – does the scheduling allow full time employees to attend in the evenings or weekends?

- The #2 barrier noted was availability. Once again, this is a barrier which can continue to be reduced as the wireless service area expands.

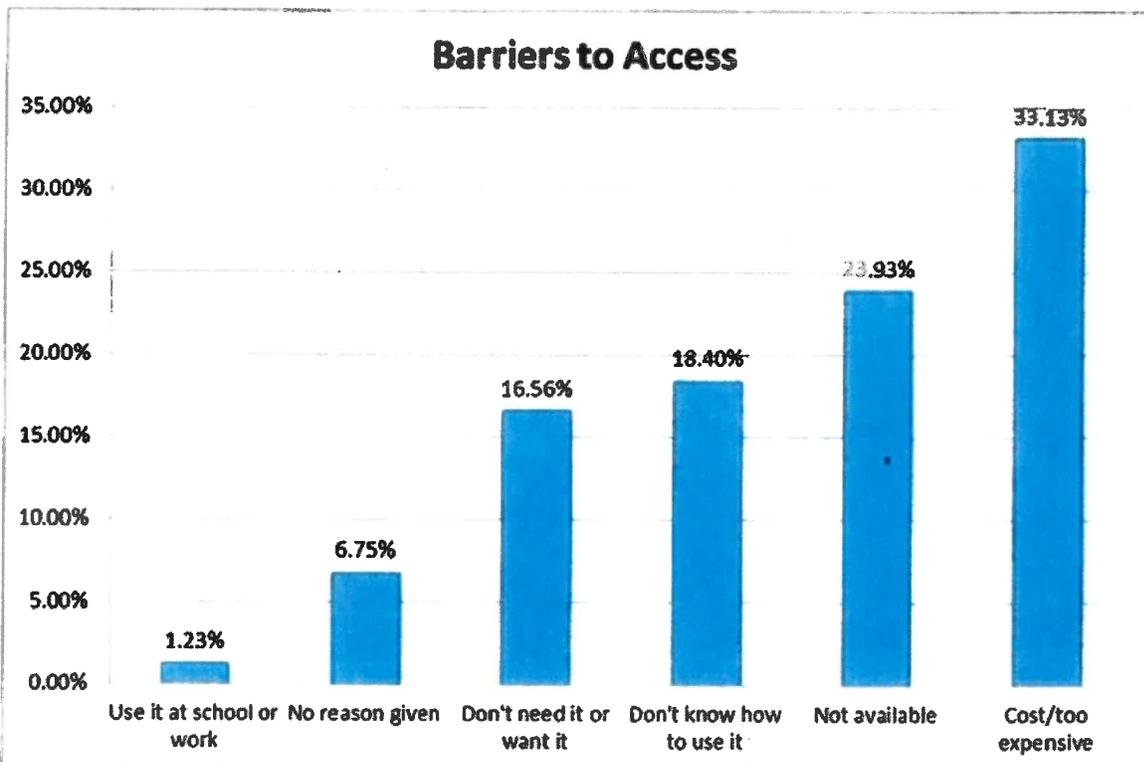
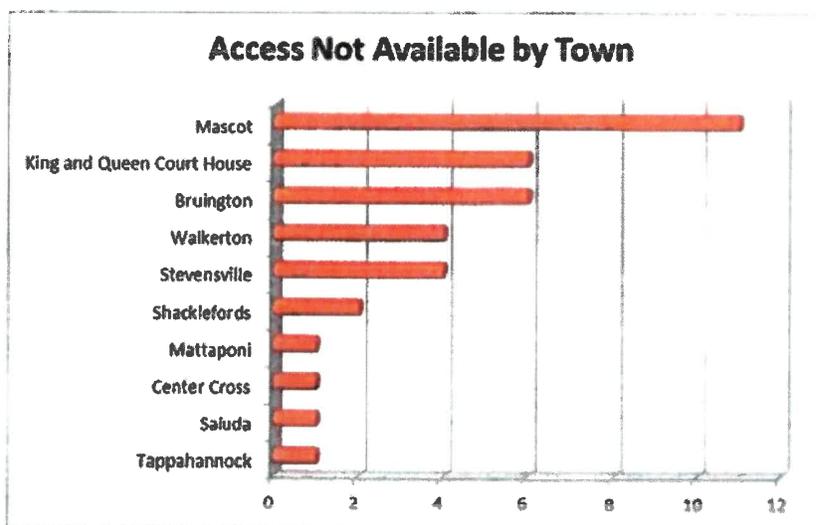


Figure 11 – Barriers to Access



One of the reasons given for not having access was that service is not available. This figure shows the towns where these responses originated giving the County insight into where future expansion of the wireless service may be useful.

Figure 11.1 – Access Not Available by Town

As a part of the survey, respondents were asked to comment on other reasons they do not have access if the reason did not fall into one of the categories above. Below is a list of other reasons which were given.

- Security
- Autistic child
- Cannot get KQVA.net
- Computer hit by lightening
- Tablet broke



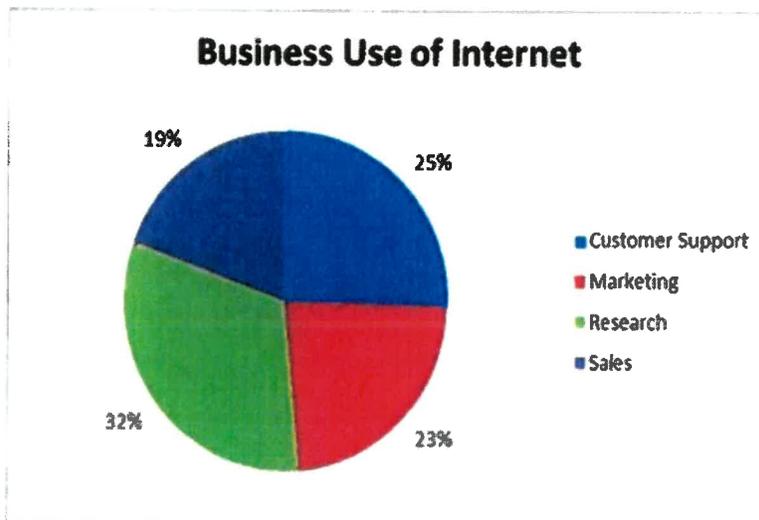
4.4 Use of the Internet by Businesses

Another area which was investigated through the survey was the use of the Internet by business or use of the Internet in the home for business purposes. This section outlines information which was obtained through the surveys.

17% of respondents indicated they own a business. The following figure outlines the towns where these businesses are located. As the information reflects, the greatest concentration of businesses is in Mattaponi, St. Stephens Church and Shacklesford.



Figure 12 – Towns Where Businesses are Located



74% of the respondents who own a business indicate they utilize the Internet to support their business. Figure 13 provides more details about what these businesses are utilizing the Internet to accomplish.

Figure 13 – Business Use of Internet

19% of the respondents utilize the Internet for sales. As part of the survey, respondents were asked to identify what percentage of these business sales are attributable to online transactions. 85% of the respondents who utilize the Internet for sales garner less than 10% of their revenue from their business from the Internet. There is an opportunity to work with these businesses through a workshop to help them improve the percentage of their sales which come from the Internet.

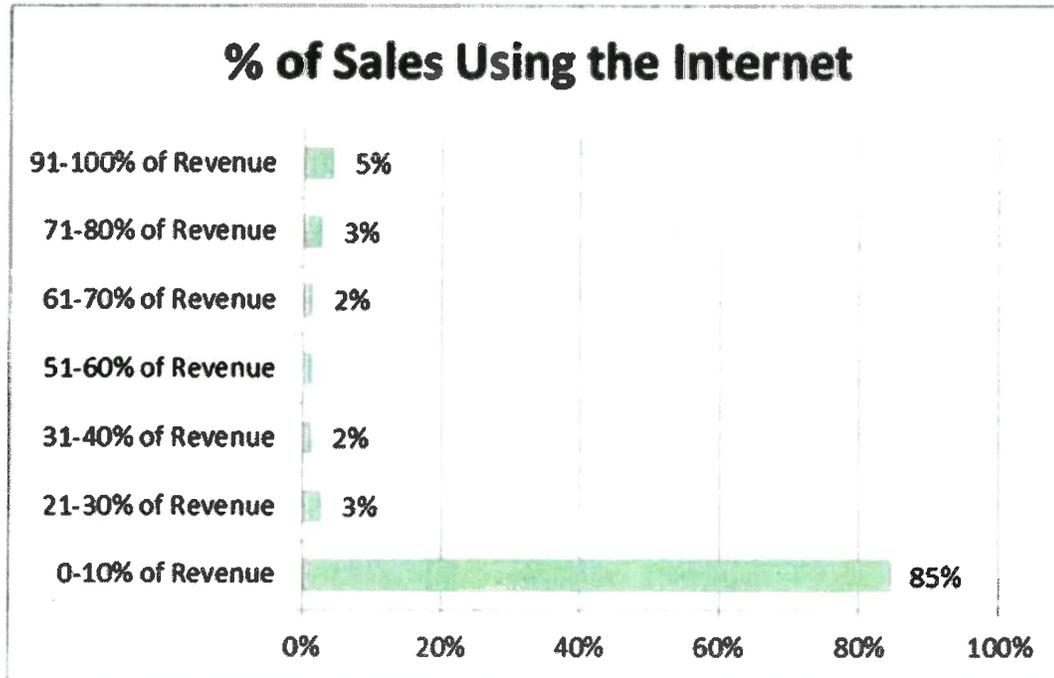


Figure 14 – % of Sales Using the Internet

4.4.1 Barriers for Business

One of the import points from the survey is to understand why people who own businesses are not using the Internet. Based on our survey, 26% of the respondents who own a business do not utilize the Internet. Figure 14 details the reasons they provided for why they are not users.

The majority of respondents who do not use the Internet believe there is no relevance to their business. This provides the community with opportunities to conduct a local business Internet workshop to discuss these findings and determine if relevancy does in fact exist but they are not aware. They simply may not be aware of the opportunities which exist and how these opportunities can be applied to their respective line of business.

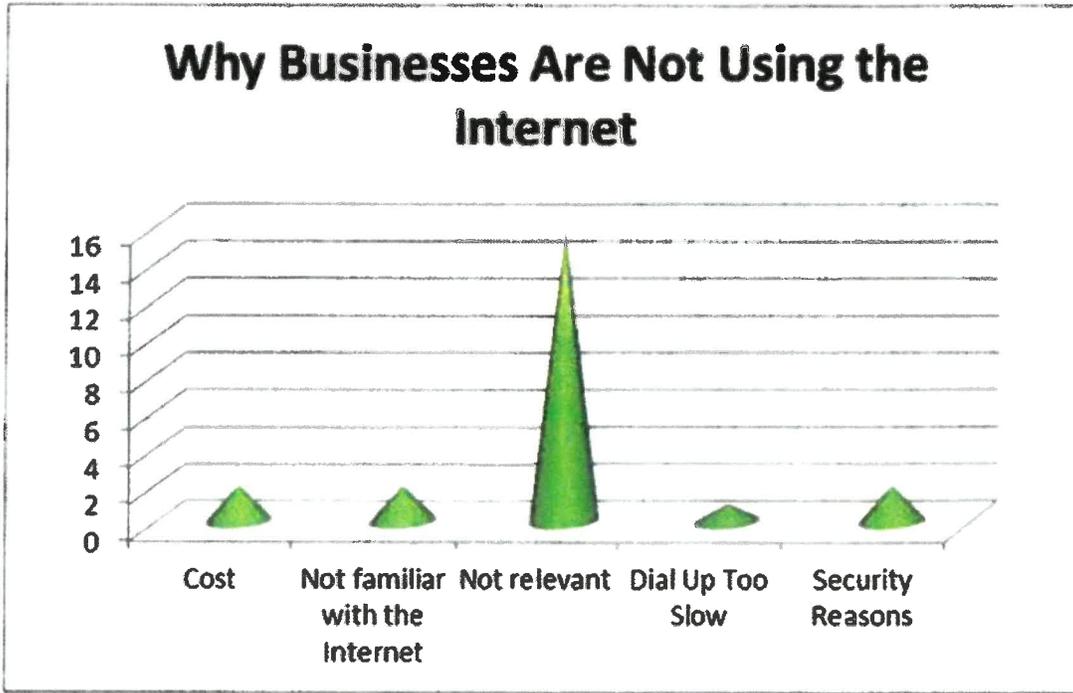


Figure 14 –Why Businesses are Not Using the Internet



4.5 Use of the Internet for Education

As previously mentioned, one of the conduits utilized to gain input through the survey process was King and Queen County Public Schools. One of the reasons for doing this is because one of the groups that can benefit the most of the Internet are students and their parents. It is important for us to identify ways we can increase access for this specific segment of the population. This section of the document outlines results which were obtained through the survey related to this specific group.

The survey population was analyzed and logic was applied as follows to identify the households which "may" have children in the household.

- Respondent Age Less than 54
- More than 2 people in the household

Based on this logic, there were 203 of 534 households which are households which we would expect to answer the questions about children. Of these 203, 115 surveys were identified that did not answer the questions about children. There is a possibility these surveys were likely answered incorrectly due to the flow of the survey.

14.7% of surveys responded they are a parent, stepparent, or legal guardian of children 18 or under? The following chart shows a breakdown of the school which the students attend.

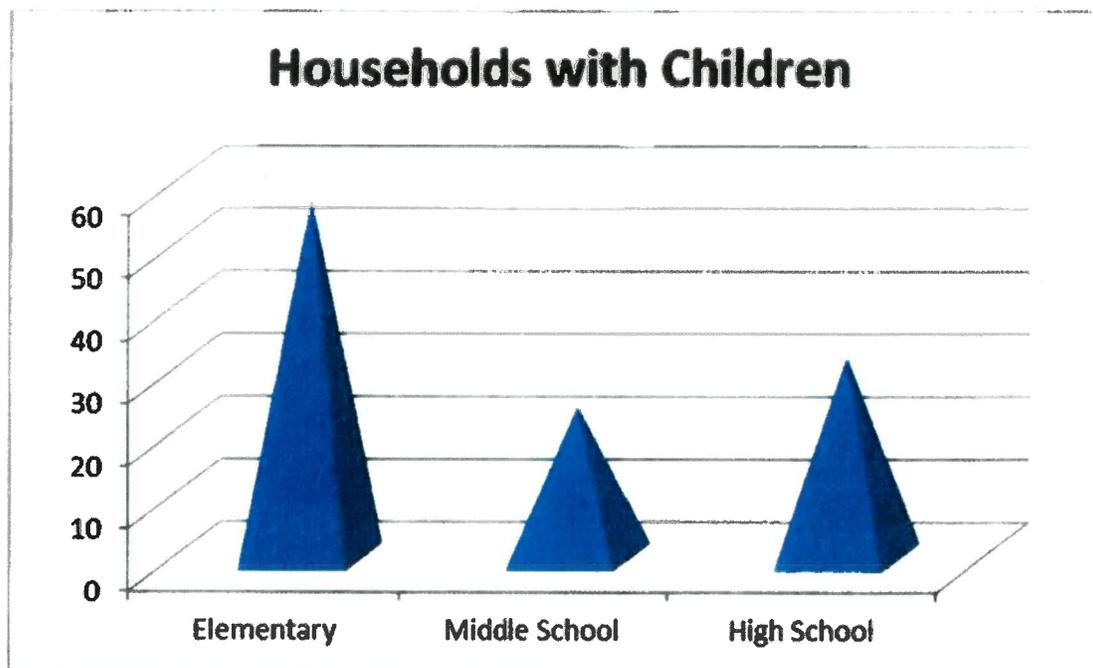


Figure 15 – Household with Children

	Elementary	Middle	High School
Total Respondents	57	24	32
Homes with Internet access	68.42%	58.33%	78.13%
Parents who visit the web site of their child's school	73.68%	66.67%	75.00%
Children who have access to the Internet after-school outside of the home	47.37%	66.67%	78.13%
Parents/guardians who feel comfortable using the computer to help their child with school work	92.98%	91.67%	93.75%

The following data presents additional information about children's Internet usage along with information about what parents are looking for in terms of assistance to aid them in aiding their children in utilizing the Internet more effectively. This information is broken down by school which will allow us to direct our follow up strategies.

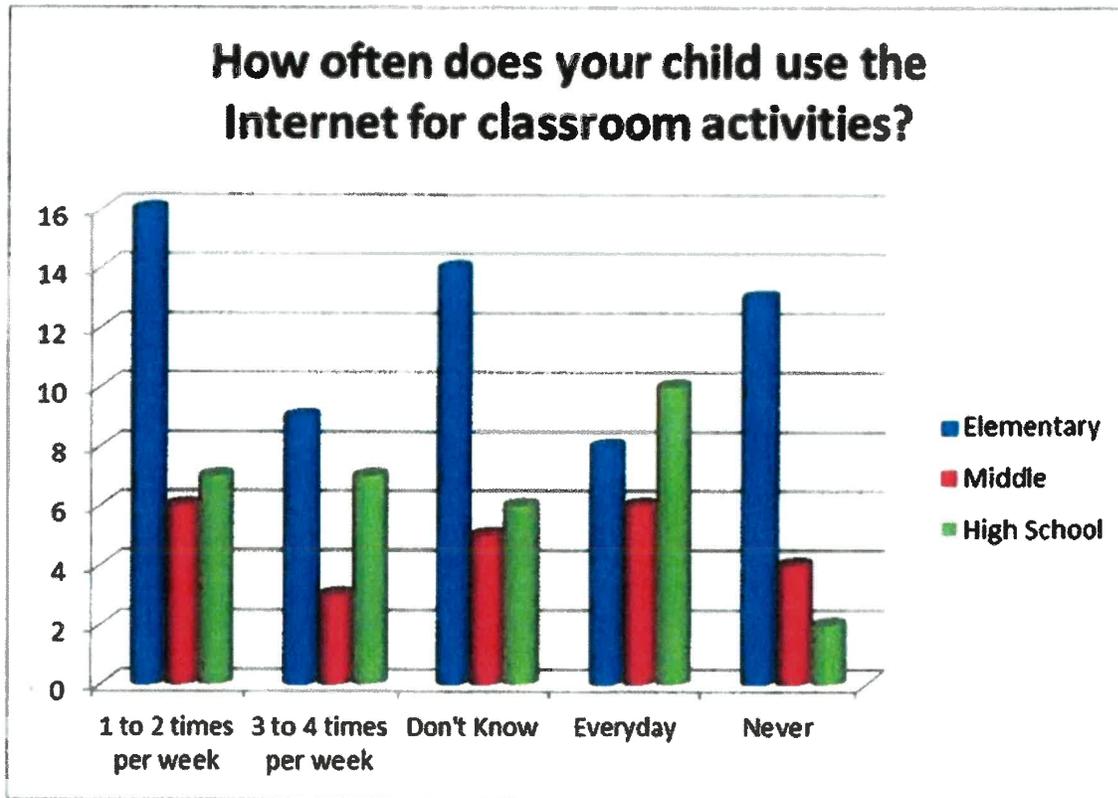


Figure 16 –Use of Internet for Classroom Activities



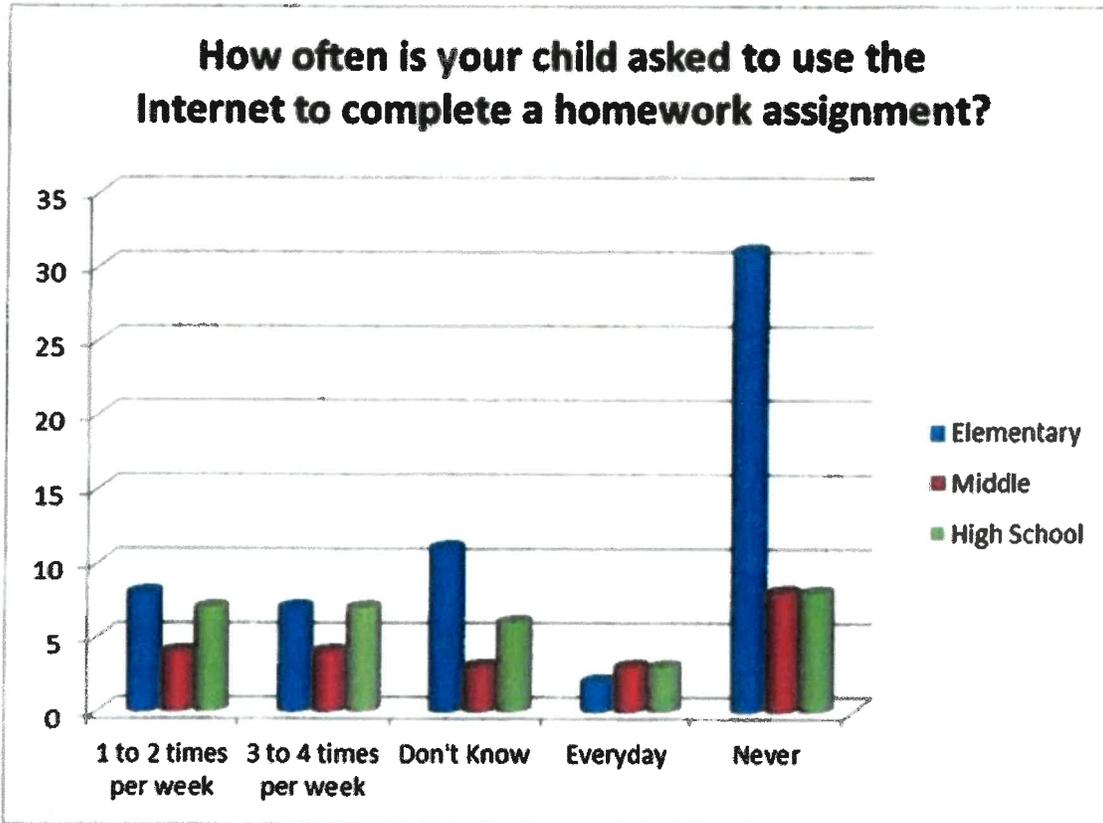


Figure 17 – Use of Internet to Complete Homework Assignments

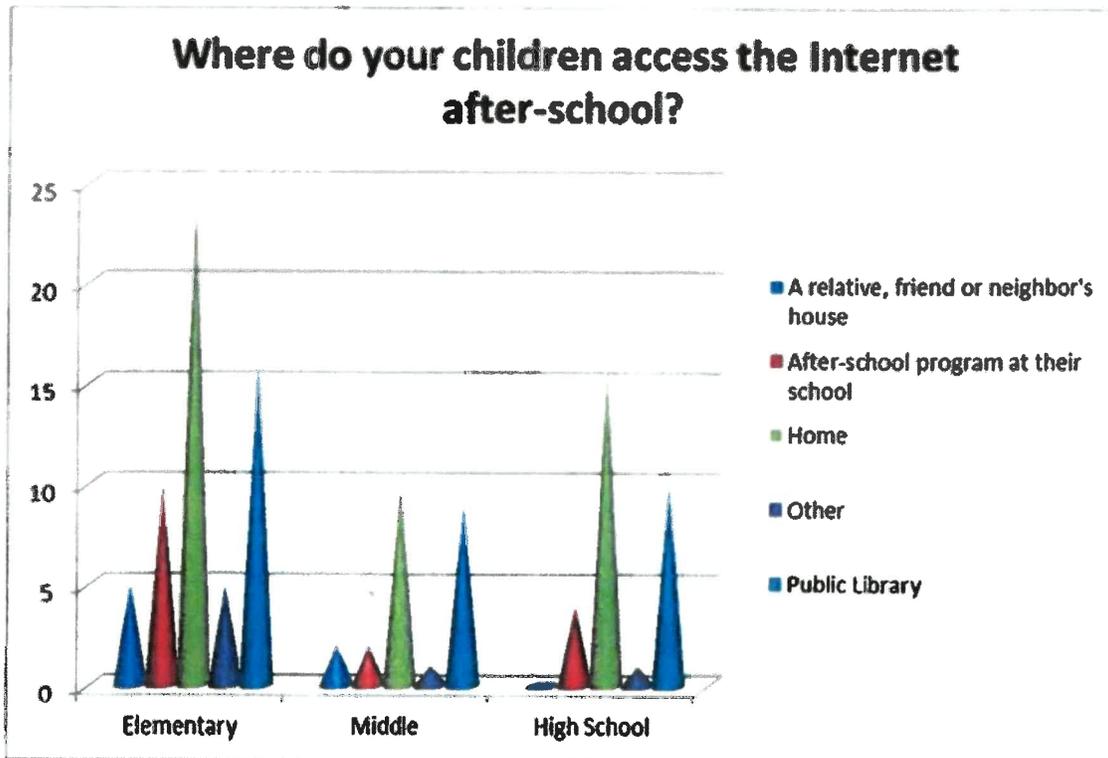


Figure 18 – Where Children Access Internet After School



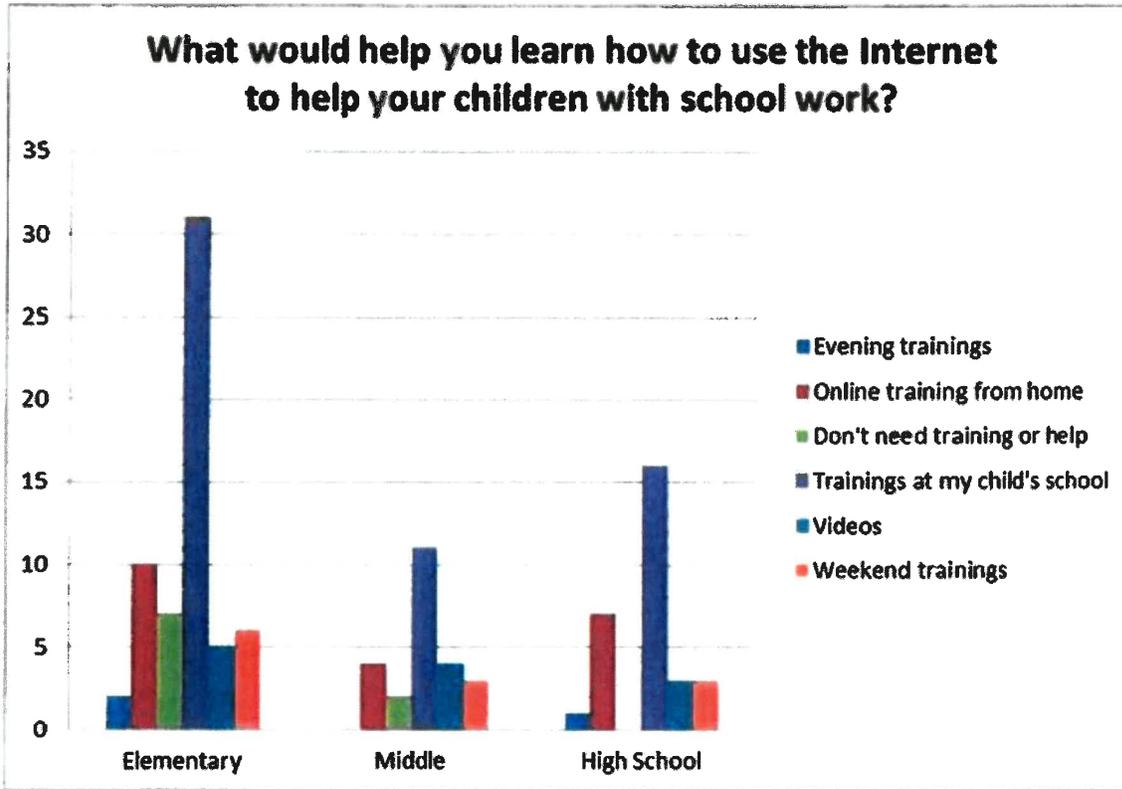


Figure 19 – What Would Help Parents Learn to Use the Internet

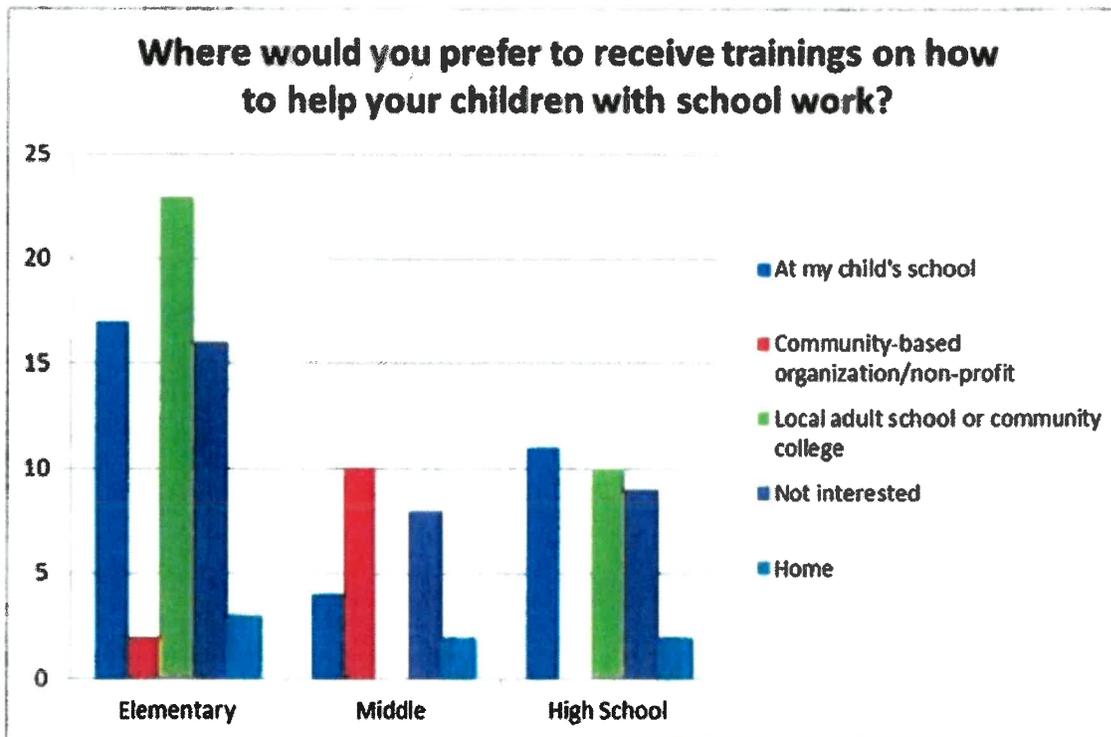
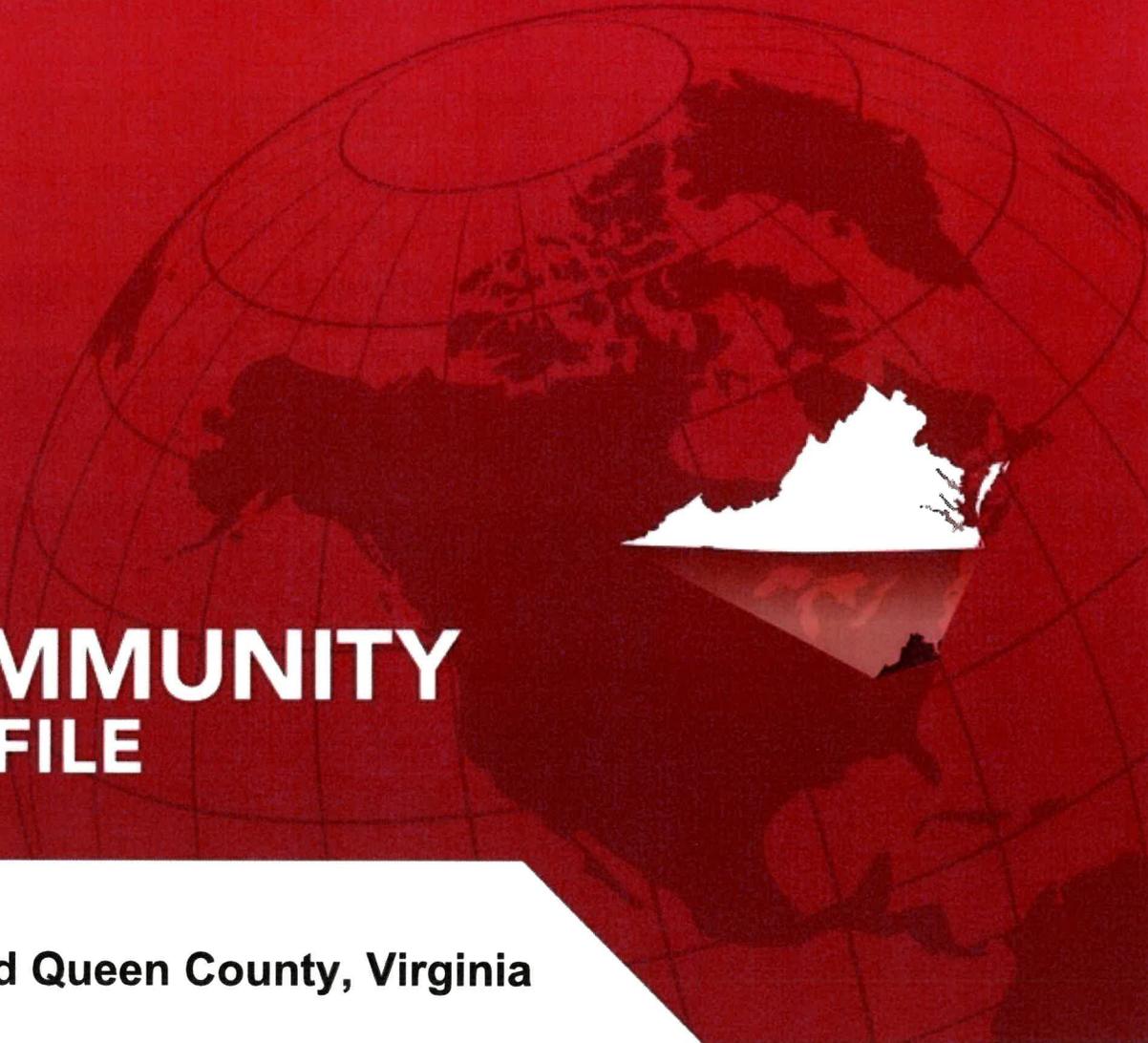


Figure 20 – Where Parents Would Like to Receive Training





COMMUNITY PROFILE

King and Queen County, Virginia



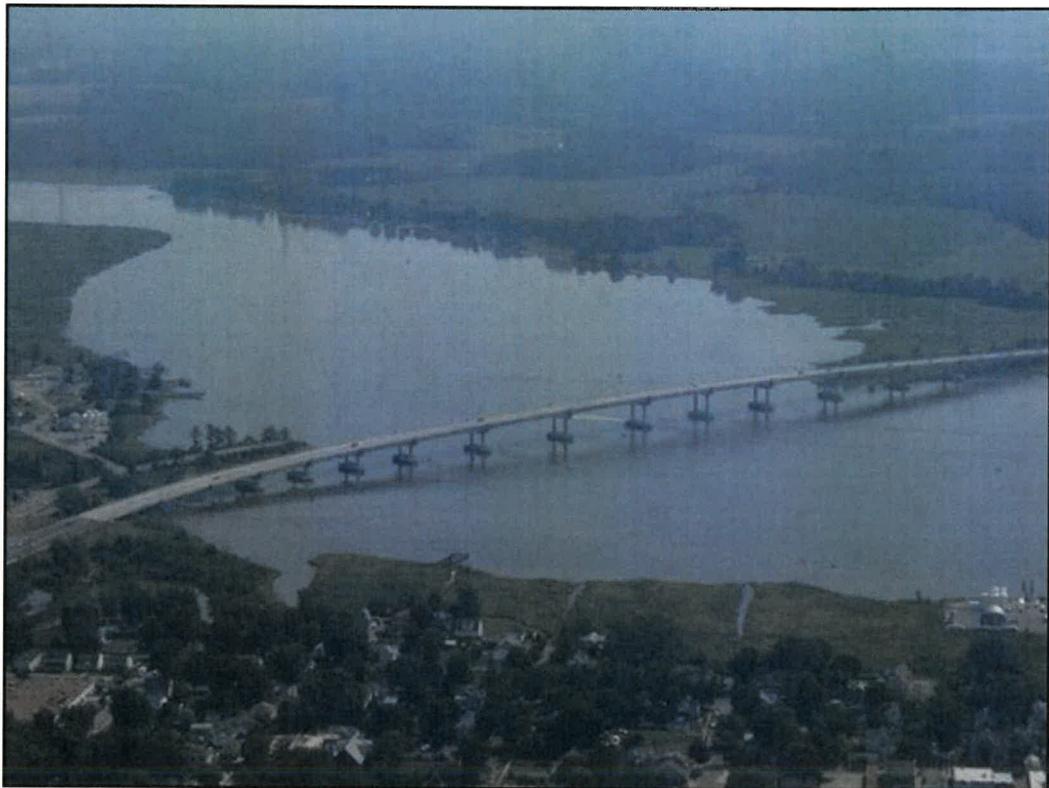
**VIRGINIA ECONOMIC
DEVELOPMENT PARTNERSHIP**
www.YesVirginia.org

King and Queen County

King and Queen County

In King and Queen County, you will find one of the most affordable business locations in the United States; a place where your business will get the attention it deserves. Our community's unique assets, including our scenic river front, our beautiful historic buildings, and our friendly people, are united to create a sense of community that others yearn to experience. The climate in King and Queen County is business friendly, with a government committed to economic development.

King and Queen County...Your Bridge to Opportunity



Labor Market

Population

Gender Distribution (2016)	Male	Female
King and Queen County	50.5%	49.5%

Race/Ethnicity (2016)

Classification	Profile Area	Extended Labor Area
White	4,856	103,957
Black	1,956	25,710
Two or More	183	3,511
American Indian or Alaska Native	129	1,068
Asian	35	1,199
Pacific Islander		103
Hispanic (may be of any race)	210	1,470

Median Age (2016)	48 years
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Civilian Labor Force (2016)

King and Queen County	3,613
Extended Labor Market Area	68,344
Total	71,957

Labor Force Participation (2011-2015)

King and Queen County	60.3%
Extended Labor Market Area	61.0%

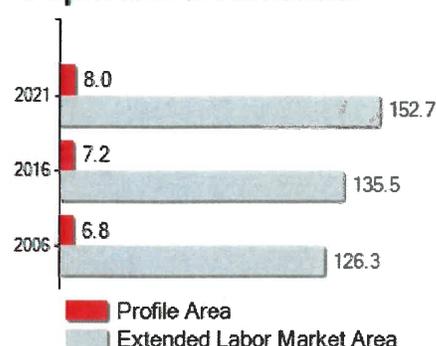
Unemployment

Unemployment Rate (July 2017)	
King and Queen County	3.8%
Extended Labor Market Area	3.7%
Statewide	3.9%

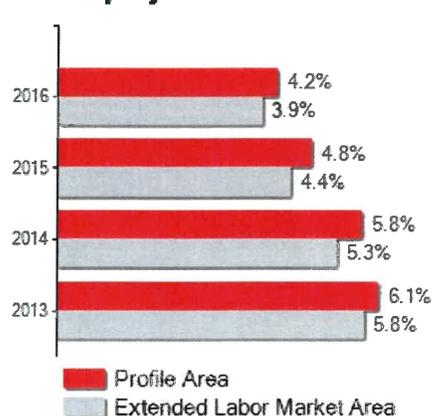
Unemployed (2016)	
King and Queen County	151
Extended Labor Market Area	2,652
Total	2,803

Underemployed (2nd Quarter 2017)	
King and Queen County	417
Extended Labor Market Area	8,683
Total	9,100

Population in Thousands



Unemployment Rates



Labor Market

Commute Time (2011-2015)		
Worked from home	255	7.9%
Under 15 minutes	384	12.9%
15-24 minutes	830	27.9%
25-34 minutes	336	11.3%
35-44 minutes	306	10.3%
45-59 minutes	619	20.8%
Over 60 minutes	500	16.8%
Mean Travel Time to Work (minutes)		36

Additional Labor Resources	
High School Graduates Not Continuing (2015-2016)	15
Two-Year College Graduates (Spring 2016)	659
Two-Year College Enrollees (Fall 2016)	4,067
Other College and University Graduates (Spring 2016)	159
Total	4,900

Rappahannock Community College's engineering program partners with Northrup Grumman to assist graduates with tuition and job placement at the Newport News Shipyard.

Labor Market

Career Readiness Certificate (01/01/2016-08/31/2017)

Virginia's Career Readiness Certificate (CRC) assists employers by certifying that a recipient possesses core skills in applied math, reading for information, and locating information. The CRC certification is based on established Workkeys® assessment tests. Virginia uses a three-tiered approach (bronze, silver, gold) to credentialing certificate holders that is based on the recipient's level of development skills.

King and Queen County	23
Extended Labor Market Area	165
Total	188

Agriculture and natural resources are major employers in the county.

Educational Attainment

On-Time Graduation Rate (Class of 2016)	82.4%
Percentage of King and Queen County population age 25+ who are high school graduates (2011-2015)	84.8%
Percentage of King and Queen County population age 25+ who have earned a Bachelor's Degree or higher (2011-2015)	18.1%

Labor Market

Employment by Sector* (1st Qtr. 2017)		
Agriculture Forestry Fishing and Hunting	80	7.6%
Mining Quarrying and Oil and Gas Extraction	N.D.	N.D.
Utilities	N.D.	N.D.
Construction	93	8.8%
Manufacturing	164	15.5%
Wholesale Trade	42	4.0%
Retail Trade	34	3.2%
Transportation and Warehousing	94	8.9%
Information	N.D.	N.D.
Finance and Insurance	N.D.	N.D.
Real Estate and Rental and Leasing	N.D.	N.D.
Professional Scientific and Technical Services	40	3.8%
Management of Companies and Enterprises	0	0
Administrative and Support and Waste Management	30	2.8%
Educational Services	N.D.	N.D.
Health Care and Social Assistance	67	6.3%
Arts Entertainment and Recreation	0	0
Accommodation and Food Services	40	3.8%
Other Services	27	2.6%
Total Government	296	28.0%
Federal Government	8	0.8%
State Government	29	2.7%
Local Government	259	24.5%
Unclassified	8	0.8%
Total	1,056	100.0%

N.D. - Not Disclosed

*By Business Establishment

Located in the Richmond MSA, the region has a workforce of approximately one million people.

Labor Market

Major Employers

Manufacturing

<i>Company</i>	<i>Product/Service</i>
ASB Greenworld Inc.	Fertilizers
Bennett Mineral Company, Inc.	Kitty litter
Leslie P. Rigsby Lumber Co.	Hardwood lumber products

NonManufacturing

<i>Company</i>	<i>Product/Service</i>
Crop Production Services Inc.	Wholesale farm supplies
Walter C. Via Enterprises, Inc.	Utilities contractor, site development

More than 3,500 students from King and Queen County attend Rappahannock Community College.

Labor Market



Union Activity (1/2014 - 3/2016)	
Petitions filed for decertification	0
Petitions filed for representation	0
Petitions filed for raid	0
Elections won by union	0
Elections won by company	0

Labor Market

Estimated Earnings (May 2016)

<i>Occupation</i>	<i>Median Wage</i>	<i>Mean Wage</i>	<i>Median Salary</i>	<i>Mean Salary</i>
Laborers and Freight, Stock, and Material Movers, Hand	\$10.50	\$11.24	\$21,831.58	\$23,375.77
Industrial Truck and Tractor Operators	\$14.40	\$15.34	\$29,957.64	\$31,917.83
Heavy and Tractor-Trailer Truck Drivers	\$16.01	\$17.15	\$33,288.68	\$35,666.87
Welders, Cutters, Solderers, and Brazers	\$16.37	\$16.35	\$34,056.80	\$34,014.12
First-Line Supervisors of Production and Operating Workers	\$27.22	\$33.40	\$56,610.77	\$69,460.75
Maintenance and Repair Workers, General	\$16.72	\$17.15	\$34,779.92	\$35,685.84
Bus and Truck Mechanics and Diesel Engine Specialists	\$21.91	\$20.47	\$45,567.41	\$42,576.19
Office Clerks, General	\$13.01	\$13.96	\$27,053.88	\$29,039.91
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$14.75	\$15.65	\$30,683.87	\$32,555.53
Receptionists and Information Clerks	\$13.05	\$14.68	\$27,151.90	\$30,539.89
Customer Service Representatives	\$13.75	\$14.59	\$28,613.09	\$30,349.97
Bookkeeping, Accounting, and Auditing Clerks	\$17.01	\$17.66	\$35,389.07	\$36,734.87
First-Line Supervisors of Office and Administrative Support Workers	\$22.39	\$22.73	\$46,568.00	\$47,269.49
Industrial Engineers	\$44.62	\$44.16	\$92,807.28	\$91,858.44
Computer User Support Specialists	\$17.82	\$22.77	\$37,078.76	\$47,361.09
Network and Computer Systems Administrators	\$31.03	\$33.27	\$64,536.45	\$69,188.51
Accountants and Auditors	\$29.37	\$31.90	\$61,076.47	\$66,337.78
Management Analysts	\$30.52	\$36.34	\$63,483.65	\$75,581.80
Human Resources Specialists	\$32.03	\$31.61	\$66,626.56	\$65,764.30
Purchasing Agents, Except Wholesale, Retail, and Farm Products	\$30.57	\$36.10	\$63,589.77	\$75,089.96

Per Capita Personal Income (2015)

\$35,980

Median Family Income (2011-2015)

\$53,365

Education

Public School Enrollment (Fall 2016)		
Level	Number	Enrollment
Combined	2	643
High School	1	209

The student teacher ratio in the county is very low compared to the rest of Virginia.

Student Teacher Ratio (FY 2016)	
Elementary	15:1
Secondary	9:1

Per Pupil Expenditure (FY 2016)
\$11,702.00

On-Time Graduation Rate (Class of 2016)
82.4%

High School Graduates Continuing Education (2015-2016)
67.4%

Advanced Programs (2015-2016)
Governor's Schools
Chesapeake Bay Governor's School for Marine & Environmental Science
Maggie L. Walker Governor's School for Government & International Studies

Governor's STEM Academies and Health Academies
The Bridging Communities Governor's STEM Academy

Workforce Development Facilities	
Facility	Type
Eastern Shore Workforce Center	Satellite Center
Fredericksburg Workforce Center	Comprehensive Center
Job Assistance Center	Satellite Center
RCC New Kent Site	Career and Technical Center
Warsaw Workforce Center	Satellite Center

Education

Higher Education Facilities — Fall 2016	
<i>Facility</i>	<i>Enrollment</i>
Rappahannock Community College - Warsaw Campus	2,066
Rappahannock Community College - Glenss Campus	2,001
Bon Secours Memorial College of Nursing	500 ^o

Numerous colleges and universities are located within a short commute of the county including; The College of William and Mary and Virginia Commonwealth University.

Transportation

Interstates	
Name	Distance
I-64	4.2 miles (6.7 km.)
I-95	14.7 miles (23.7 km.)
I-295	17.3 miles (27.9 km.)
I-195	23.7 miles (38.2 km.)
I-664	33.1 miles (53.3 km.)
I-85	38.4 miles (61.9 km.)
I-564	40.3 miles (64.9 km.)
I-264	46.8 miles (75.4 km.)

Note: Measured from border of locality/region.

Highways			
Highway 14	Highway 33	Highway 360	

Commercial Air Service		
<i>Richmond International Airport, Sandston -- 44.9 miles (72.2 km.)</i>		
American Airlines	Delta Air Lines	Southwest Airlines
United Airlines	JetBlue Airways	Allegiant Air
OneJet		

Newport News-Williamsburg International Airport, Newport News -- 56.6 miles (91.0 km.)

American Airlines	Delta Air Lines	
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Note: Within a 75-mile drive of the center of the locality.

US Routes 360 and 33 provide four-lane access through the county to Interstates 64, 95 and 295.

Transportation

Freight Rail Service

Norfolk Southern Railway Company

Richmond International and Newport News-Williamsburg International Airports are both located within 25 miles of the county.

Seaports

<i>Name</i>	<i>Distance</i>
Port of Virginia (Richmond Marine Terminal)	68.0 miles (109.4 km)
Port of Virginia (Newport News Marine Terminals)	84.0 miles (135.2 km)
Port of Virginia (Virginia International Gateway)	84.0 miles (135.2 km)
Port of Virginia (Norfolk International Terminals)	96.0 miles (154.5 km)
Port of Virginia (Portsmouth Marine Terminal)	97.0 miles (156.1 km)

Note: Driving distance from the center of the locality to Port of Virginia and any other seaports within 100 miles.

Other Ports of Entry

<i>Name</i>	<i>Distance</i>
Richmond-Petersburg	44.9 miles (72.2 km)
Newport News	56.6 miles (91.0 km)
Norfolk	87.1 miles (140.2 km)
Port of Washington - Dulles	123.5 miles (198.7 km)

Note: Driving distance from the center of the locality to Port of Washington - Dulles and any other port of entry within 100 miles.

Utilities



Utilities	
Electric	Rappahannock Electric Cooperative
Electric	Dominion Energy
Natural Gas	Not Available
Telecommunications	Verizon South
Telecommunications	Cox Communications
Solid Waste Disposal	Dahlgren Landfill
Solid Waste Disposal	Mascot Landfill
Solid Waste Disposal	Owenton Landfill

Dominion Virginia Power, one of the nation's largest power producers, and Rappahannock Electric Cooperative provide electricity to the county.

Financial Institutions

Financial Institutions — 4th Qtr 2016 Assets	
<i>Bank</i>	<i>Assets (millions)</i>
Branch Banking and Trust Company	\$214,433.0

The region has several local, regional and national banking institutions that service the area.

Government and Taxes

Government

King and Queen County has a County Administrator and a five-member Board of Supervisors.

The county has a comprehensive plan and zoning and subdivision ordinances.

King and Queen Court House is the county seat. There are no incorporated towns within the county.

Taxes

Localities in Virginia collect a 1% sales tax. They do not tax other items taxed at the State level.

Counties and cities in Virginia are separate taxing entities. Therefore, a company pays taxes to either a county or to a city.

If a company is located in a town, it pays town and county taxes except for utility taxes which are paid only to the town and the license tax which is paid only to the town unless town law permits the additional collection of a county tax.

Manufacturers pay real estate, machinery and tools, truck and automobile, utility, and sales taxes.

Nonmanufacturers pay real estate, tangible personal property, truck and automobile, utility, and sales taxes. They also may pay either a merchants' capital or a license tax.

Manufacturer's Tax Profile (King and Queen) [pdf](#)

Non-Manufacturer's Tax Profile (King and Queen) [pdf](#)

Along the streams and rivers of the county, there are many natural picnic areas where boating, fishing and swimming may be enjoyed.

Community Facilities

King and Queen County residents utilize the medical facilities located in Gloucester County and the Richmond metropolitan area. Gloucester's 71-bed Riverside Middle Peninsula Hospital offers 24-hour emergency care, coronary and intensive care, and a full range of family oriented care services. The Richmond metropolitan area has numerous medical facilities including the Virginia Commonwealth University Medical Center. This world renown teaching and research medical center offers the latest technology, facilities and services.

The King and Queen County Library has a 6,000-volume collection. Library systems at area colleges and universities are also open to the public. These library systems include The College of William and Mary with a 1,598,035-volume collection, Rappahannock Community College with a 35,788-volume collection and Virginia Commonwealth University with a 1,812,883-volume collection.

Approximately 25 Protestant churches are located in King and Queen County. Catholic churches are located in Gloucester and Richmond. Jewish synagogues can be found in Richmond.

County residents generally use the shopping facilities available in nearby communities such as Richmond, Williamsburg, and Essex County. The Richmond metropolitan area has

King and Queen County's close proximity to Richmond and Williamsburg enable residents to enjoy numerous cultural, entertainment and sporting activities.

Community Facilities

(continued)

eight malls and 67 shopping centers; the Williamsburg area has a mall and 15 shopping centers; and Essex County has three shopping centers and over 150 retail and service-related businesses.

Immediate retail and service needs of residents are accommodated at approximately 25 retail establishments throughout the county.

State, regional and local parks offer fishing, hunting, hiking, biking, ball fields, playgrounds and water sports.

Lifestyle

Recreational opportunities available in King and Queen County are primarily water related activities. Along the streams and rivers of the county there are many natural picnic areas where boating, fishing and swimming may be enjoyed. The Mattaponi River and Dragon Run have been stocked with various species of bass and brim.

During hunting season, deer, turkey, water fowl, and small game are plentiful.

King and Queen County's close proximity to Richmond and Williamsburg enables residents to enjoy numerous cultural, entertainment and sporting events. Area attractions include Colonial Williamsburg; two entertainment parks, Busch Gardens and Kings Dominion; and the Virginia Museum of Fine Arts, the Science Museum of Virginia and the Valentine Museum in Richmond.

Area attractions include Colonial Williamsburg; two entertainment parks: Busch Gardens and Kings Dominion; and the Virginia Museum of Fine Art.

Virginia's River Country Profile