

Application to DHCD Submitted through CAMS

Augusta County

Augusta/Highland Rural FTTH Project VATI 2021

Application ID: 75708162020144040
Application Status: Pending
Program Name: Virginia Telecommunications Initiative 2021
Organization Name: Augusta County
Organization Address: 18 Government Center Lane
Verona, VA 24482
Profile Manager Name: Jennifer Whetzel
Profile Manager Phone: (540) 245-5610
Profile Manager Email: jwhetzel@co.augusta.va.us

Project Name: Augusta/Highland Rural FTTH Project VATI 2021
Project Contact Name: Jennifer Whetzel
Project Contact Phone: (540) 245-5610
Project Contact Email: jwhetzel@co.augusta.va.us
Project Location: 18 Government Center Lane
Verona, VA 24482-0590
Project Service Area: Augusta County, Highland County

Total Requested Amount: \$1,331,975.00
Required Annual Audit Status: Accepted

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Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	\$1,331,975.00	\$570,846.00	\$1,902,821.00
Construction	\$1,331,975.00	\$570,846.00	\$1,902,821.00
Total:	\$1,331,975.00	\$570,846.00	\$1,902,821.00

Budget Narrative:

Augusta and Highland Counties are submitting one application to the Department of Housing and Community Development that includes four Fiber-to-the-Home (FTTH) projects within the two localities. The Project Budget tab includes the total for all four projects. The projects noted in the application are detailed as follows: • Middlebrook FTTH – Phase II: Construction \$268,681; DHCD Request \$188,077; Other Funding \$80,604 • Morris Mill FTTH – Phase I: Construction \$473,396; DHCD Request \$331,377; Other Funding \$142,019 • McDowell FTTH: Construction \$413,715; DHCD Request \$289,601; Other Funding \$124,114 • Deerfield FTTH: Construction \$747,029; DHCD Request \$522,920; Other Funding \$224,109 • Total for Application: Construction \$1,902,821; DHCD Request \$1,331,975; Other Funding \$570,846

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:

In this application for VATI FY2021 funding, Augusta County and Highland County have partnered on a regional application for the “Augusta/Highland Rural FTTH Project”, along with MGW as our partnering broadband provider. MGW Telephone Co. was established in 1967 and is the incumbent provider (ILEC) in eastern Highland County and western Augusta County, creating a perfect partnership for a VATI project. In addition, MGW also operates a wireline network outside of their ILEC boundary that is 100% fiber (no DSL or copper plant) and has been working closely with the broadband committees and authorities in these counties for several years to bring fiber to the unserved communities in the region.

This project area is far more rural when compared to many of the VATI applications that have been awarded in recent years. The population density is extremely low, and the ridge-and-valley terrain makes for increased construction costs. We feel this project aligns perfectly with the spirit of the VATI program, as the term “rural” is used 3 times in the very first section of the VATI Guidelines and it does not get any more rural than here. We hope that DHCD will give priority to our project area to help close, not further, the digital divide in rural Virginia. The proposed project includes 2 areas that are located within MGW’s ILEC boundary (McDowell & Deerfield), and two areas outside of the ILEC boundary (Middlebrook & Morris Mill). Below is a brief description of each of

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these areas, which are shown in *Attachment 1 - Project Area Map*.

Middlebrook FTTH Phase II - Augusta County received a VATI award in 2017 which included extending fiber into an unserved area and making FTTH available to all locations passed before ending on State Route 252 (Middlebrook Road). Once construction was complete, the initial take rate was 68% and MGW continues to get inquiries for a fiber connection in that area. Middlebrook Road is a main travel corridor in the County and the only fiber infrastructure along this road is the 2,000 feet that was installed with the 2017 project. This Phase II project will leverage the VATI investment from 2017 and extend fiber infrastructure an additional 5 miles along Middlebrook Road to the Village of Middlebrook, making a fiber connection available to 142 along the route. MGW maintains a database of interested customers or inquiries, and there have been 77 in this project area.

Morris Mill FTTH Phase I - Morris Mill is another unserved area in Augusta County, which has been a top 4 project in their Broadband Plan and related Broadband RFIs. The Morris Mill area is tucked between 2 main roads north and south of the project area. MGW has middle-mile fiber along both of those roads, making FTTH the obvious choice for planning broadband deployment in this area. The Morris Mill area includes over 750 addressable structures, and we have included 421 of those in Phase I. If awarded, we plan to apply for VATI FY2022 funding for Phase II to bring fiber to the remaining locations in the area. MGW maintains a database of interested customers or inquiries, and there have been 117 in this project area.

McDowell FTTH - McDowell is a village in Highland County, the second largest populated place in the county following the Town of Monterey, and is located within MGW's ILEC boundary. MGW has installed fiber to their central office (POP) in McDowell, as well as, deployed fiber-fed nodes located north and south of the project area. Locations within a mile of these nodes have speeds of 25 or greater available, but due to DSL technology, the speeds drop off quickly the further the location is from those nodes. VATI funding will allow MGW to leverage this middle-mile fiber (installed with both private and federal investments) and provide FTTH access to 235 locations that would otherwise have access to DSL only (this project area was carefully delineated as to NOT include any locations that can receive 25/3 or greater). Where many Virginia residents in rural area lean on their cellular phone/service for basic internet use, there is no cell coverage in the McDowell FTTH project area aside from a few free Wi-Fi hot spots provided by MGW at their pay phone locations.

Deerfield FTTH - Deerfield is a village in western Augusta County and is located within MGW's ILEC boundary. The Deerfield Valley is surrounded by National Forest on both sides and is quite removed from the rest of Augusta County due to topography. MGW has installed fiber to their central office (POP) in Deerfield, as well as, deployed fiber-fed nodes located north and south of the project area. Locations within a mile of these nodes have speeds of 25 or greater available, but due to DSL technology, the speeds drop off quickly the further the location is from those nodes. VATI funding will allow MGW to leverage this middle-mile fiber (installed with both private and federal investments) and provide FTTH access to 508 locations that would otherwise have access to DSL only (this project area was carefully delineated as to NOT include any locations that can receive 25/3 or greater).

The proposed project will not only provide 1,306 locations the bandwidth required for the virtual learning, teleworking, and telemedicine environment we are facing due to the ongoing pandemic, it will also create economic growth opportunities such as new small and home-based businesses, additional telecommuting, and new housing starts and increased sales of existing homes. It will provide opportunities for business attraction and expansion, workforce retention, and greater competition with urbanized areas that currently offer broadband service.

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The Highland County Public Library supports the project as it will help local families access the digital literacy resources that the library provides. Many families drive their vehicles to local hotspots to be able to gain wireless internet access, just to download books or participate in online schooling. With so many children being forced into virtual learning, the library has added new digital resources to support them, such as Scholastic Bookflix and Scholastic Teachables. These are in addition to their current offerings of free book downloads from sites such as Hoopla, Sesame Street, eBooks, and education options such as Rocket Languages, Universal Class, and the Explora suite of research databases.

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:

Middlebrook FTTH Phase II & Morris Mill FTTH Phase I:

- The County identified providers and speed within each project area through the use of Federal Communications Commission (FCC) data. Rural Broadband Network Services (dba High Speed Link) most recent Form 477 data reports service of 25 mbps/3 mbps to these areas.
- Comcast is listed as providing speeds above 25/3 on the FCC data.

Deerfield & McDowell FTTH - MGW is the incumbent provider/carrier in this project area; to our knowledge there are no other providers providing voice and data services in this project area.

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:

Middlebrook FTTH Phase II - this project area does not include any RDOF eligible census blocks or any other CAF-funded census blocks; there are CAF II funded blocks adjacent to the project area (across the road in the nearest case), and the applicant delineated the project areas carefully as to have 0% overlap any CAF-funded areas; Attachment 2 includes map showing this 0% overlap.

Morris Mill FTTH Phase I - the project area overlaps slightly with 2 RDOF eligible census blocks, only because the census blocks in this area are very large; we manually counted the number of locations in the portion of the RDOF block being overlapped and counted approx. 25 locations; Attachment 2 includes a map showing a small

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portion of the project area overlapping an RDOF block.

Deerfield FTTH - the Deerfield project area is located within MGW's ILEC boundary; MGW participates in the ACAM* program and has completed the ACAM-funded upgrades in this project area with the deployment of fiber-fed nodes; the proposed project will leverage the ACAM-funded backbone and middle-file fiber for FTTH; Attachment 2 includes a map showing how the ACAM areas are "spotty" and not contiguous throughout the ILEC boundary, and how the majority of locations along the primary travel corridors are not in ACAM blocks.

McDowell FTTH - the McDowell project area is located within MGW's ILEC boundary; MGW participates in the ACAM* program and has completed the ACAM-funded upgrades in this project area with the deployment of fiber-fed nodes; the proposed project will leverage the ACAM-funded backbone and middle-file fiber for FTTH. Attachment 2 includes a map showing the fiber-fed nodes and ACAM blocks in the area of the project. Please note how the areas in the immediate vicinity of the nodes were carefully removed from the project area so that the project area only included locations that meet the VATI eligibility criteria..

** ACAM is not a grant program, it is high-cost support that carriers opted to accept and is received in the form of monthly payments over the programs 10-year support term (2017-2026). MGW's ACAM support includes obligations to 1,766 unspecified locations. Of those locations, only 309 (17.5%) are required to receive service of 25/3 or better and 930 (52.5%) are required to receive 10/1 to 25/3. The use of ACAM investments as leverage for VATI projects was recommended by VATI staff.*

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:

Middlebrook FTTH Phase II & Morris Mill FTTH Phase I:

- The County identified providers and speed within each project area through the use of Federal Communications Commission (FCC) data. Rural Broadband Network Services (dba High Speed Link) most recent Form 477 data reports service of 25 mbps/3 mbps to these areas. Attachment #14 shows the few customers that were identified during the challenge process for 2020 VATI. The challenge process for 2021 VATI will require the customers to be within the physical project area.
- Comcast is listed as providing speeds above 25/3 on the FCC data. Comcast serves households in the Morris Mill Area along Parkersburg Turnpike from the City of Staunton line west to the area near Elliott Street and south to Cedar Green Road. MGW's FTTH project would be in the vicinity of this area, but few passings will overlap. Conclusion were derived using the Comcast website address search tool.
- Areas of need for the RFI were selected through a compilation of 2019 Internet Survey respondents noting no internet at location, dissatisfaction of current service, and type of internet service utilized.

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Citizen inquiries were compiled and assisted in designating the four project areas. The Morris Mill area is represented in the RFI and documentation of the RFI section is in Attachment #3.

- Augusta County held an “Overlap Meeting” between interested providers. MGW and High Speed Link (HSL) attended the meeting and discussed the various project areas the County was considering for its VATI 2021 application(s).
- The project area lies within an old Verizon landline territory and could be considered one of the rural areas they publicly announced they would not be upgrading their infrastructure in. This can be confirmed by many testimonials from residents and businesses in the project area.

Deerfield & McDowell FTTH - MGW is the incumbent provider/carrier in this project area; to our knowledge there are no other providers providing voice and data services in this project area. None of MGW’s existing customers in this project area can receive speeds greater than 25/3 and the majority have < 10/1 available. Some locations have phone-only as they are too far from a node to achieve DSL service.

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:

The Augusta/Highland Rural FTTH Project includes a total of 1,306 serviceable units in the project area. There are 4 non-contiguous areas included in the project area, and Attachment 4 will include a completed form for each the 4 areas.

Total Passings = 1,306

Residential = 1,193

Business = 95

Non-residential = 9

Community Anchors = 9

Our VATI application team utilized business license data for Augusta County (Highland does not issue business licenses), property searches on VAMANet, customer billing information, windshield surveys, GIS data, and other knowledge of the project area to identify business, in particular, home-based businesses.

Serviceable units with 10/1 or less = 1,154

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The Deerfield and McDowell project areas are located within MGW's ILEC boundary, so we were fortunate to have customer-level data available to analyze and identify the number of units. We also utilized MGW's most recent CAF reporting information to verify locations with <10, 10-25, and > 25 in order to delineate eligible project areas and determine project statistics such as serviceable units. The Middlebrook and Morris Mill project areas are areas that the County and MGW have studied these last few years- a smaller version of the Middlebrook project area was included in past VATI applications. These areas were also studied by a broadband consultant and project management team during the development of the County's Broadband Plan. Therefore, we are confident that the projected number (of serviceable units with 10/1 or less) is accurate to within 95% or greater of the actual number.

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:

N/A-The proposed projects do not include a wireless component.

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

Answer:

MGW shall deploy a gigabit-level last-mile network architecture which allows for the delivery of voice and data services across the broadband access platform. MGW will utilize redundant Ethernet uplinks from the proposed FTTP electronics to its existing softswitch to facilitate voice services. The fiber optic cable infrastructure will be designed in a manner that allows MGW to utilize various technologies such as Active Ethernet, Gigabit Passive Optical Network (GPON), or other next-generation technologies. Redundant connections ensure highly reliable broadband data communications services, and MGW will utilize its existing and new data network routers, Internet uplinks, and internet service provider (ISP) services as needed. All the subscribers who receive a FTTH connection will have internet service offerings available with packages starting at 25 Mbps and on up to 1 Gbps (1 Gig). Each customer's service (bandwidth) will be queued as appropriate based upon the package they choose.

The list below shows the speed packages that will be available to the customers in the project area that receive a FTTH connection:

Lingo Networks (monthly fees):

Residential: Silver 50 mbps/10 mbps \$59.99; Gold 100 mbps/20 mbps \$69.99; Platinum 200 mbps/40 mbps \$99.99

Business: Silver 100 mbps/20 mbps \$59.99; Gold 200 mbps/40 \$89.99; Platinum 1Gig/100 mbps \$279.99

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MGW Communication (monthly fees):

Primary 25 mbps/5 mbps Residential \$54 Business \$64

Dynamic 50 mbps/10 mbps Residential \$64 Business \$74

Advanced 100 mbps/20 mbps Residential \$74 Business \$84

Premium 200 mbps/40 mbps Residential \$104 Business \$114

Elite 1 Gig/50 mbps Residential \$204 Business \$399

Pricing differs slightly between MGW's ILEC and CLEC areas primarily due to the regulatory factors and tariffs imposed on an ILEC.

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:

MGW has been in the telcom business since 1967 and have tested and deployed a wide variety of equipment and configurations since that time. MGW uses a Gigabit Passive Optical Network (GPON) technology. GPON provides a robust and cost-effective solution while still meeting the high standards necessary for a carrier-class network. MGW's GPON solution uses GPON Optical Line Terminations (OLTs) connected to residential Optical Network Termination equipment (ONTs), in many situations through use of passive optical splitters. MGW has an existing point-of-presence (POP) in each of the 4 project areas that will facilitate the delivery of broadband to end users. MGW utilizes the Calix platform at each POP, node, and even the end user's customer premise equipment (CPE). Consistency between these components provides reliability, flexibility, and scalability. It also lets MGW proactively respond to any network issues before they become service effecting. Calix is the leading global provider of the cloud and software platforms, systems and services required to deliver the unified access network and smart premises of tomorrow.

Elements to be added as part of the project include, Calix E7 (broadband distribution switch), Small Form-factor Pluggable (SFP) transceivers, GPON cards, FTTP patch panels, and of course the outside plant facilities such as the fiber optic cable, fiber splice closures, fiber distribution pedestals, and the OLT/ONT combo for each location which is provided a fiber connection.

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

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construction schedule, identifying specific tasks, staff, contractor(s) responsible, collection of data, etc., and estimated start and completion dates. Applicants must include Memorandums of Understanding (MOUs) or Memorandums of Agreement (MOAs) between applicants (drafts are allowable). Label Attachments: Attachment 6 – Timeline/Project Management Plan; Attachment 7 – MOU/MOA between Applicant/Co-Applicant.

Answer:

The Deerfield FTTH and McDowell FTTH project areas are located within MGW's ILEC boundary, an area they have been providing telecom services for over 50 years. The installation of fiber in these areas will generally follow existing copper, telephone lines and for which MGW has the easements/permits already in place to begin. These two projects are upgrade (not expansion) projects and we have a longstanding relationship with our customers, many of which helped MGW pull copper cable over the mountains many years ago. Notwithstanding a review and revisit of the construction plans once an award is announced, these projects are in MGW's "backyard" and are shovel-ready.

The Middlebrook and Morris Mill projects are expansion project for MGW, and they have already invested private funds in areas adjacent to these project areas. This has allowed MGW to be responsive to Augusta County's solicitation for a broadband partner and to meet both their company's mission and the broadband goals of the County.

MOU's have been drafted between the Counties and their partnering provider, and are ready to be executed following an award announcement and approval, signature of county officials. They are included in Attachment 7 of this application.

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

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rights of way or easements, waiving permit fees, force account labor, etc. Please note the a minimum 20% match is required to be eligible for VATI, the private sector provider must provide 10% of the required match. If the private co-applicant's cash match is below 10% of total project cost, applicants must provide financial details demonstrating appropriate private investment. Label Attachments: Attachment 8 - Funding Sources Table; Attachment 9 – Documentation of Match Funding.

Answer:

The Counties of Augusta and Highland and MGW Communications are proposing to provide a combined local match of 30% for all three project areas. The entirety of this 30% match shall be in cash and documentation of this financial commitment from both the Counties and MGW is included in the required attachments. The Funding Sources Table includes a table for each of the three project areas:

• Middlebrook FTTH – Phase II	VATI \$188,077	Local\$80,604
• Morris Mill FTTH – Phase I	VATI \$331,377	Local\$142,019
• McDowell FTTH	VATI \$289,601	Local \$124,114
• Deerfield FTTH	VATI \$522,920	Local \$224,109
•Total for Application	VATI \$1,331,975	Local\$570,846

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

Answer:

The partnering provider is leveraging the backbone and middle-mile fiber that has been installed throughout MGW's ILEC area to allow for deployment of FTTH. ACAM is not a grant program, it is high-cost support that carriers opted to accept and is received in the form of monthly payments over the programs 10-year support term (2017-2026). MGW's ACAM support includes obligations to 1,766 unspecified locations. Of those locations, only 309 (17.5%) are required to receive service of 25/3 or better. As the only wireline provider in eastern Highland and western Augusta, we are obligated to direct the ACAM funding to projects where it will impact the most households and businesses in the ILEC boundary. MGW also has a substantial fiber network outside of their ILEC boundary, and both the Morris Mill and Middlebrook projects will leverage those investments to deploy FTTH in those project areas. More specifically, Augusta County and MGW were awarded a VATI project in 2017 and the proposed Middlebrook FTTH Phase II project will leverage those state funds by extending middle-mile fiber from the current dead-end into parts of the county which current have zero fiber infrastructure.

The partnering provider will also be leveraging their existing Joint Use Agreement they have in place with other utility companies such as Dominion, Verizon, and the local electric cooperatives. On average, it takes about 6 months to get a Joint Use Agreement in place, but once the joint use relationship is established- we can go from concept to construction within a matter of weeks. MGW will be leverage these agreements by submitting pole attachment permits immediately upon notice of award- some have already been drafted. As a utility, MGW also works closely with the local VDOT offices and field engineers to determine where and if right-of-way is available in rural areas where we often encounter narrow, unstriped roadways with minimal, and sometimes no, right-of-way.

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Lastly, MGW intends to leverage their relationship with Dominion and their state-approved pilot program. They have signed a mutual NDA to allow them to share information and discuss opportunities for collaboration.

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:

The anticipated take rates for the Deerfield and McDowell FTTH projects was calculated by first adding 100% of the current DSL <10/1 and DSL < 25/3 customers which will receive a FTTH connection, a projection that at least 50% of the phone-only customers will receive a FTTH connection, and a projection that at least 30% of the other serviceable units that are not current DSL or phone-only customers will receive a FTTH connection. That number was then divided by the serviceable units identified in the project area to establish a projected take rate.

The anticipated take rate for the Middlebrook FTTH Project was calculated by first identifying the number of service inquiries that MGW has had in that project area (77). Then 50% of the serviceable units in the project area for which an inquiry was not received was added. The sum of those numbers was then divided by the total number of serviceable units in the project area to establish a projected take rate. MGW has had a high number of requests in this area because it is directly adjacent to the project area that received last-mile FTTH connections as part of a VATI 2017 project. While constructing that last-mile infrastructure, many of the residents along Middlebrook Road stopped and talked (or called into MGW's call center) inquiring about a fiber connection and the possibility of a phase II project. The County has also received numerous inquiries about expanded service in the Middlebrook area due to the exposure of the initial project.

The anticipated take rate for the Morris Mill FTTH Project was calculated by first identifying the number of service inquiries that MGW has had in that project area (117). Then 50% of the serviceable units in the project area for which an inquiry was not received was added. The sum of those numbers was then divided by the total number of serviceable units in the project area to establish a projected take rate. MGW has been talking to landowners and giving presentations to HOA's in the project area to obtain commitments prior to project start. The boots on the ground work along with the high number of service inquiries equates to an excellent projected take rate in this area.

Our methodology behind these projections provides an accurate minimum take rate for the project areas while avoiding overestimating. However, when considering additional connections that will take place within 1-year of project completion, we project the actual take rate to be even higher. The table below provides a forecasted take rate for each of the projects included in this application. All projects are subject to adjustment based upon input from County and results from pre-application project marketing. For example, due to the project timeline increasing in 2021 from 12 months to 18 months, it would be feasible to increase each of the individual project areas to improve how the

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applicationscoresinthetotalnumberofpassings.

PROPOSED PROJECT AREA	TOTAL ADDRESSES	ANTICIPATED TAKE RATE	BASIS FOR ESTIMATE
Middlebrook FTTH – Phase II	142	70%	past projects in area; customerinquiries/high demand
Morris Mill FTTH – Phase I	421	70%	County broadband survey, HOA/project area meetings, customer inquiries/high demand
McDowell FTTH	235	70%	ILEC (existing service area) last-mile upgrade
Deerfield FTTH	508	60%	ILEC (existing service area) last-mile upgrade; lots of cabins

Based upon our experience in pursuing VATI funding and reviewing other successful grant applications, we feel that it would be vital to the success of an application to perform a door-to-door campaign to obtain subscriber commitment- that process has already started. We already have substantial marketing information for the project areas described herein. We also keep a database of customer inquiries for the entire region, which includes many inquiries from these project areas. We have already met with 2 HOA’s in the project area, with additional meetings planned upon award. These meetings and the boots-on-the-ground efforts will help achieve the anticipated take rates.

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

Answer:

Key Individuals Assigned to Project(s)		
Name	Title	Responsibilities
Craig Smith	President, MGW	Community and County liaison; Oversee st; ensure project success

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Robert Huff	Director of Strategic Planning, MGW	Project management; point of contact for partners; submit monthly reports and draw requests.
Tony McCune	Network Engineer, MGW	Coordinate permitting; design network arch and fiber splicing; oversee work of contract
Sheri Smith	Regulatory & Compliance Officer, MGW	Oversee the administrative elements of the partnership and the VATI contract
Casey Wilcher	Construction Supervisor, MGW	Manages day-to-day activities of fiber insta
John Barnhill	Project Manager, MGW	Assists with grant and project management
Timothy Fitzgerald	County Administrator, Augusta County	Obtain proper Board of Supervisors approval signatory on MOU
Jennifer Whetzel	Deputy County Administrator, Augusta County	Draft, submit grant application; Grant managed awarded
JR Lawhorne	Owner, Software Company, Broadband Company	Provide input for and review grant applications
David Henderson	Retired, Financial Planner, Broadband Company	
Misty Cook	Finance Director, Augusta County	Monitor grant compliance as required for annual financial audit
Jackie Zetwick	IT Director, Augusta County	Assist with gathering information for applications including oversight of GIS mapping; project monitoring for County interests
Richard Homes	Treasurer, Augusta County	Banking responsibilities related to grant draw and project payments
Nancy Witschey	Highland County Economic Development /	Obtain proper Board of Supervisors approval Assists with grant and project management
Ed Diggs	Program Manager at Dominion	Potential project partner (leverage)

Local governments depend on grant funding for staffing and capital needs. Submission of grant applications and grant reporting are managed by several layers of County staff, such as the County Administrator, the County Department that manages the project or purchase and the Finance Director.

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the network construction and installation of network components. Tony McCune is the senior Network Engineer at MGW and has been designing and installing telecommunications networks for over 30 years. Robert Huff, Strategic Planning Director, has a background in grant, project, and construction management and successfully completed a VATI 2017 project on time and within budget. The scope of that project included several miles of middle-mile fiber to support last-mile FTTH deployment, establishing a new fiber node to deliver broadband to the end-users, and the construction of a 195' tower used to provide FW service in a large coverage area.

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:

The budget for the proposed project(s) is encompassed into a single line item in CAMS for construction. Attachment 11, Derivation of Costs, includes an itemization of equipment and construction costs for each of the project areas as totaled here:

• Middlebrook FTTH – Phase II	\$268,681
• Morris Mill FTTH – Phase I	\$473,396
• McDowell FTTH	\$413,715
• Deerfield FTTH	\$747,029
• Total for Application	\$1,902,821

A detailed budget is included as Attachment 12 - Documentation of Supporting Costs. The budget includes itemized cost estimates for Construction, Fiber Splicing & Network Components and is broken down by each of the project areas. MGW Networks employs linemen, operators, fiber splicers, fiber technician, and a variety of professional network staff and will be providing the majority of the construction services. Contractors may be utilized for aerial cable installations in challenging terrain (Nichols Construction), at major splice points (Andrews Communications), and for traffic control (Flagging Force). MGW Networks has the equipment necessary to complete all phases of construction including several sizes of equipment for plowing in fiber cable, horizontal directional drill (bore machine), line/bucket trucks, rocks saws, excavators, and fiber splicers. The topography and rurality of Augusta and Highland Counties results in higher construction costs when compared to other parts of the state- especially as it relates to buried fiber cable. With MGW's proven track record of successfully implementing broadband projects and installing telecommunications infrastructure in this region of the Commonwealth, and their ability to keep the majority of the construction in-house, the total project cost is significantly less than if we had to utilize contractors for any or all phases. MGW is also able to perform the engineering & permitting tasks in-house,

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which normally would be 10-15% of the total project cost.

The budget, like the scope, have been kept very simple in order to maximize the amount of fiber (broadband) deployment during the 18 month contract period. All estimates are based upon network equipment utilized on MGW Communication’s fiber network and standard construction rates. Unless otherwise instruction by DHCD, all remittances will identify and pull from the funding sources in the same proportions described in the matching funds section.

15. The cost benefit index is comprised of three factors: (i) state share for the total project cost, (ii) state cost per unit passed, and (iii) the internet speed. From these statistics, individual cost benefit scores are calculated and averaged together to create a point scale for a composite score. Provide the following:
- a. Total VATI funding request
 - b. Number of serviceable units
 - c. Highest residential speed available in proposed project area

Answer:

Cost/Benefit Index Factors	Middlebrook FTTH Phase II	Morris Mill FTTH Phase I	McDowell FTTH	Deerfield FTTH	Total
VATI Funding Request	\$188,077	\$331,377	\$289,601	\$522,920	\$1,331,975
Number of Serviceable Units	142	421	235	508	1306
Highest Residential Speed Offered	1 Gig down x 50 up	1 Gig down x 50 up	1 Gig down x 50 up	1 Gig down x 50 up	1 Gig down x 50 up

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

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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:

The County has made strides in addressing the need for broadband, by trying to education itself through citizen input, analysis of available data and applying for the VATI grants. Our minor accomplishments to date include:

- The 2016 completion of a Community Broadband Telecommunications Strategic Plan (Plan) through the award a Virginia Telecommunications Planning Initiative Grant.
- Pursued through the application for Virginia Telecommunications Initiatives Grants offered by the Virginia Department of Housing and Community Development in 2017-2021.
- In 2018, the Augusta County Board of Supervisors appointed a Broadband Committee made up of County citizens to assist in facilitating the solutions from the 2016 Plan. The Committee also recruited additional residents for sub-committees to develop partnerships, increase awareness, improve marking and provide technical assistance.
- Completion of a Wireless Facilities Telecommunications Analysis for Wireless Voice and Broadband Services in 2012.
- Augusta County is a member of the Central Shenandoah Planning District Commission which is a designated Economic Development District (EDD) under a program administered by the U.S. Department of Commerce's Economic Development Administration.
- In 2019, the County submitted a response to an inquiry from Dominion Energy Virginia for potential partnership to can leverage the broadband pilot program established by the Virginia State Corporation Commission (SCC) to deploy broadband into unserved areas.
- The Augusta County Library system offer databases that support education. Databases aid in school research and practice tests for all ages and subject levels from SOLS to MCAT to professional certifications. An increase in the number of courses taken in the Universal Class databases has been realized in the past few months. Career Transitions aids in preparing for a career, finding job openings and providing a virtual interview experience. The Library also provides wifi at branch and book station locations, which has seen significant increase in usage since the pandemic began. They also continue to help patrons learn how to use technology, such as smartphones.
- Based on a 2019 Internet Survey performed by Augusta County, 50% of households with students have either weak or no wi-fi access. Based on the data for broadband coverage in these communities, at least 38% of all students have neither cellular data nor wi-fi service, and another 12% have weak broadband access. With the schools going to full or partial virtual learning, the need for coverage is more than ever before. The Augusta County schools are purchasing Chromebooks for additional grade levels to assist in bridging the digit divide.

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agreements during the preconstruction phases in order to install the FTTH infrastructure efficiently. As a utility, MGW can readily pull permits from VDOT for installations in the right-of-way and a permit package has been drafted and awaiting an award announcement. MGW has also entered into an NDA with Dominion so that we can discuss opportunities to leverage their infrastructure through the state-approved pilot program. It is anticipated that at least one of the project areas in this application will leverage Dominion resources. MGW established hotspots within the community during the pandemic to assist rural areas with access to broadband for school and work purposes.

17. Additional Information

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

Label Additional Attachments as:

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

Answer:

na

Attachments:

Map(s) of project area, including proposed infrastructure

Attachment1ProjectAreaMap817202092752.pdf

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

Attachment2DocumentationonFederalFundingArea817202092800.pdf

Documentation that proposed project area is unserved based on VATI criteria

Attachment3DocumentationofUnserved817202023214.pdf

Passings Form (Please use template provided)

Attachment4PassingsForm8172020105034.pdf

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Propagation Map if Wireless Project

Attachment5FiberNetworkArchitecture8172020114425.pdf

Timeline/Project Management Plan

Attachment6ProjectManagementPlanMGW817202023206.pdf

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

Attachment7MOU8172020115757.pdf

Funding Sources Table

Attachment8VATIFundingSourcesTable817202022603.pdf

Documentation for match funding

Attachment9Matchdocumentation817202022830.pdf

Letters of Support

Attachment10MGWLettersofSupport817202044611.pdf

Derivation of Cost (Project Budget)

Attachment11DerivationofCosts817202021817.pdf

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

Attachment12DocumentationofSupportingCost817202021826.pdf

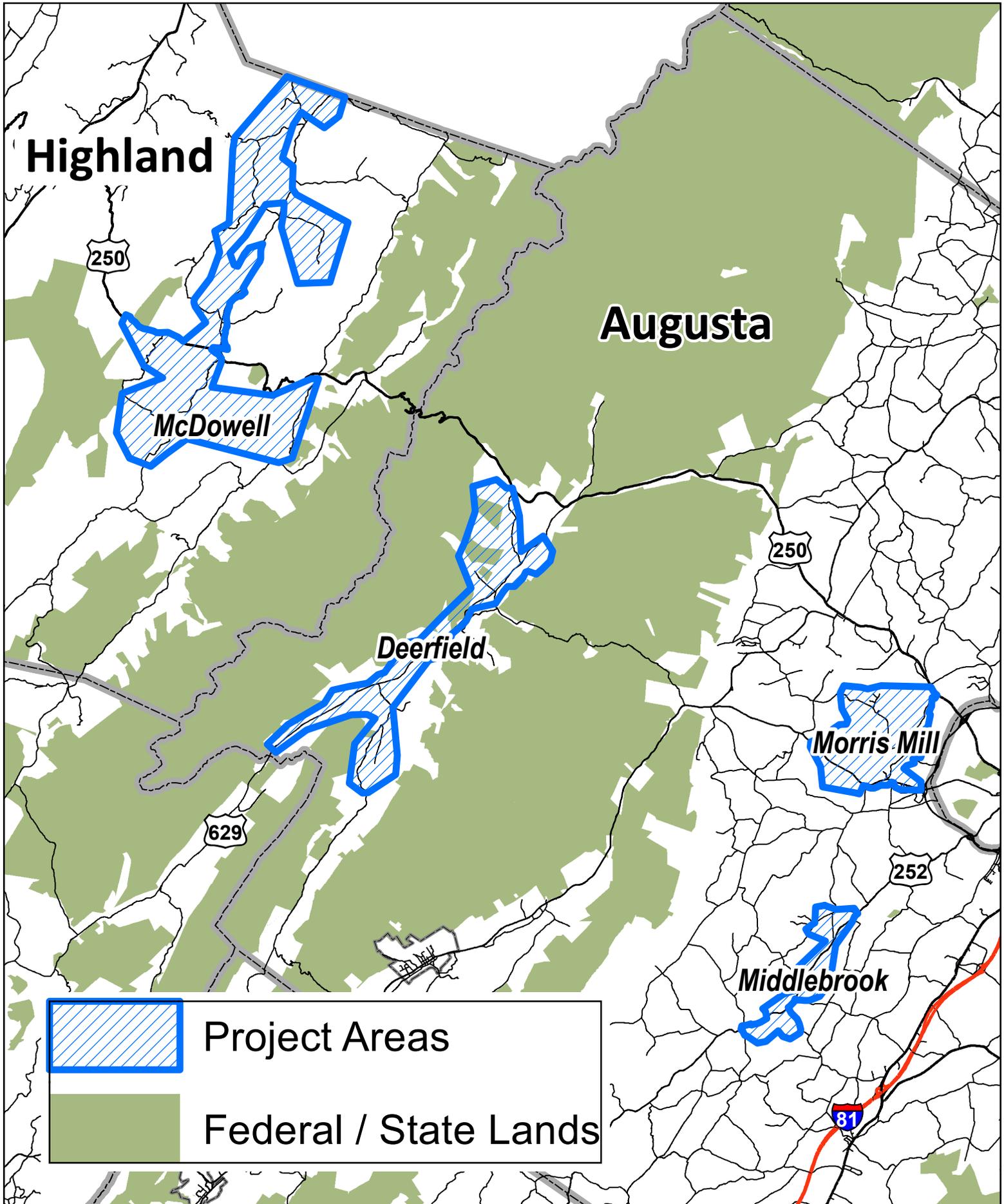
Two most recent Form 477 submitted to FCC

Attachment13TwomostrecentForm477submittedtotheFCCCorequivalent8172020104323.pdf

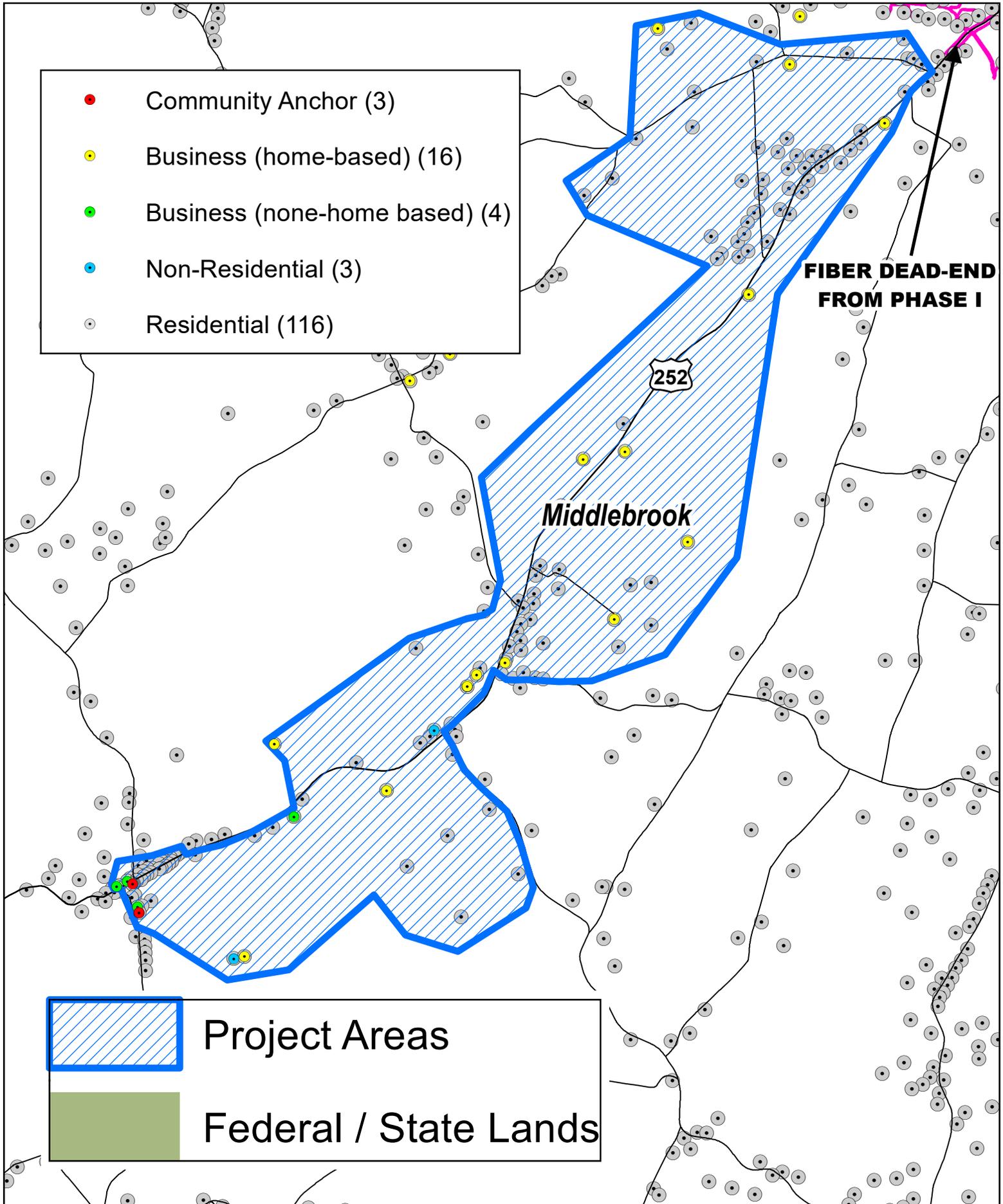
Optional

Attachment14ExistingProviderDocumentation817202023306.pdf

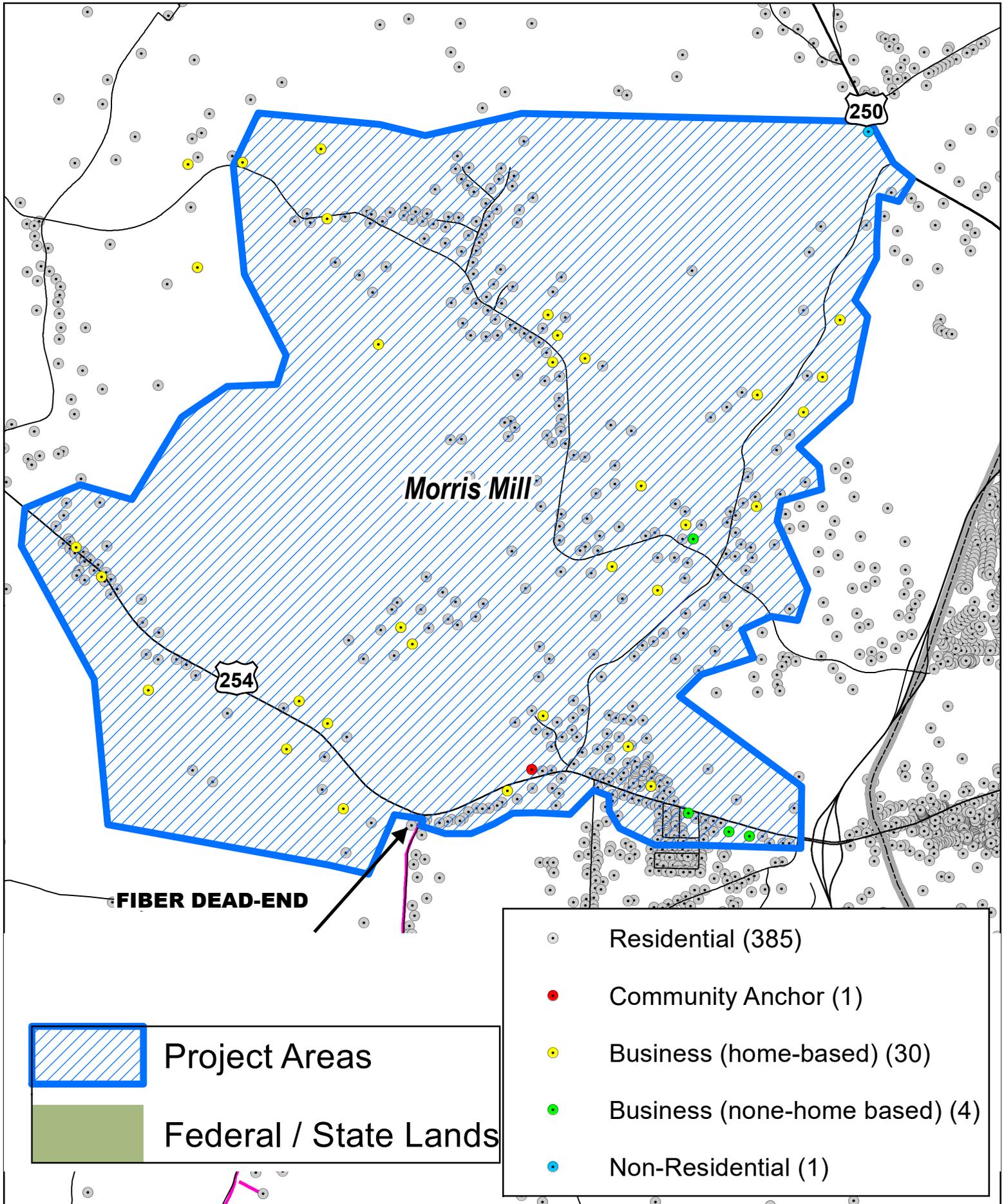
Augusta/Highland Rural FTTH Project



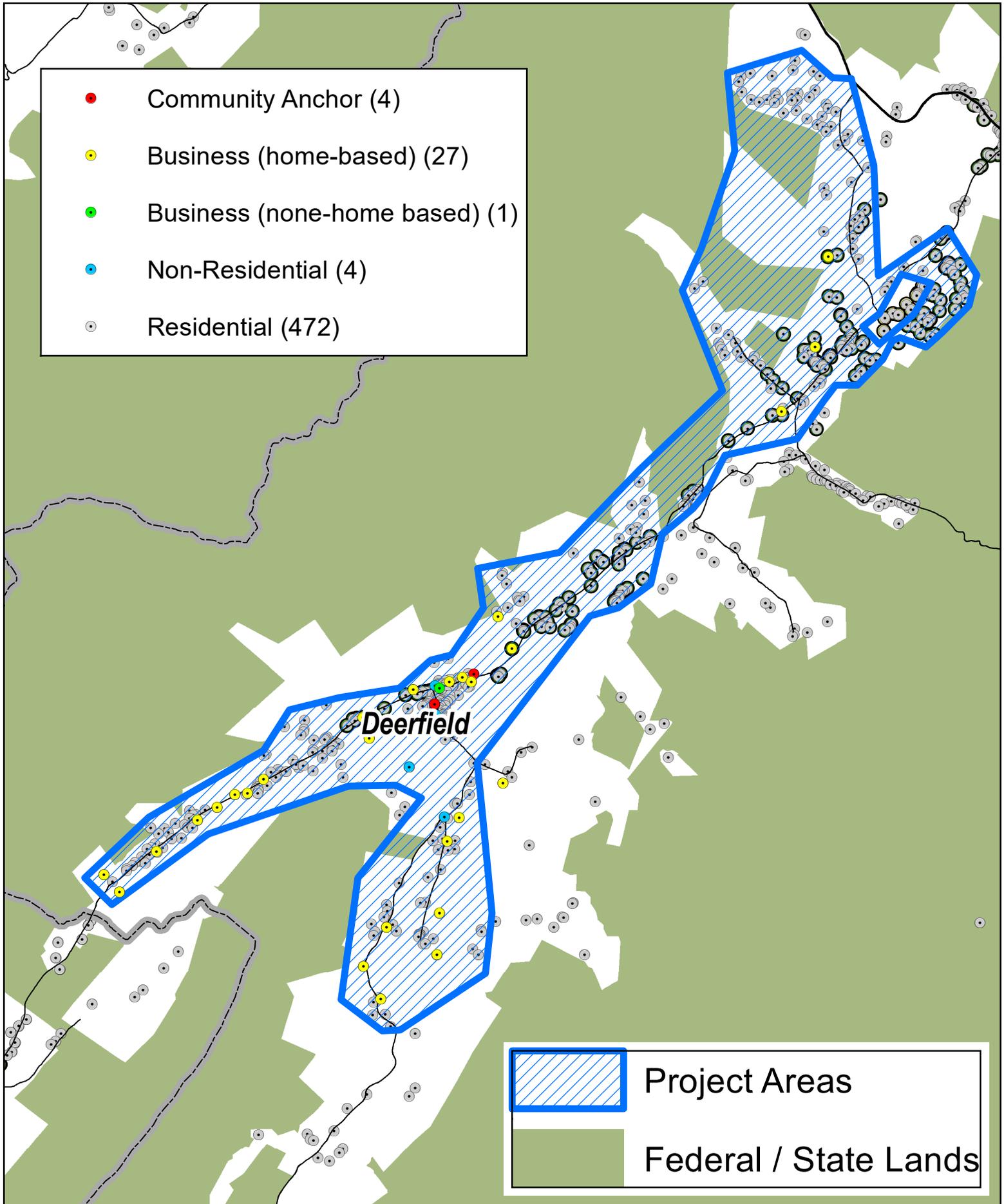
Augusta/Highland Rural FTTH Project: Middlebrook FTTH Phase II



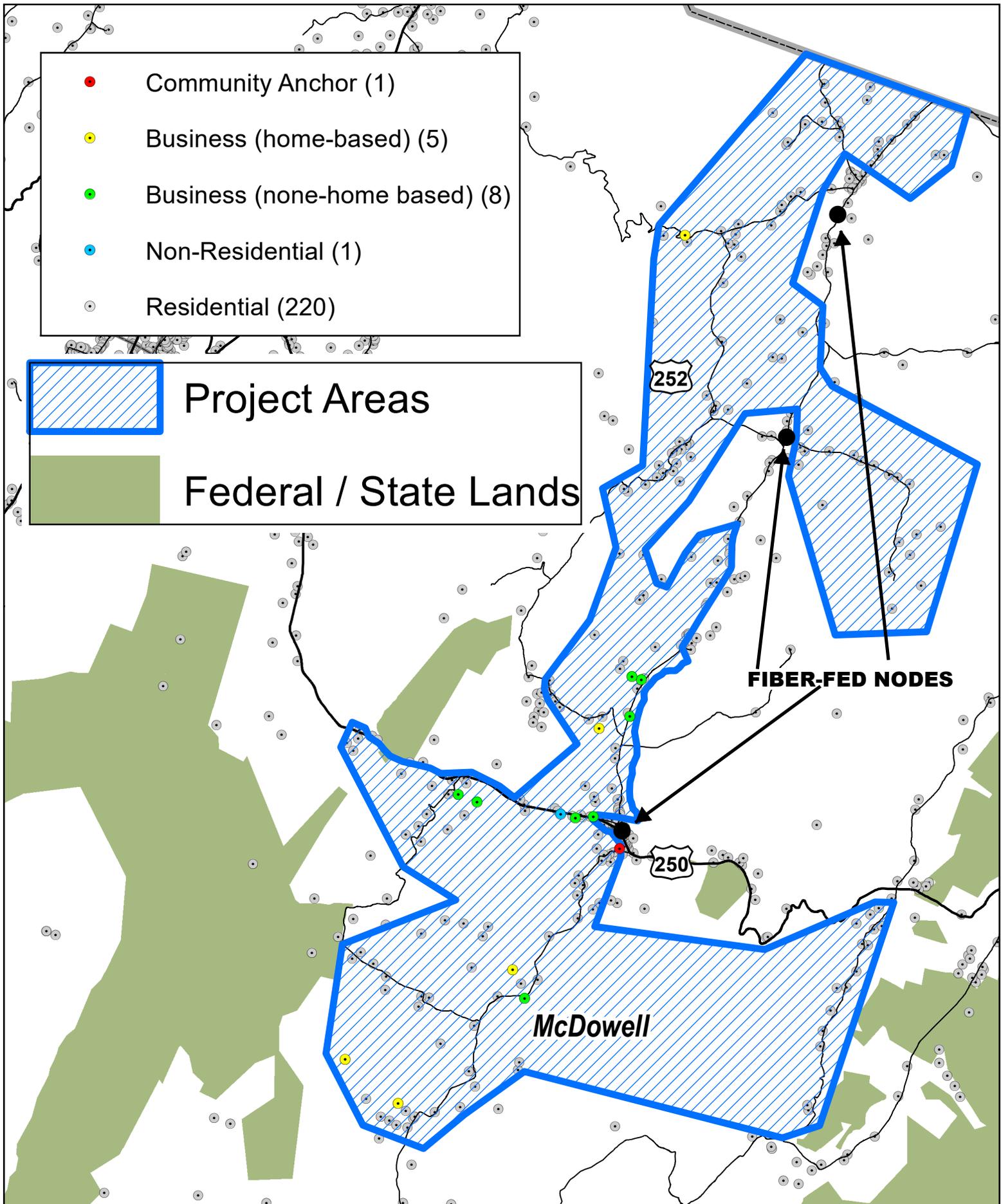
Augusta/Highland Rural FTTH Project: Morris Mill FTTH Phase I



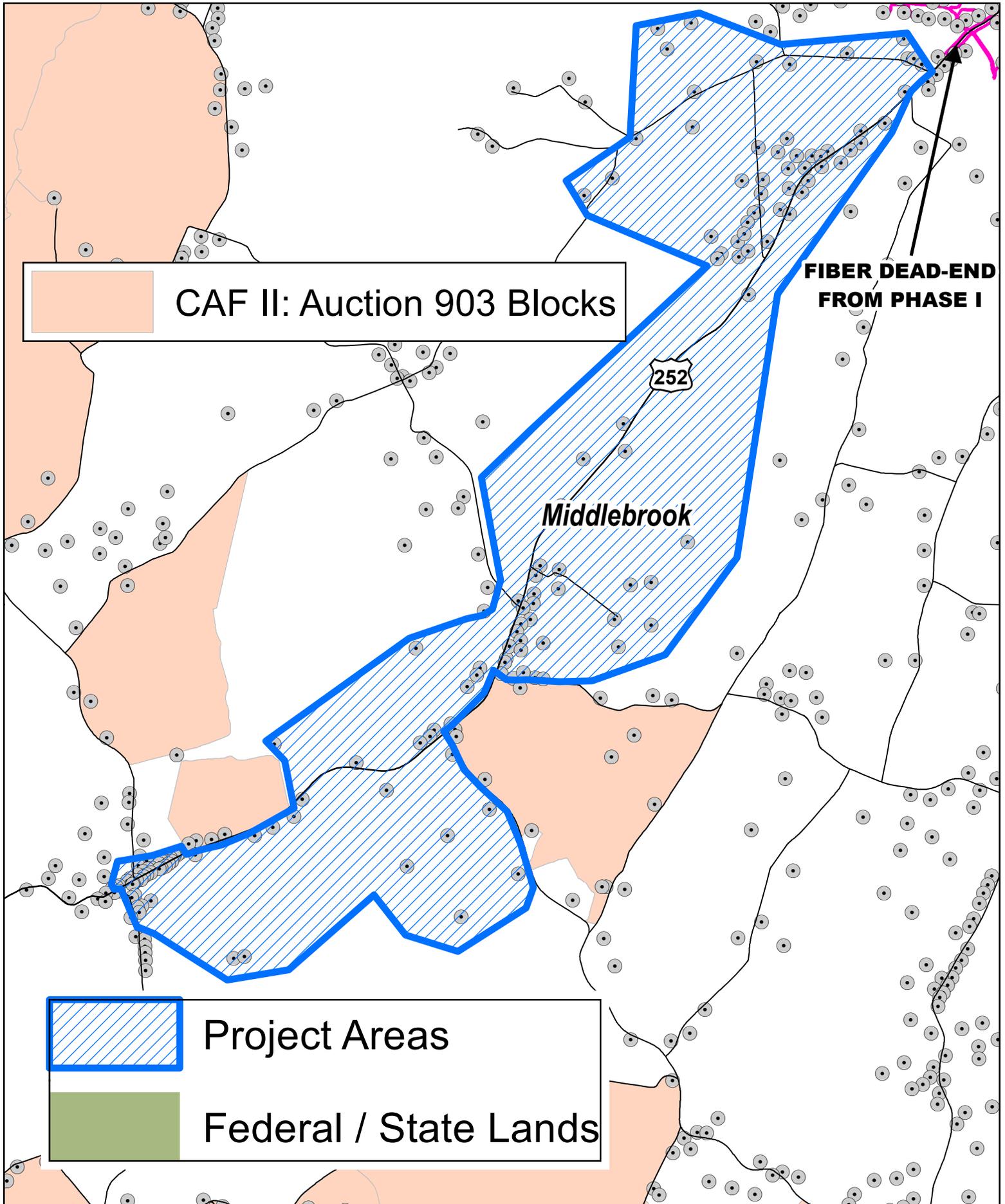
Augusta/Highland Rural FTTH Project: Deerfield FTTH



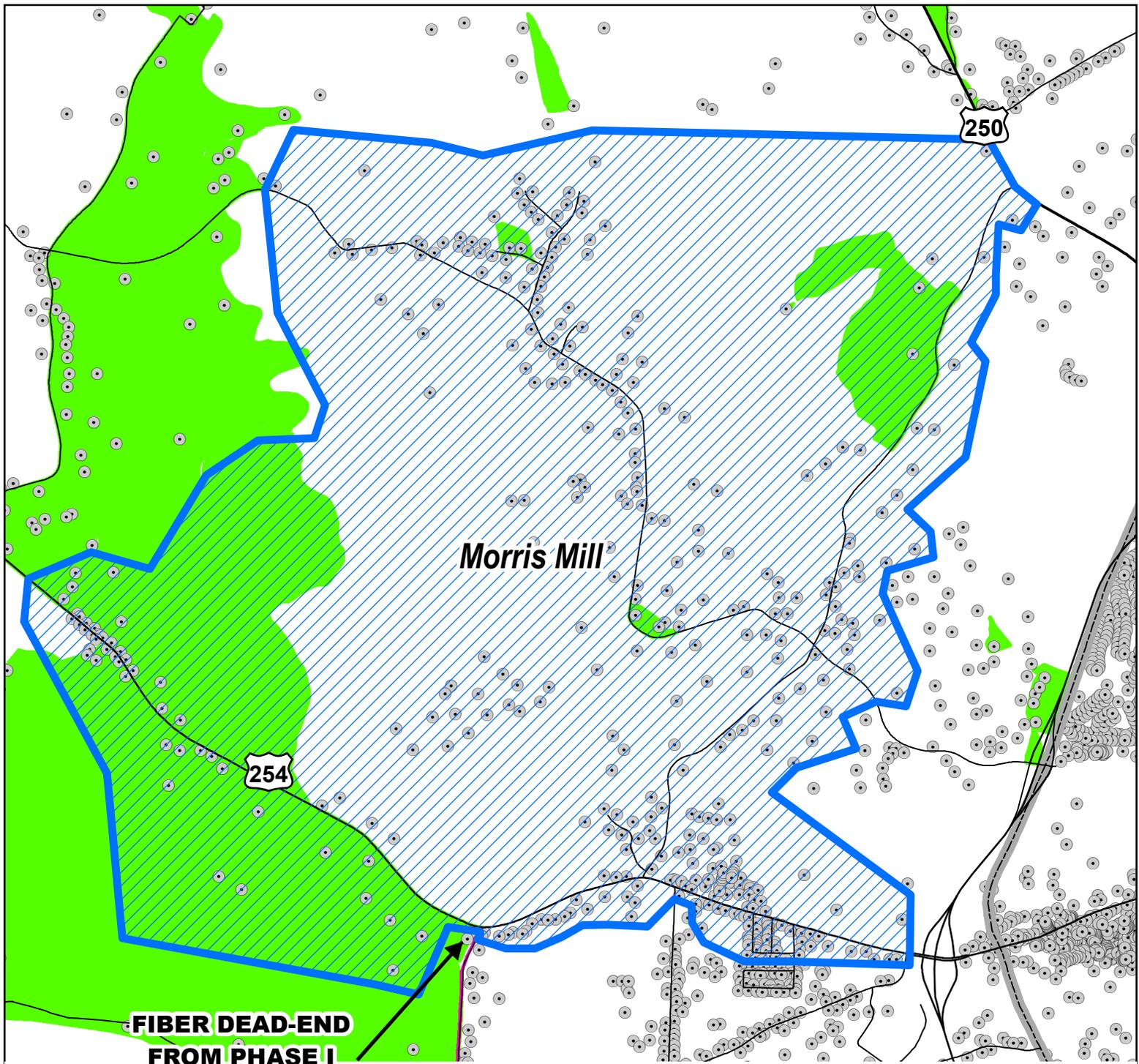
Augusta/Highland Rural FTTH Project: McDowell FTTH

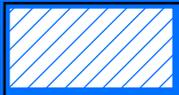


Augusta/Highland Rural FTTH Project: Middlebrook FTTH Phase II & CAF Areas



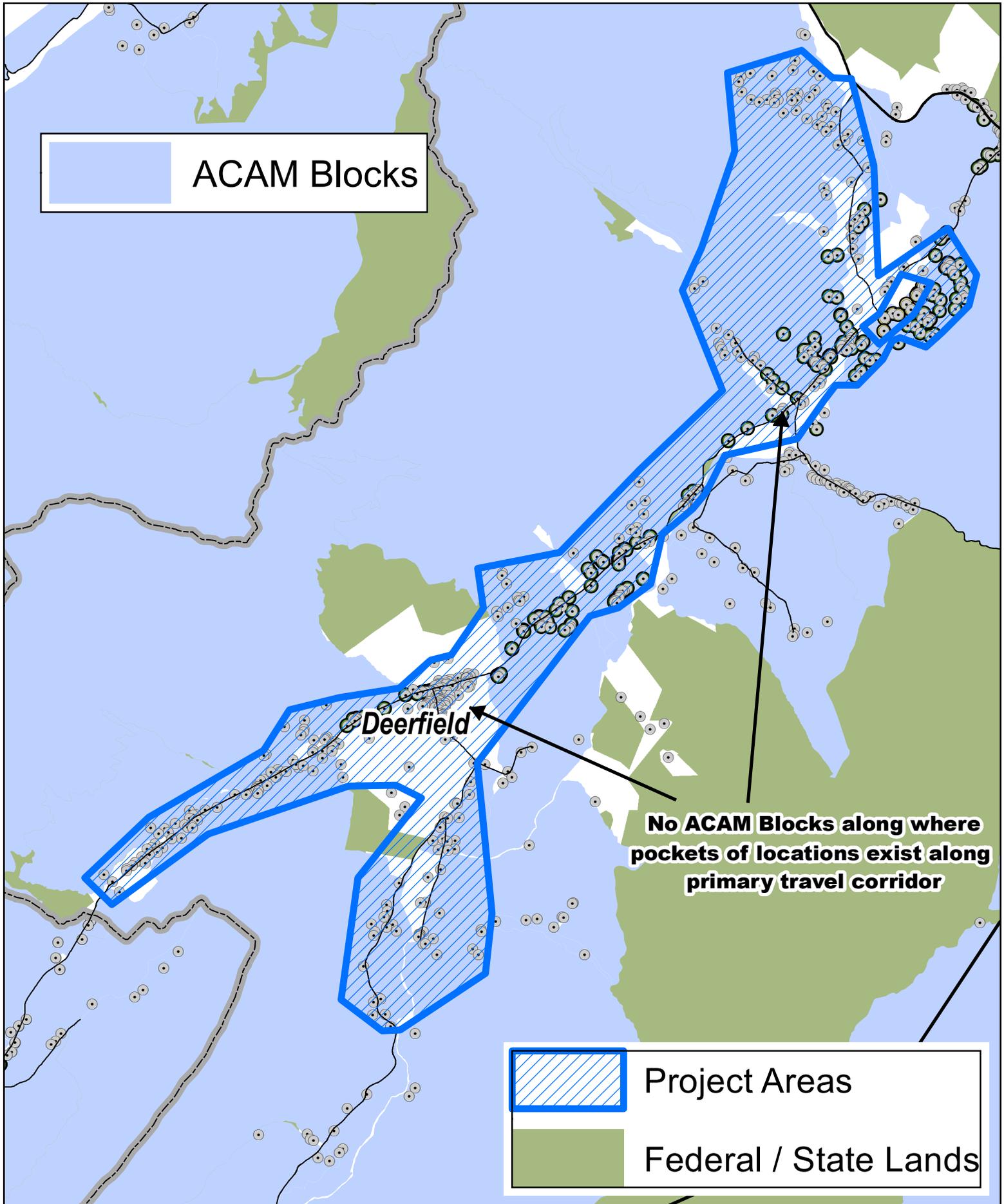
Augusta/Highland Rural FTTH Project: Morris Mill FTTH Phase I & RDOF Blocks



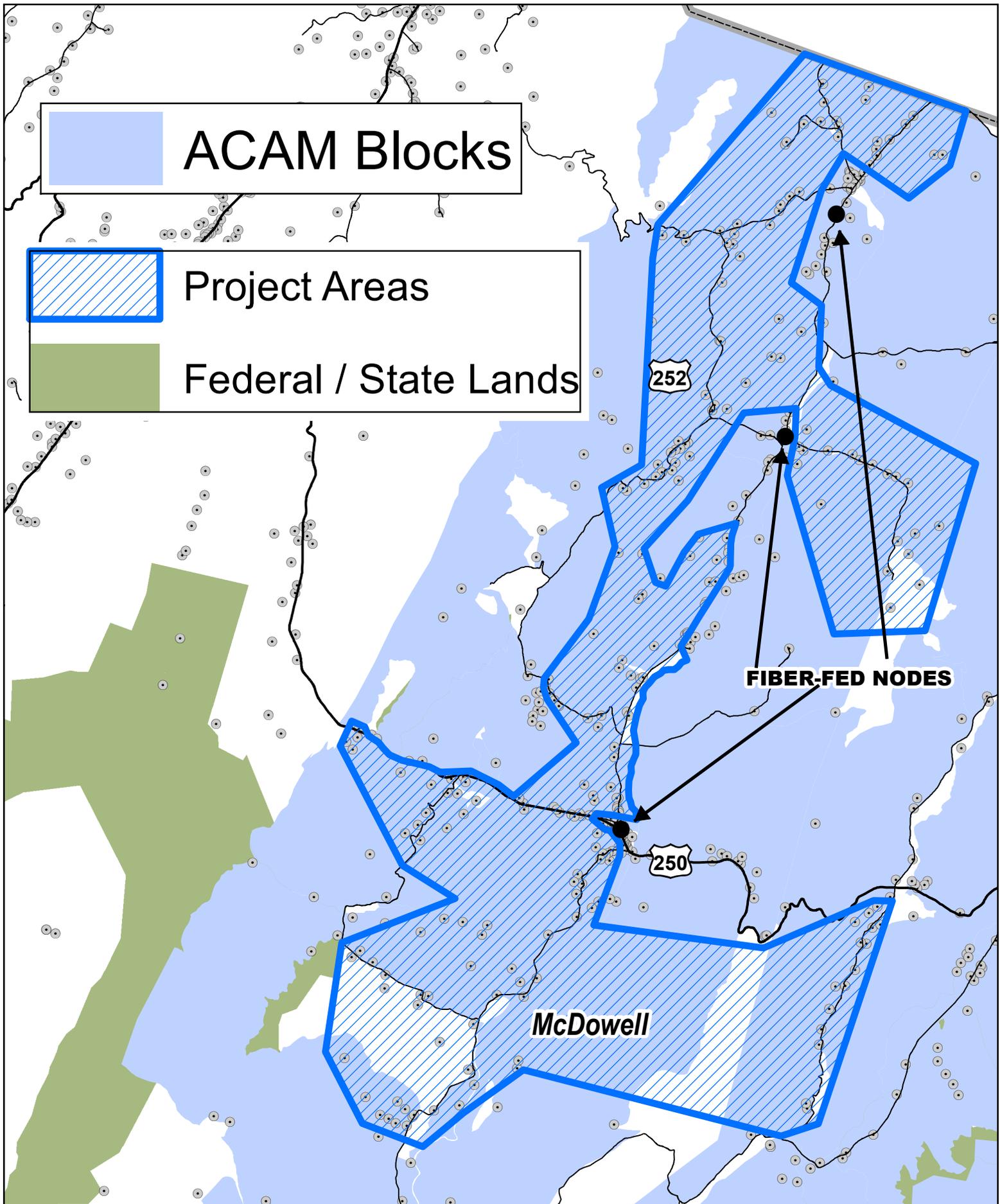
	Project Areas
	Federal / State Lands

	RDOF Blocks
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Augusta/Highland Rural FTTH Project: Deerfield FTTH & ACAM Blocks



Augusta/Highland Rural FTTH Project: McDowell FTTH & ACAM Blocks



MIDDLEBROOK													
Logical Record N	Provider ID	FRN	Provider Name	DBA Name	Technology	Consumer	Max Adver	Max Adver	Business	Max CIR D	Max CIR Upstream Speed (mbps)		
69992163	52979	1568880	GCI Communication Corp.	GCI Communication Corp.	60	0	0	0	1	0	0		
70517675	53601	18756155	VSAT Systems, LLC	Skycasters	60	1	2	1.3	1	0	0		
33991027	53437	2073203	Verizon Virginia LLC	Verizon Virginia LLC	10	1	5	0.768	1	0	0		
25270633	51615	19225366	MGW Networks, L.L.C.	MGW Networks	70	1	6	1	1	6	1		
27287927	52257	17169327	King Street Wireless, L.P.	King Street Wireless L.P.	70	1	10	2	0	0	0		
25270781	51615	19225366	MGW Networks, L.L.C.	MGW Networks	70	1	10	1	1	10	1		
37094657	53702	17649732	Rural Broadband Network Services	HighSpeedLink.net	70	1	25	3	1	25	3		
70254919	53153	12369286	HNS License Sub, LLC	HughesNet	60	1	25	3	1	0	0		
22552822	50820	4963088	ViaSat, Inc.	Viasat Inc	60	1	100	3	1	0	0		
34485014	53458	3768165	COMCAST CABLE COMMUNICATIO	Comcast	43	1	987	35	1	0	0		
25271179	51615	19225366	MGW Networks, L.L.C.	MGW Networks	50	1	1000	100	1	1000	100		

MORRIS MILL												
Logical Reco	Provider ID	FRN	Provider Name	DBA Name	Technolog	Consumer	Max Adver	Max Adver	Business	Max CIR D	Max CIR	Upstream Speed (mbps)
69991907	52979	1568880	GCI Communication Corp.	GCI Communication Corp.	60	0	0	0	1	0	0	
34484988	53458	3768165	COMCAST CABLE COMMUNICATIONS, L	Comcast	42	0	0	0	1	0	0	
69992076	52979	1568880	GCI Communication Corp.	GCI Communication Corp.	60	0	0	0	1	0	0	
33991065	53437	2073203	Verizon Virginia LLC	Verizon Virginia LLC	10	1	1.5	0.384	1	0	0	
70517419	53601	18756155	VSAT Systems, LLC	Skycasters	60	1	2	1.3	1	0	0	
25270117	51615	19225366	MGW Networks, L.L.C.	MGW Networks	70	1	3	1	1	3	1	
33991054	53437	2073203	Verizon Virginia LLC	Verizon Virginia LLC	10	1	3	0.768	1	0	0	
25270747	51615	19225366	MGW Networks, L.L.C.	MGW Networks	70	1	6	1	1	6	1	
27289951	52257	17169327	King Street Wireless, L.P.	King Street Wireless L.P.	70	1	10	2	0	0	0	
25270144	51615	19225366	MGW Networks, L.L.C.	MGW Networks	70	1	10	1	1	10	1	
33991058	53437	2073203	Verizon Virginia LLC	Verizon Virginia LLC	10	1	10	1	1	0	0	
27289018	52257	17169327	King Street Wireless, L.P.	King Street Wireless L.P.	70	1	10	2	0	0	0	
37094690	53702	17649732	Rural Broadband Network Services LLC	HighSpeedLink.net	70	1	25	3	1	25	3	
70254663	53153	12369286	HNS License Sub, LLC	HughesNet	60	1	25	3	1	0	0	
22552536	50820	4963088	ViaSat, Inc.	Viasat Inc	60	1	100	3	1	0	0	
34485458	53458	3768165	COMCAST CABLE COMMUNICATIONS, L	Comcast	43	1	987	35	1	0	0	

ATTACHMENT B

The following information details efforts by the County to identify four areas in need of improved internet services. The information will also assist in writing a grant application.

Identified Areas

- Area 1 – Fort Defiance Area (west of Rt. 11 in northern part of County)
- Area 2 – Morris Mill Road Area (west of City of Staunton)
- Area 3 – Spottswood Area (south central portion of County)
- Area 4 – Barrenridge Area (north of Fishersville)

Maps

- Survey data noting Location category (page 8)
- Survey data noting No internet at location (page 9)
- Survey data noting Satisfaction of current service (page 10)
- Survey data noting Type of internet service (page 11)
- County map noting four project areas (page 12)
- Project Area maps that identify (pages 13-16):
 - Residential points within the project area.
 - Survey responses noting: no internet service, dissatisfaction with service and business points. Business includes home based business, agricultural operations, and individuals that work from home.
 - Census blocks.

Provider and Speed Data (pages 17-18)

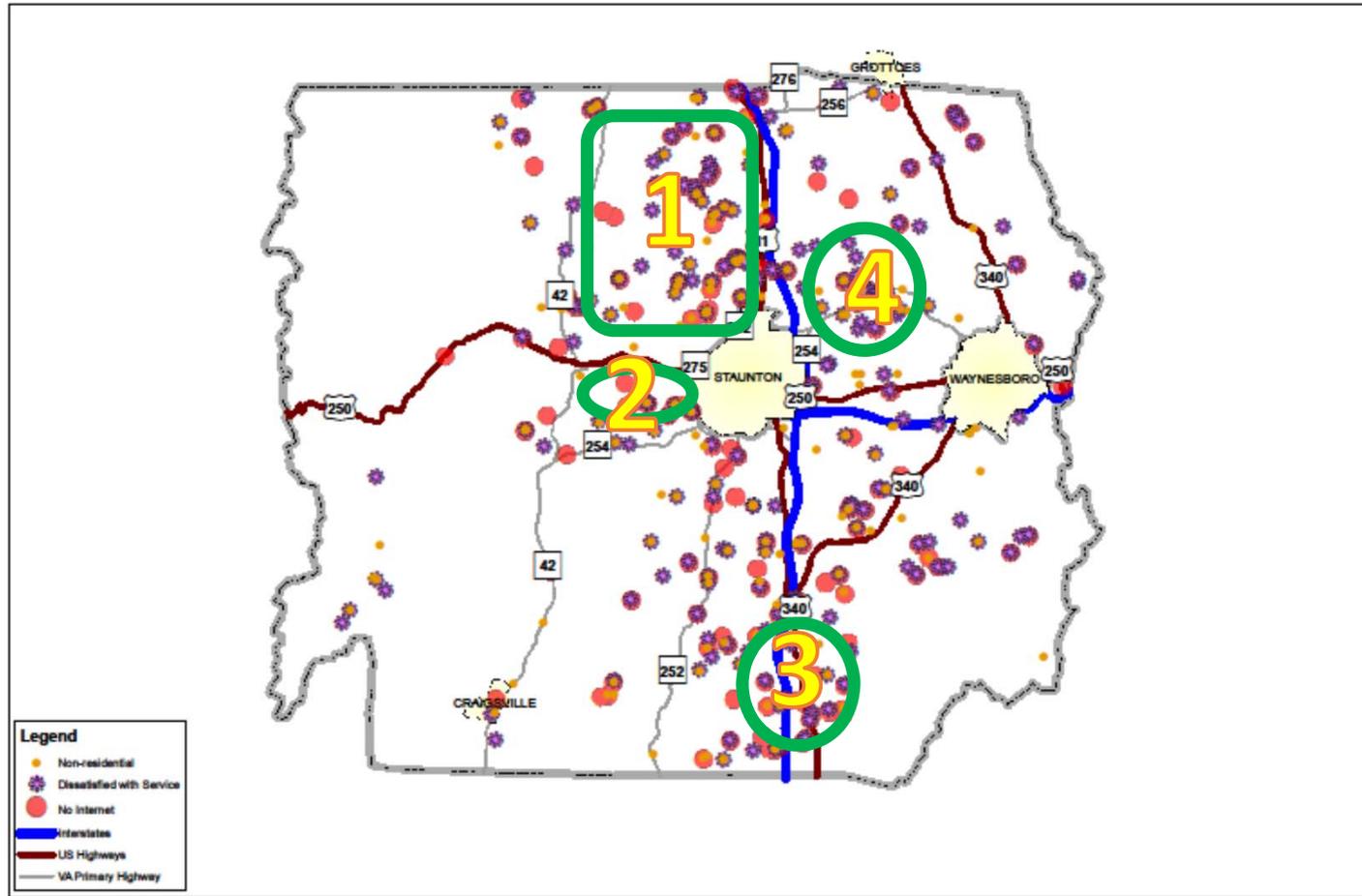
The County has attempted to identify providers and speed within each project area through the use of Federal Communications Commission (FCC) data. As providers know the detail of where their service begins and ends, they can select a project based on their network. The County's data will be useful in preparing the grant application. The County will assist with further vetting what customers are serviced by what provider once projects are proposed. Please reference the attached spreadsheets for a list of providers within each area and the speeds that they report to the FCC.

Residential Units

The grant application is interested in the number of residential units passed. Tentatively, the number of units per project area are:

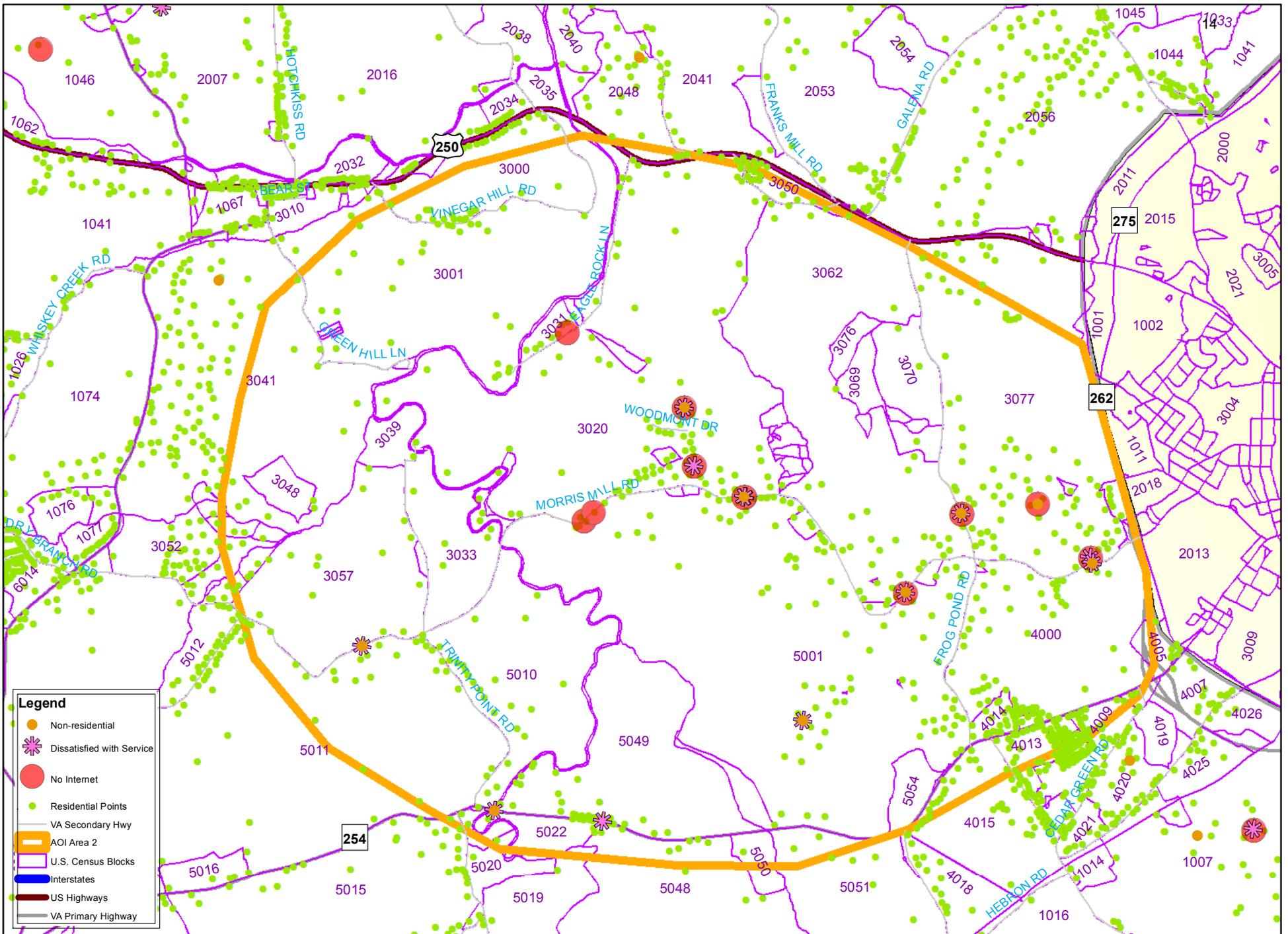
- Area 1 – Fort Defiance Area 3,029
- Area 2 – Morris Mill Road Area 708
- Area 3 – Spottswood Area 871
- Area 4 – Barrenridge Area 479

The County will assist with identifying the actual amount of residential units in an area that is proposed by a provider.



June 11, 2019 Broadband Survey
Non-Residential, Dissatisfied, and No Internet responses.





June 11, 2019 Broadband Survey (AREA 2)
 Non-Residential, Dissatisfied, and No Internet responses
 and County-wide Residential points



DEERFIELD												
Logical Record N	Provider ID	FRN	Provider Name	DBA Name	Technology	Consumer	Max Adver	Max Adver	Business	Max CIR D	Max CIR Upstream Speed (mbps)	
69989875	52979	1568880	GCI Communication Corp.	GCI Communication Corp.	60	0	0	0	1	0	0	
70515387	53601	18756155	VSAT Systems, LLC	Skycasters	60	1	2	1.3	1	0	0	
24281952	51224	4335873	MGW Telephone Company, Inc.	MGW Telephone	10	1	10	1	1	10	1	
37102797	53702	17649732	Rural Broadband Network Services	HighSpeedLink.net	70	1	25	3	1	25	3	
70252631	53153	12369286	HNS License Sub, LLC	HughesNet	60	1	25	3	1	0	0	
22550215	50820	4963088	ViaSat, Inc.	Viasat Inc	60	1	100	3	1	0	0	

2021 Virginia Telecommunication Initiative (VATI) Passing Form

Augusta/Highland Rural FTTH Project: Middlebrook FTTH Phase II

Type of Passings	Total Number in Project Area	Number with Speeds at 10/1 or below in Project Area
Residential	116	112
Businesses (non-home based)	4	4
Businesses (home-based)	16	16
Community Anchors	3	3
Non-residential	3	3
Total Number of Passings	142	138

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

Definitions

Passing – any structure that can receive service.

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

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

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

2021 Virginia Telecommunication Initiative (VATI) Passing Form

Augusta/Highland Rural FTTH Project: Morris Mill FTTH Phase I

Type of Passings	Total Number in Project Area	Number with Speeds at 10/1 or below in Project Area
Residential	385	325
Businesses (non-home based)	4	3
Businesses (home-based)	30	26
Community Anchors	1	1
Non-residential	1	1
Total Number of Passings	421	356

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

Definitions

Passing – any structure that can receive service.

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

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

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

2021 Virginia Telecommunication Initiative (VATI) Passing Form

Augusta/Highland Rural FTTH Project: Deerfield FTTH

Type of Passings	Total Number in Project Area	Number with Speeds at 10/1 or below in Project Area
Residential	472	412
Businesses (non-home based)	1	1
Businesses (home-based)	27	25
Community Anchors	4	4
Non-residential	4	3
Total Number of Passings	508	445

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

Definitions

Passing – any structure that can receive service.

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

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

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

2021 Virginia Telecommunication Initiative (VATI) Passing Form

Augusta/Highland Rural FTTH Project: McDowell FTTH

Type of Passings	Total Number in Project Area	Number with Speeds at 10/1 or below in Project Area
Residential	220	202
Businesses (non-home based)	8	7
Businesses (home-based)	5	5
Community Anchors	1	1
Non-residential	1	0
Total Number of Passings	235	215

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

Definitions

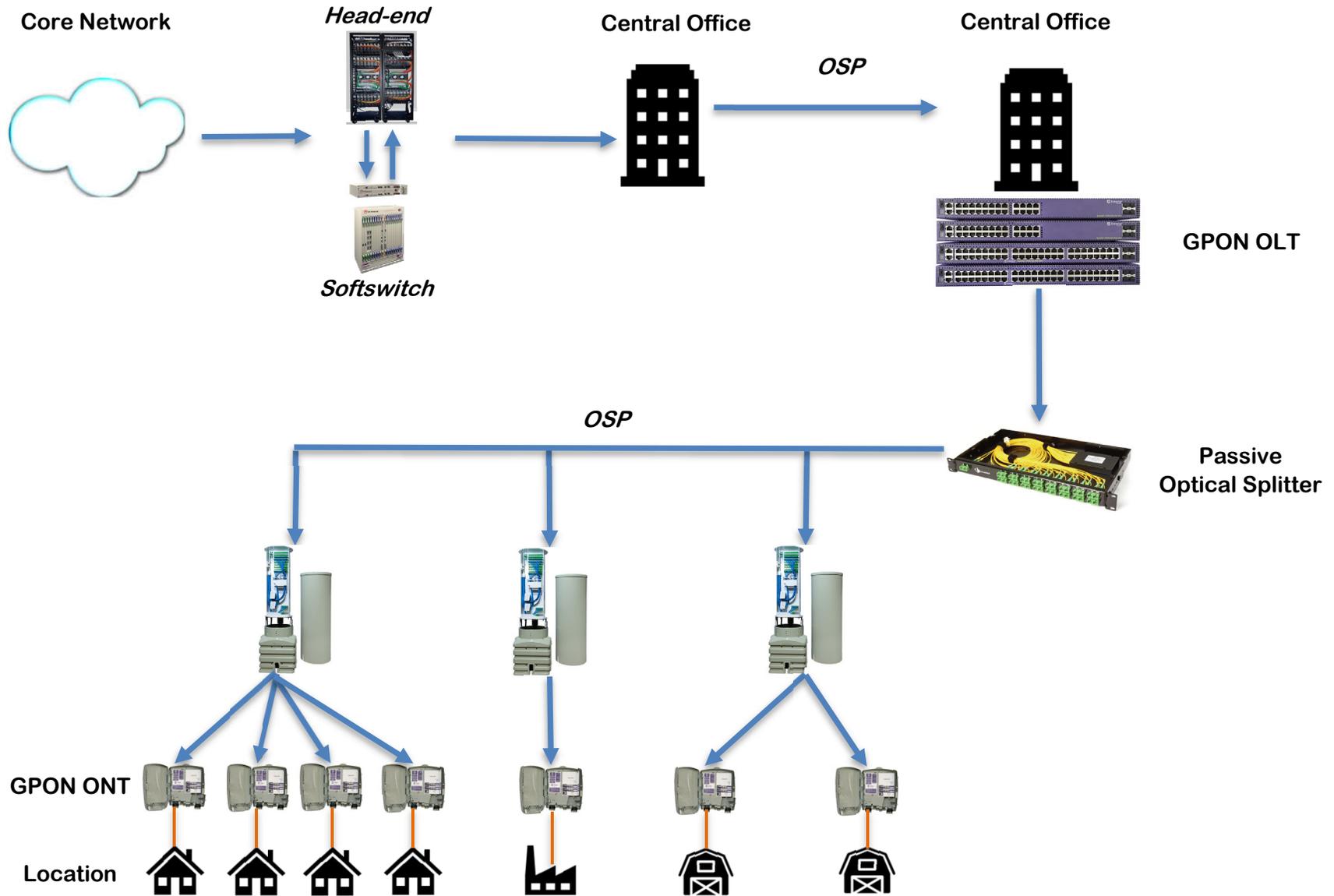
Passing – any structure that can receive service.

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

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

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

Fiber Network Architecture



Memorandum of Understanding

This agreement is made on _____, _____ between **MGW Communication**, 27 North Central Avenue, Staunton, Virginia 24401 (“Company”), and the **County of Augusta**, Virginia, Attn: County Administrator’s Office, 18 Government Center Lane, P.O. Box 590, Verona, Virginia 24482 (“County”).

RECITALS:

- A. Whereas, the Department of Housing and Community Development (DHCD) is implementing the Virginia Telecommunications Initiative (VATI) grant program; and
- B. Whereas, the primary objective of the VATI is to provide financial assistance to supplement construction costs by private sector broadband service providers, in partnership with local units of government to extend service to areas that presently are defined as unserved per grant guidelines; and
- C. Whereas, applications must be submitted by a unit of government (Towns, Cities, Counties, EDA/IDA, Broadband/Wireless Authorities, Planning District Commissions, School Divisions, etc.) with a private sector provider(s) as a co-applicant; and
- D. Whereas, the County has completed a Broadband Telecommunications Strategic Plan and issued a Request for Information seeking Internet Service Providers to partner with the County to submit an application for the 2021 VATI grant program; and
- E. Whereas, MGW Communication submitted a proposal for broadband deployment solutions in the County; and
- F. Whereas, the County and MGW Communication will partner for a grant application for the 2021 VATI grant program for the Deerfield Fiber Project, Morris Mill Fiber Project, and Middlebrook Fiber Project.

NOW, therefore, the parties agree that they will uphold the following responsibilities:

THE COUNTY:

1. The County will manage the VATI grant requirements with DHCD, including, but not limited to progress reports and monthly funding draws; and
2. The County will provide assistance with GIS mapping and permitting requirements throughout the project; and
3. The County will assist with educating the public about the project and services to be available in their areas.

THE COMPANY:

4. The Company will provide the County required information for the management of the VATI grant, including, but not limited to progress reports and monthly invoices; and
5. The Company will provide the required documents to the County for zoning and permit applications, if required; and
6. The Company will design, engineer, construct and implement broadband services as designated in the VATI application by the construction deadline of eighteen (18) months from DHCD contract date, and
7. The Company will guarantee that the standard bandwidth offerings for the projects will be a minimum of 25 Mbps download and 3 Mbps upload; and

8. The Company will lease or own the assets associated with the projects.

This agreement will terminate when DHCD notifies the County that all grant requirements have been satisfied.

Witness the following authorized signatures on behalf of the parties:

Date

By: _____
R. Craig Smith
President, MGW Communication

Date

By: _____
Timothy K. Fitzgerald
County Administrator

DRAFT

CONTRIBUTION AGREEMENT

THIS CONTRIBUTION AGREEMENT (“Agreement”) is entered into as of the ____ day of _____, 2020, by and between the **COUNTY OF AUGUSTA, VIRGINIA**, a political subdivision of the Commonwealth of Virginia (the “County”) and the **ECONOMIC DEVELOPMENT AUTHORITY OF AUGUSTA COUNTY, VIRGINIA**, a political subdivision of the Commonwealth of Virginia (the “Authority”).

RECITALS:

- A. The County is authorized pursuant to § 15.2-953 of the Code of Virginia, 1950, as amended, to make gifts, donations and appropriations of money to economic development authorities for the purposes of promoting economic development.
- B. The Department of Housing and Community Development (DHCD) implemented the Virginia Telecommunications Initiative (VATI) grant program, noting that rural communications is essential to infrastructure for modern community and economic development.
- C. The County was awarded the grant for a project(s) in the Deerfield, Morris Mill and/or Middlebrook area.
- D. The County hereby acknowledges and agrees that the expansion of broadband services would foster and promote the economic development of the County and the Commonwealth of Virginia.
- E. The County hereby agrees to contribute a total of \$223,000 to the Authority.
- F. The Authority hereby agrees that it is the Authority’s responsibility to pay the \$223,000 to MGW Communication.
- G. The disbursement of the Contribution Amount is necessary if the Company is to proceed with completing the grant project(s).

NOW, THEREFORE, in consideration of the foregoing and of the mutual covenants and agreements herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the County and the Authority do hereby agree as follows:

1. **Recitals.** The recitations set forth in the foregoing recitals are material to this Agreement and are hereby incorporated into and made a part of this Agreement as though they were fully set forth in this Section 1 and constitute the representations and understandings of the County and the Authority according to the tenor and import thereof.
2. **County Commitments.** The County is committed to disburse to the Authority the Contribution Amount as and when appropriated by the County, for the Company’s explicit

benefit.

3. **Authority Obligations.** In accordance with this Agreement, the Authority shall disburse to MGW Communication the Contribution Amount, as and when received from the County.

4. **Notices.** Any notice, request, demand, instruction or other document required or permitted by the provisions of this Agreement to be given or served hereunder or under any document or instrument executed pursuant hereto shall be in writing and (i) sent by certified mail, return receipt requested, (ii) personally delivered, or (iii) sent by a recognized overnight courier service to the Authority, the County and/or the Company, at the following addresses, or at such other addresses as the Authority, the County or the Company, by notice, may designate:

If to the County: County of Augusta, Virginia
Administrative Office
18 Government Center Lane
P. O. Box 590
Verona, Virginia 24482
Fax: (540) 245-5621
Attn: County Administrator

with a copy to: Office of the County Attorney
18 Government Center Lane
P. O. Box 590
Verona, Virginia 24482
Fax: (540) 245-5621
Attn: County Attorney

If to the Authority: Economic Development Authority
of Augusta County, Virginia
18 Government Center Lane
P. O. Box 590
Verona, Virginia 24482
Attn: Chairman

6. **Amendment.** This Agreement may be amended only by the mutual written consent of the Authority and the County, with written acknowledgement of such amendment by the Company.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written and, by so executing, each of the Authority and the County warrants that it possesses full right and authority to enter into this Agreement and to perform its obligations hereunder.

COUNTY OF AUGUSTA, VIRGINIA, a political
subdivision of the Commonwealth of Virginia

By: _____
Gerald Garber, Chairman
Augusta County Board of Supervisors

ATTEST:

Clerk of the Board

**ECONOMIC DEVELOPMENT AUTHORITY
OF AUGUSTA COUNTY, VIRGINIA**, a political
subdivision of the Commonwealth of Virginia

By: _____
B. Randolph Roller, Chairman

ATTEST:

Secretary of the Authority

Memorandum of Understanding

This agreement is made on _____, _____ between **MGW Communication**, 27 North Central Avenue, Staunton, Virginia 24401 (“Company”), and the **County of Highland**, Virginia, Attn: County Administrator’s Office, 165 W. Main, P.O. Box 130, Monterey, Virginia 24465 (“County”).

RECITALS:

- A. Whereas, the Department of Housing and Community Development (DHCD) is implementing the Virginia Telecommunications Initiative (VATI) grant program; and
- B. Whereas, the primary objective of the VATI is to provide financial assistance to supplement construction costs by private sector broadband service providers, in partnership with local units of government to extend service to areas that presently are defined as unserved per grant guidelines; and
- C. Whereas, applications must be submitted by a unit of government (Towns, Cities, Counties, EDA/IDA, Broadband/Wireless Authorities, Planning District Commissions, School Divisions, etc.) with a private sector provider(s) as a co-applicant; and
- D. Whereas, the County has completed a Broadband Telecommunications Strategic Plan and issued a Request for Information seeking Internet Service Providers to partner with the County to submit an application for the 2021 VATI grant program; and
- E. Whereas, MGW Communication submitted a proposal for broadband deployment solutions in the County; and
- F. Whereas, the County and MGW Communication will partner for a grant application for the 2021 VATI grant program for the McDowell Fiber Project.

NOW, therefore, the parties agree that they will uphold the following responsibilities:

THE COUNTY:

1. The County will manage the VATI grant requirements with DHCD, including, but not limited to progress reports and monthly funding draws; and
2. The County will provide assistance with GIS mapping and permitting requirements throughout the project; and
3. The County will assist with educating the public about the project and services to be available in their areas.

THE COMPANY:

4. The Company will provide the County required information for the management of the VATI grant, including, but not limited to progress reports and monthly invoices; and
5. The Company will provide the required documents to the County for zoning and permit applications, if required; and
6. The Company will design, engineer, construct and implement broadband services as designated in the VATI application by the construction deadline of eighteen (18) months from DHCD contract date, and
7. The Company will guarantee that the standard bandwidth offerings for the projects will be a minimum of 25 Mbps download and 3 Mbps upload; and

8. The Company will lease or own the assets associated with the projects.

This agreement will terminate when DHCD notifies the County that all grant requirements have been satisfied.

Witness the following authorized signatures on behalf of the parties:

Date

By: _____
R. Craig Smith
President, MGW Communication

Date

By: _____
Roberta Lambert
County Administrator

DRAFT

VATI FUNDING SOURCES TABLE

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

Source	Amount	%	Status
REQUESTED VATI	\$ 1,331,975	70%	Pending
MGW COMMUNICATIONS	\$ 343,481	18%	APPROVED
COUNTY OF AUGUSTA	\$223,365	11.8%	APPROVED BY BOARD OF SUPERVISORS 8/12/20
COUNTY OF HIGHLAND	\$ 4,000	0.2%	APPROVED
	\$		
	\$		
	\$		
TOTAL	\$1,902,821	100 %	



August 10, 2020

LETTER OF FINANCIAL COMMITMENT

Ms. Jennifer M. Whetzel
Deputy County Administrator
County of Augusta
Verona, Virginia 2482

RE: Augusta County 2020 VATI Project

Dear Ms. Whetzel,

MGW is very pleased to be selected as Augusta County's partnering ISP in an application to the Virginia Telecommunications Initiative (VATI)- for projects that will construct last-mile fiber infrastructure and provide broadband to many residents, farms, and businesses in the proposed project areas. As you and the other staff and elected officials know from our numerous meetings, MGW is committed to improving broadband availability in Augusta County.

The intent of this letter is to affirm our financial commitment of no less than \$345,000 to be used as matching funds for the last-mile FTTH projects in the Middlebrook, Morris Mill, Deerfield, and McDowell areas. MGW has these funds available as cash to purchase the materials included with the project and to pay our employees who will be working on the project.

We applaud Augusta County for your attentiveness to the telecommunications needs throughout your communities and your local investment will undoubtedly assist with the provision of broadband services in these high-cost, unserved areas.

Feel free to contact me with any questions you may have at (540) 448-1336 or by sending an email to craig.smith@mgwnetworks.com

Sincerely,

A handwritten signature in blue ink that reads "R. Craig Smith". The signature is written in a cursive, flowing style.

R. Craig Smith, President

COUNTY OF AUGUSTA, VA.

BOARD OF SUPERVISORS

JEFFRY A. SLAVEN
North River

PAM CARTER
Pastures

G. L. "BUTCH" WELLS
Beverley Manor

MICHAEL L. SHULL
Riverheads

GERALD W. GARBER
Middle River

SCOTT SEATON
Wayne

STEVE MORELLI
South River



TIMOTHY K. FITZGERALD – COUNTY ADMINISTRATOR

AUGUSTA COUNTY GOVERNMENT CENTER

P.O. BOX 590, VERONA, VA 24482-0590

(540) 245-5610 FAX (540) 245-5621

coadmin@co.augusta.va.us

MEMO

TO: Jennifer Whetzel, Deputy County Administrator

FROM: Timothy Fitzgerald, County Administrator

DATE: August 13, 2020

RE: VATI2021 Grant Match

The Board of Supervisors approved grant match for the VATI 2021 in the amount of \$343,000 from the Economic Development Capital Account. The breakdown is MGW Networks \$223,000 and RBNS \$120,000.



AUGUSTA COUNTY FIRE-RESCUE

County Government Center
18 Government Center Lane
P.O. Box 590, Verona, VA 24482

Main Office Line: (540) 245-5624 - Fax Line: (540) 245-5356

www.co.augusta.va.us
firerescue@co.augusta.va.us

August 13, 2020

Virginia Department of Housing
and Community Development

Augusta County Fire-Rescue conveys support for the VATI 2021 grant application for improved internet services in the Deerfield and Middlebrook areas of the County. The areas are rural in nature and the volunteer fire and rescue agencies in those areas have limited options for internet access. For example, Middlebrook Volunteer Fire Company has a fixed wireless package that provides 3-6 MB, while Deerfield Volunteer Fire & Rescue have a DSL connection. Neither meet the definition of high-speed internet per the Federal Communications Commission.

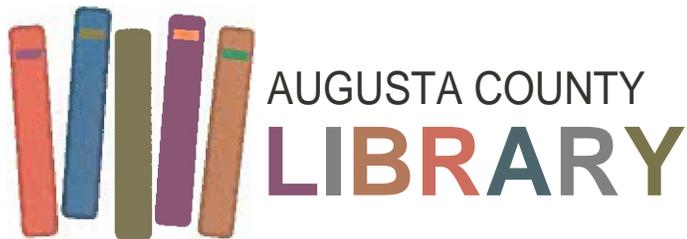
Volunteer agencies receive their call information for reporting purposes through an email and they use this to fill out required reports on a daily basis. These reports are required by the State to accurately account for fire responses and medical responses to be eligible for State and Federal grants, along with allowing the County to process insurance billing for Revenue Recovery. Emergency Medical Service (EMS) Revenue Recovery is a program in which a third party bills a user fee to Medicaid, Medicare, and private insurance companies for emergency ambulance transport service. It is imperative that the agencies have internet access that allows them the ability to efficiently and effectively process reports.

In addition to timely records management, Augusta County Fire-Rescue recently approved an initiative to equip all ambulances and medic units with Automatic Vehicle Location (AVL) technology that will allow the 911 center to track units in real time and determine the closest most appropriate unit is dispatched. Strengthening access to broadband in these rural areas will support this AVL technology.

Please strongly consider Augusta County's application during your review process.

David W. Nichols

David W. Nichols, MS, EFO
Fire & Rescue Chief



August 13, 2020

To Whom It May Concern:

The Augusta County Library expresses support for the VATI 2021 grant application for improved internet services in the Deerfield and Middlebrook areas of the County.

The Library system includes small libraries in both villages. Use of the public computers and the Wi-Fi is high as most area patrons do not have access to affordable broadband at home. Unfortunately, neither library's current internet service meets the definition of high-speed internet per the Federal Communications Commission. Deerfield's service is provided by MGW. Middlebrook's service from Lumos is an unacceptable 2.5 mg.

Part of the Augusta County library's mission is to provide residents with materials and services to improve their quality of life by meeting their educational and recreational needs. The library system provides computer access to patrons so that this mission can be fulfilled. Strategic Goals and Objective, Strategic Direction #4 states "Provide exceptional public library service to the citizens of Augusta County." One of the primary ways to achieve this is stated in Goal #2 "provide technology training to seniors, the computer illiterate, and at the Branch and Stations." Computer access and training is one area that the library system has seen significant growth in need over the years.

As you are aware modern life requires use of the internet. Applying for jobs, renewing driver's licenses, doing homework, and paying bills are now done online. The citizens in Deerfield and Middlebrook cannot complete these necessary tasks using the library's Internet service without the systems timing out. A person's ability to complete a job application should not be determined by location. The decisions of local school boards to offer complete or partial virtual learning for K-12 has an impact on the library, from use of meeting rooms for students to use or book delivery programs for elementary age students.

Please consider Augusta County's application for the VATI 2021 grant so that we can improve upon computer services at the Middlebrook and Deerfield libraries.

Sincerely,

Diantha McCauley

Diantha McCauley
Director



August 13, 2020

Tamarah Holmes, Ph.D
Director, Office of Broadband
Department of Housing and Community Development
600 East Main Street, Ste 300
Richmond, VA 23219

Dear Dr. Holmes,

The Highland County Public Library is providing this letter of support for Highland County's FY2021 Virginia Telecommunication Initiative (VATI) application. For this application, Highland is partnering with Augusta County on a regional project (the "Augusta/Highland Rural FTTH Project") along with MGW as our partnering broadband provider. MGW Telephone Co. (MGW) was established in 1967 and is the incumbent provider in eastern Highland County and western Augusta County, creating a perfect partnership for a VATI project.

The Highland County Public Library supports this project because it will help local families access the many digital literacy resources that the library provides. We know of many families who must drive their vehicles to local hotspots to be able to gain wireless internet access, just to download books or participate in online schooling. With so many children being forced into virtual learning the library has added new digital resources to support them such as Scholastic Bookflix and Scholastic Teachables. These were in addition to our current offerings of free book downloads from sites such as Hoopla, Sesame Street eBooks, and education options such as Rocket Languages, Universal Class, and the Explora suite of research databases.

Highland County families need this access the most because they have no other options available to them. Please choose to support the Augusta/Highland Rural FTTH Project.

Sincerely,

A handwritten signature in blue ink that reads "Tomi Herold". The signature is fluid and cursive.

Tomi Herold
Library Director

August 14, 2020

Tamarah Holmes, Ph.D
Director , Office of Broadband
Department of Housing and Community Development
600 East Main Street, Suite 300
Richmond, VA 23219

Dear Dr. Holmes,

We are providing this letter of support for Highland County's FY2021 Virginia Telecommunication Initiative (VATI) application. For this application, Highland County is partnering with Augusta County on a regional project (the "Augusta/Highland Rural FTTH Project") along with MGW Telephone Company as our partnering broadband provider. MGW Telephone Company (MGW) was established in 1967 and is the incumbent provider in eastern Highland County and western Augusta County, creating a perfect partnership for a VATI project.

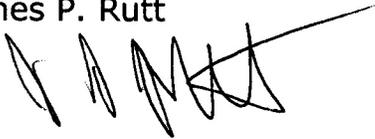
This project area is far more rural when compared to many of the VATI applications that have been awarded funding in recent years. The population density is extremely low, and the ridge-and-valley terrain makes for increased construction costs. We think that this project aligns perfectly with the spirit of the VATI program, as the term rural is used 3 times in the very first section of the VATI Guidelines, we are the epitome of a rural area. We hope that DHCD will give priority to our project area to help close, not further, the digital divide in rural Virginia.

As the need for higher internet speeds continues to increase, so does the definition of broadband. MGW's network upgrades in recent years have allowed many areas to have 4/1 or even 10/1 available from the fiber-fed DSL nodes. However, to achieve the County's and the Commonwealth's goals for speeds and universal broadband coverage, the only solution is to replace the last-mile service line with a fiber-to-the-home (FTTH) connection. This application is aimed at providing a FTTH connection to as many eligible locations in eastern Highland as quickly as possible.

Working from home requires a stable high speed internet connection. Currently, our connection is unstable with a download speed of up to 7.5 mbps, and an upload speed of 1.0. The connection is constrained to the degree that uploading anything prevents downloading, therefore, grinding connectivity to a halt. A reliable, high speed internet connection would allow for greater work productivity and the ability to telecommute rather than having to leave the area to obtain satisfactory internet speeds and connectivity.

Sincerely,

James P. Rutt

A handwritten signature in black ink, appearing to read 'James P. Rutt', with a long horizontal stroke extending to the right.

Celia W. Rutt

A handwritten signature in black ink, appearing to read 'Celia W. Rutt', with a long horizontal stroke extending to the right.

1110 New Salem Lane
Mc Dowell, VA 24458
540-396-6268



COUNTY ADMINISTRATOR
ROBERTA A. LAMBERT
MONTEREY, VIRGINIA

August 13, 2020

HIGHLAND COUNTY
BOARD OF SUPERVISORS

P. O. BOX 130
MONTEREY, VIRGINIA 24465
Phone: 540-468-2347 Fax: 540-468-3447
E-mail: hcboard@htcnet.org
Website: www.highlandcova.org

BOARD MEMBERS:

DAVID W. BLANCHARD
MONTEREY, VIRGINIA

HARRY B. SPONAUGLE
DOE HILL, VIRGINIA

JOHN L. MOYERS, JR.
MCDOWELL, VIRGINIA

Tamarah Holmes, Ph.D
Director, Office of Broadband
Department of Housing and Community Development
600 East Main Street, Ste 300
Richmond, VA 23219

Dear Dr. Holmes,

We are providing this letter of support for Highland County's FY2021 Virginia Telecommunication Initiative (VATI) application. For this application, Highland is partnering with Augusta County on a regional project (the "Augusta/Highland Rural FTTH Project") along with MGW as our partnering broadband provider. MGW Telephone Co. (MGW) was established in 1967 and is the incumbent provider in eastern Highland County and western Augusta County, creating a perfect partnership for a VATI project.

This project area is far more rural when compared to many of the VATI applications that have been awarded in recent years. The population density is extremely low, and the ridge-and-valley terrain makes for increased construction costs. We feel this project aligns perfectly with the spirit of the VATI program, as the term rural is used 3 times in the very first section of the VATI Guidelines and it doesn't get any more rural than here. We hope that DHCD will give priority to our project area to help close, not further, the digital divide in rural Virginia.

MGW's service area is approx. 993 square miles and the VATI funding would help them deploy fiber-to-the-home (FTTH) in additional areas, and much faster than if funded by MGW alone. While MGW has upgraded most of its network to fiber along the major travel corridors in the County, there are many areas that are years out from having a fiber connection.

There is a great need for broadband and telecom services in general in the eastern half of Highland County as the area is totally without cell coverage. There are 2 free Wi-Fi hot spots (provided by MGW) for locals or travelers to have access to the internet and Wi-Fi calling.

Thank you for considering this application.

Sincerely,

HIGHLAND COUNTY BOARD OF SUPERVISORS

Roberta A. Lambert
County Administrator

August 17, 2020

Tamarah Holmes, Ph.D
Director, Office of Broadband
Department of Housing and Community Development
600 East Main Street, Ste 300
Richmond, VA 23219

Dear Dr. Holmes,

The Highland County Chamber of Commerce is providing this letter of support for Highland County's FY2021 Virginia Telecommunication Initiative (VATI) application. For this application, Highland is partnering with Augusta County on a regional project (the "Augusta/Highland Rural FTTH Project") along with MGW as our partnering broadband provider. MGW Telephone Co. (MGW) was established in 1967 and is the incumbent provider in eastern Highland County and western Augusta County, creating a perfect partnership for a VATI project.

This project area is far more rural when compared to many of the VATI applications that have been awarded in recent years. The population density is extremely low, and the ridge-and-valley terrain makes for increased construction costs. We feel this project aligns perfectly with the spirit of the VATI program, as the term rural is used 3 times in the very first section of the VATI Guidelines, and it doesn't get any more rural than here. We hope that DHCD will give priority to our project area to help close, not further, the digital divide in rural Virginia.

Fast, consistent internet accessibility is crucial for attracting and keeping new residents and businesses. As the need for higher internet speeds continues to increase, so does the definition of broadband. MGW's network upgrades in recent years have allowed many areas to have 4/1 or even 10/1 available from fiber-fed DSL nodes. However, to achieve the County's and the Commonwealth's goals for speeds and universal broadband coverage, the only solution is to replace the last-mile service line with a fiber-to-the-home (FTTH) connection. This application is aimed at providing a FTTH connection to as many eligible locations in eastern Highland as quickly as possible.

We appreciate your consideration of this letter. If you have any questions or need more information, please do not hesitate to reach out. Thank you, and take care.

Sincerely,

Chris Swecker
Executive Director, Highland County Chamber of Commerce
540-468-2550, director@highlandcounty.org, www.highlandcounty.org



Economic Development Authority of Highland County, Virginia

August 17, 2020

To Whom It May Concern:

On behalf of the Economic Development Authority of Highland County, I am pleased to offer this letter in support of the application being made by the Bath-Highland Network Authority for a VATI grant for expansion of broadband access within the area.

Bryan S. Obaugh
Chair
Mill Gap

The network authority has partnered with one of our local ISPs, MGW Telephone Company, on this application to deploy a last mile fiber project that will target multiple unserved areas of the region.

Janice Deem
Secretary
Mill Gap

Citing from the Highland EDA's strategic plan, one of our current projects is "Exploring Broadband/Cellular services" within the county.

Janice Deem
Mill Gap

Also, within Highland County's comprehensive plan there is a goal (ES-17) to "identify and support the providing of the latest technology to local businesses at all levels."

Chad Kimble
Blue Grass

The area within Highland County which is ear-marked for expansion of broadband by the VATI application is not served by broadband speed. Network activities by businesses and residents, including students, are negatively affected.

George Hogshead
McDowell

For economic growth of the county, a sound technology infrastructure is required. And it must be available throughout the county in order to attract more businesses.

Henry Budzinski
Monterey

The EDA of Highland County fully supports the VATI application.

Nancy Witschey
Blue Grass

Yours truly,

Jessica Glendinning, Chair
Highland County Economic Development Authority

P.O. Box 68
Monterey, VA 24465

(540) 468-2347
highlandeda@htcnet.org

CDBG Derivation of Cost

Derivation of Cost

Product	Total	VATI	Non-VATI	Source of Estimate	Date
approximately 171,340' LF of last-mile fiber network @ \$3.85/LF - Installation & Materials	\$ 951,268	\$ 665,888	\$ 285,381	MGW	8/7/2020
approximately 52,875' LF of last-mile fiber network @ \$3.70/LF - Installation & Materials	\$ 260,043	\$ 182,030	\$ 78,013	MGW	8/7/2020
FTTH Splicing & Splice Closures for 494 Serviceable Units	\$ 274,534	\$ 192,174	\$ 82,360	MGW	8/7/2020
Network Components (POP to CPE) - Installation & Materials	\$ 416,976	\$ 291,883	\$ 125,093	MGW	8/7/2020
<i>totals</i>	\$ 1,902,822	\$ 1,331,975	\$ 570,846		

Augusta/Highland Rural FTTH Project

VATI 2021 Application - Construction Budget

Middlebrook FTTH Phase II				
	Quantity	Cost per Unit	Total Cost	Source
<i>CONSTRUCTION</i>				
Last-mile Installation (includes materials & labor) in Linear Feet	37,800	\$3.85	\$145,530.00	MGW
Road Crossings/Bores	7	\$3,500.00	\$24,500.00	MGW
Handholes/Pull-boxes	24	\$315.65	\$7,575.60	VEC Supply
Service Pedestals	48	\$237.93	\$11,420.64	Power & Tel
<i>subtotal</i>			\$189,026.24	
<i>FIBER SPLICING</i>				
Fiber Splice Closures	62	\$311.15	\$19,291.30	Power & Tel
Fiber Splice Trays	85	\$20.51	\$1,743.35	Power & Tel
Fiber Splicer	124	\$52.00	\$6,448.00	MGW
<i>subtotal</i>			\$27,482.65	
<i>NETWORK COMPONENTS (POP to CPE)</i>				
SFP Plug	2	\$1,083.25	\$2,166.50	Calix
GPON Cards	1	\$10,795.50	\$10,795.50	Calix
Fiber Patch Panel	1	\$2,042.00	\$2,042.00	Power & Tel
CPE (Calix Gigacenter)	142	\$261.75	\$37,168.50	Calix
<i>subtotal</i>			\$52,172.50	
TOTAL PROJECT COST			\$268,681.39	
Morris Mill FTTH Phase I				
	Quantity	Cost per Unit	Total Cost	Source
<i>CONSTRUCTION</i>				
Last-mile Installation (includes materials & labor) in Linear Feet	52,875	\$3.70	\$195,637.50	MGW
Road Crossings/Bores	11	\$3,500.00	\$38,500.00	MGW
Handholes/Pull-boxes	18	\$315.65	\$5,681.70	VEC Supply
Service Pedestals	85	\$237.93	\$20,224.05	Power & Tel
<i>subtotal</i>			\$260,043.25	
<i>FIBER SPLICING</i>				
Fiber Splice Closures	140	\$311.15	\$43,561.00	Power & Tel
Fiber Splice Trays	85	\$20.51	\$1,743.35	Power & Tel
Fiber Splicer	824	\$52.00	\$42,848.00	MGW
<i>subtotal</i>			\$88,152.35	
<i>NETWORK COMPONENTS (POP to CPE)</i>				

SFP Plug	2	\$1,083.25	\$2,166.50	Calix
GPON Cards	1	\$10,795.50	\$10,795.50	Calix
Fiber Patch Panel	1	\$2,042.00	\$2,042.00	Power & Tel
CPE (Calix Gigacenter)	421	\$261.75	\$110,196.75	Calix
<i>subtotal</i>			\$125,200.75	
TOTAL PROJECT COST			\$473,396.35	
Deerfield FTTH				
	Quantity	Cost per Unit	Total Cost	Source
<i>CONSTRUCTION</i>				
Last-mile Installation (includes materials & labor) in Linear Feet	95,040	\$3.85	\$365,904.00	MGW
Road Crossings/Bores	14	\$3,500.00	\$49,000.00	MGW
Handholes/Pull-boxes	64	\$315.65	\$20,201.60	VEC Supply
Service Pedestals	202	\$237.93	\$48,061.86	Power & Tel
<i>subtotal</i>			\$483,167.46	
<i>FIBER SPLICING</i>				
Fiber Splice Closures	171	\$311.15	\$53,206.65	Power & Tel
Fiber Splice Trays	202	\$20.51	\$4,143.02	Power & Tel
Fiber Splicer	970	\$52.00	\$50,440.00	MGW
<i>subtotal</i>			\$107,789.67	
<i>NETWORK COMPONENTS (FIBER NODES to CPE)</i>				
Calix E7	2	\$796.00	\$1,592.00	Calix
GPON Cards	1	\$10,795.50	\$10,795.50	Calix
SFP Plug	5	\$1,083.25	\$5,416.25	Calix
CO Splitter	1	\$1,215.00	\$1,215.00	Power & Tel
Fiber Patch Panel	2	\$2,042.00	\$4,084.00	Power & Tel
CPE (Calix Gigacenter)	508	\$261.75	\$132,969.00	Calix
<i>subtotal</i>			\$156,071.75	
TOTAL PROJECT COST			\$747,028.88	
McDowell FTTH				
	Quantity	Cost per Unit	Total Cost	Source
<i>CONSTRUCTION</i>				
Last-mile Installation (includes materials & labor) in Linear Feet	38,500	\$3.85	\$148,225.00	MGW

Road Crossings/Bores	24	\$3,500.00	\$84,000.00	MGW
Handholes/Pull-boxes	64	\$315.65	\$20,201.60	VEC Supply
Service Pedestals	112	\$237.93	\$26,648.16	Power & Tel
<i>subtotal</i>			\$279,074.76	
<i>FIBER SPLICING</i>				
Fiber Splice Closures	78	\$311.15	\$24,269.70	Power & Tel
Fiber Splice Trays	117	\$20.51	\$2,399.67	Power & Tel
Fiber Splicer	470	\$52.00	\$24,440.00	MGW
<i>subtotal</i>			\$51,109.37	
<i>NETWORK COMPONENTS (FIBER NODES to CPE)</i>				
Calix E7	2	\$796.00	\$1,592.00	Calix
GPON Cards	1	\$10,795.50	\$10,795.50	Calix
SFP Plug	4	\$1,083.25	\$4,333.00	Calix
CO Splitter	1	\$1,215.00	\$1,215.00	Power & Tel
Fiber Patch Panel	2	\$2,042.00	\$4,084.00	Power & Tel
CPE (Calix Gigacenter)	235	\$261.75	\$61,511.25	Calix
<i>subtotal</i>			\$83,530.75	
TOTAL PROJECT COST			\$413,714.88	
TOTAL OF ALL FOUR AREAS			\$1,902,821.50	

Calix Network Configuration & Quotation

Customer Name: MGW TELEPHONE
 Project Name: Cart: 2019-104732
 Quote Description: Quote1566576586285
 Author Name: Ryan Smith
 Contact Name:

Quote Reference Number:
 Quote Type:
 Date Created:
 Date Modified:
 Quote Expiration:



Calix Part #	Part Description	Funding Equipment CLEI	Price	Qty	Extended Price
	800 SG				
100-04011	844G-1 GigaCenter, 2 POTS, 4 GE, Dual Wi-Fi, 1 USB -UPS Power Interface	BVMCH00ARE	\$261.75	1	\$261.75
	E7				
000-00372	E7-2 Field Install Package (CO & ODC/RT): Shelf with Blank Card, FTA, and Field installation Kit		\$796.00	1	\$796.00
100-03656	E7-2 GPON-4 r2 line card (4x GPON OIM, 8x GE SFP, 2x 10GE XFP, 2x 10GE SFP+)	BVL3AW5FTA	\$10,795.50	2	\$21,591.00
	OIM GPON				
100-04200	GPON SFP OIM, Class B+, 1490/1310nm Single Fiber Transceiver, I-Temp (RT), C-Series	BVL3A6UFAA	\$1,083.25	2	\$2,166.50
Funding Equipment Total					\$24,815.25
Funding Grand Total					\$24,815.25

Package Details:

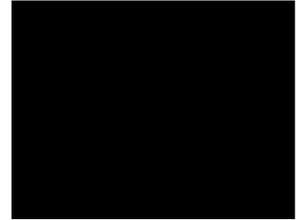
000-00372 package consists of the following:

100-01449	E7-2 Shelf, 1RU, 2 Slots, with 1 Blank Card	1
100-01830	E7-2 Field Install Kit for CO & RT (19" and 23" mounting brackets, power and ground cables, etc)	1
100-03590	E7-2 Fan Tray Assembly 2 - FTA2	1

Calix Network Configuration & Quotation

Customer Name: MGW TELEPHONE
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Equipment Summary					
Calix Part #	Part Description	CLEI	Price	Qty	Extended Price
	800 SG				
100-04011	844G-1 GigaCenter, 2 POTS, 4 GE, Dual Wi-Fi, 1 USB -UPS Power Interface	BVMCH00ARE	\$261.75	1	\$261.75
	E7				
000-00372	E7-2 Field Install Package (CO & ODC/RT): Shelf with Blank Card, FTA, and Field installation Kit		\$796.00	1	\$796.00
100-03656	E7-2 GPON-4 r2 line card (4x GPON OIM, 8x GE SFP, 2x 10GE XFP, 2x 10GE SFP+)	BVL3AW5FTA	\$10,795.50	2	\$21,591.00
	OIM GPON				
100-04200	GPON SFP OIM, Class B+,1490/1310nm Single Fiber Transceiver, I-Temp (RT), C-Series	BVL3A6UFAA	\$1,083.25	2	\$2,166.50
Equipment Total					\$24,815.25
Grand Total					\$24,815.25

Package Details:

000-00372 package consists of the following:

100-01449	E7-2 Shelf, 1RU, 2 Slots, with 1 Blank Card	1
100-01830	E7-2 Field Install Kit for CO & RT (19" and 23" mounting brackets, power and ground cables, etc)	1
100-03590	E7-2 Fan Tray Assembly 2 - FTA2	1

Notes & Optional Equipment and Services

All prices are being quoted in US \$ (Dollars).

Due to rounding, some totals may not correspond with the sum of the separate figures.

Calix Warranty - See Purchase Agreement.

Important Ordering Instructions:

Please include the Calix quote number (found in the upper right hand corner) on your PO. You may also provide an internal PO number to be used with your order. Orders received without an internal PO number will use the Calix quote number by default.

Include contact information (Name, Email & Tel) for the person who will receive the order acknowledgements and shipping notifications as well as the required billing and shipping addresses for your order.

Send Purchase Orders to Calix Order Management:
 Email: om@calix.com

Calix Network Configuration & Quotation

Customer Name: MGW TELEPHONE
Project Name: Cart: 2019-104732
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Quote Expiration:



Fax: 707-283-3771

You may check the status of your order at any time on our website. (www.calix.com, click Login)



MGW Networks_Lingo Networks
 Staunton Virginia 24401
 U.S.A

Purchase Order

PO-00519

Vendor Address

Power & Telephone

2673 Yale Avenue
 Memphis
 38112 TN
 U.S.A



Ship to : MGW Networks

23 N Central Avenue
 Staunton, Va 24401

#	Item & Description	GL Code	Qty	Rate	Amount
1	Clearfield PANEL 144 PORT TB SCAPC SKU : GGBB144C1FAZZ 19&23 MNTG PTCH/SPL FXMP PANEL, LOOSE TUBE PATCH AND SPLICE, 6 INCH /12 CASS. CAP. CHASSIS , ALMOND, 4.77 INCH RODS, 144 PORTS LOADED INTO 12 SINGLEMODE SC/APC CLEARVIEW BLUE CASSETTE(S). FRONT AND REAR PROTECTION. SLACK BASKET INCLUDED	2423200	2.00 1	2,042.00	4,084.00

Sub Total 4,084.00

Total \$4,084.00



MGW Networks_Lingo Networks
 Staunton Virginia 24401
 U.S.A

Purchase Order

PO-00563T

Vendor Address

Power & Telephone

2673 Yale Avenue
 Memphis
 38112 TN
 U.S.A



Ref# : W/O 190301

Ship to : MGW Networks

328 Chapel Road
 Churchville, Va 24421

#	Item & Description	GL Code	Qty	Rate	Amount
1	CHARLES INDUSTRIES ITEM moq of 3 at this price Part # CMPH-75SN/CL CMPH-7500, 2-PIECE BASE, 2 LADDER BARS, CABLE BRACKET W /BOND PLATE W/GROUND LUG, NON-FLAME RETARDANT, CTL LABEL Fiber Pedestal SKU : Special.Charles	2423200	4.00 1	237.93	951.72
2	Fiber 96 LT DCM SJ SA GE FREE SMF 28 E + SKU : FEDH1A1J12CE096E3	2423	20,000.00 1	0.534	10,680.00
3	Fiber 144 LT SJ SA DCM GEL FREE SMF28E+ SKU : FEDH1A1J12CE144E3	2423	20,000.00 1	0.7655	15,310.00
				Sub Total	26,941.72
				Total	\$26,941.72



MGW Networks_Lingo Networks
 Staunton Virginia 24401
 U.S.A

Purchase Order

PO-00575

Vendor Address

VEC Supply
 1155 5th Street SW Extd
 Charlottesville
 22902 VA
 U.S.A



Ref# : Mountain Grove

Ship to : MGW Networks
 23 N Central Avenue
 Staunton, Va 24401

#	Item & Description	GL Code	Qty	Rate	Amount
1	VAULT 24X36X18 TIER 15 BLANK COVER SKU : MBG STK 243618PC T15 1190101	2423200	6.00 1	315.65	1,893.90
2	VAULT HDPE 17X30X18 GREEN WITH LID NO LOGO HEX BOLTS SKU : MAC 1730-18P2PB2 1190101	2423200	8.00 1	173.00	1,384.00
				Sub Total	3,277.90
				Total	\$3,277.90



MGW Networks_Lingo Networks
 Staunton Virginia 24401
 U.S.A

Purchase Order

PO-00582T

Vendor Address

Power & Telephone

2673 Yale Avenue
 Memphis
 38112 TN
 U.S.A



Ship to : MGW Networks

23 N Central Avenue
 Staunton, Va 24401

#	Item & Description	GL Code	Qty	Rate	Amount
1	Coyote Tray Lite Grip SPL 24 CT STD SKU : 80809958	6423200	15.00 1	20.51	307.65
				Sub Total	307.65
				Total	\$307.65



MGW Networks_Lingo Networks
 Staunton Virginia 24401
 U.S.A

Purchase Order

PO-00585T

Vendor Address

Power & Telephone

2673 Yale Avenue
 Memphis
 38112 TN
 U.S.A



Ship to : MGW Networks

23 N Central Avenue
 Staunton, Va 24401

#	Item & Description	GL Code	Qty	Rate	Amount
1	Coyote Dome Closure 9 1/2" x 19" Dome SKU : COYD919B000	6423200	15.00 1	311.15	4,667.25
				Sub Total	4,667.25
				Total	\$4,667.25



Power & Telephone
2673 Yale Ave.
Memphis, TN 38112

QUOTE

UPC Vndr	Ack Date	Order #
PO #	Page #	
RYAN	1	

Ship To: MG-W TELEPHONE COMPANY
BOX 105
WILLIAMSVILLE, VA 24487

Contact: Donna Whitaker
(901)866-3171
donna.whitaker@ptsupply.com

Cust #: 20546
Bill To: MG-W TELEPHONE COMPANY
23 N CENTRAL AVE
STAUNTON, VA 24401

Reference		Currency	USD
Instructions		Sales Rep In	DSW
		Terms	
		Net 30 Days	
Ship Point		Via	Ship Date
Power & Telephone Supply Co.		WHS ROUTING	
Requested Ship Date	07/24/19	Freight In / Out	N/N

Ln #	Product and Description	Quantity Ordered	Qty U/M	Unit Price	Price U/M	Net Amount
	*** MUST SCAN MAC ADDRESSES AND SERIAL NUMBERS *** ***'Only ship UPSS for small pkg. or ODFL for LTL, no CENF***					
1	GJBB024F1FBZZ PANEL FXDS 24 SM LCUPC FXMP PANEL, LOOSE TUBE PATCH AND SPLICE, 1.75 INCH/2 CASS. CAP. CHASSIS , ALMOND, 4.77 INCH RODS, 24 PORTS LOADED INTO 2 SINGLEMODE LC/UPC CLEARVIEW BLUE CASSETTE(S). FRONT AND REAR PROTECTION. REAR COVER INCLUDED	1	EA	534.00	EA	534.00
2	SPECIAL.CLEARFIELD CLEARFIELD ITEMS MGP-PES-EAZ-ZZZ RACK MOUNT SPLITTER ASSEMBLY, 19/23 INCH, (1X) 1X64 PLANAR SPLITTER, TERMINATED WITH LC/UPC CONNECTORS, LC/UPC ADAPTER INPUT(S) AND OUTPUTS	1	EA	1,215.00	EA	1,215.00

2	Lines Total	Qty Shipped Total	2	Total	1,749.00
				Taxes	92.70
				Invoice Total	1,841.70

QUOTE

Customer Copy

Page 1 of 1

Buyer is responsible for evaluating and ordering product for intended use. Custom product is non-cancellable and non-returnable. Other products may not be returnable. Return policy for your order may be verified by your account manager. Buyer has fifteen (15) days from receipt to notify Seller of error, defect or damage. Otherwise, shipment is deemed acceptable. Payment Terms are stated on order. Exceptions must be mutually agreed to in writing in advance of order acceptance by Seller. Full Terms are available at www.ptsupply.com/terms-and-conditions.

Nichols Construction LLC
PO Box 1179
Vansant, VA 24656



Contractor Rate Sheet

MGW01A	Place Pole 25-35 Ft.	\$ 250.00
MGW01B	Remove Place Pole 25-35 Ft.	\$ 100.00
MGW02A	Place Pole 40-50 Ft.	\$ 380.00
MGW01B	Remove Place Pole 40-50 Ft.	\$ 125.00
MGW03A	Joint Use Pole (Adder)	\$ 550.00
MGW04A	Straighten Pole	\$ 250.00
MGW05A	Hand Dig Hole (Pole/Anchor) (Adder)	\$ 125.00
MGW06A	Hand Set Pole (Adder) No Access	\$ 650.00
MGW07A	Place Push Brach Pole	\$ 375.00
MGW07B	Remove Push Brace	\$ 125.00
MGW10A	Place Anchor	\$ 165.00
MGW10B	Remove Anchor	\$ 45.00
MGW11A	Rock Removal (Pole/Anchor) Per Hole (Adder)	\$ 450.00
MGW12A	Place Cable Extension Arm	\$ 85.00
MGW2B	Remove Place Cable Extension Arm	\$ 50.00
MGW13A	Add Tag Pole	\$ 5.50
MGW20A	Place Strand up to 10M (5/16)	\$ 0.65
MGW20B	Remove Place Strand up to 10M (5/16)	\$ 0.35
MGW21A	Place Fiber Optic Cable (All Sizes)	\$ 0.95
MGW21B	Remove Place Fiber Optic Cable (All Sizes)	\$ 0.40
MGW25A	OverLash Fiber Optic Cable	\$ 0.95
MGW28A	Tree Trimming 5' Radius	\$ 2.60
MGW30A	Place Down Guy	\$ 25.00
MGW30B	Remove Place Down Guy	\$ 15.00
MGW32B	DeLash/ReLash Cable	\$ 1.05
MGW34A	Bond Existing Cables	\$ 8.50
MGW35A	Transfer Attachment	\$ 90.00
MGW35B	Transfer Drop	\$ 48.00
MGW36A	Resag Aerial Cable	\$ 125.00
MGW37A	Place Riser Guards	\$ 84.00
MGW37B	Remove Place Riser Guards	\$ 38.00
MGW38A	Place Snowshoes	\$ 130.00
MGW38B	Remove Snowshoes	\$ 85.00
MGW40A	Plow Fiber/ID 1.25	\$ 3.75
MGW41A	Plow Additional Cable	\$ 1.10
MGW42A	Place Fiber in Open Trench (No Other Work)	\$ 1.25
MGW43A	Hand Dig Fiber/Drop (Non Mechanical)	\$ 11.25
MGW44A	Place Buried Fiber Drop (Plow)	\$ 1.65
MGW45A	Trench Fiber/ID 1.25 @ 36" Depth	\$ 3.25
MGW46A	Backhoe Fiber/ID 1.25 @ 36" Depth	\$ 5.25
MGW50A	Directional Bore 1.25 ID	\$ 14.50
MGW51A	Directional Bore 2 ID	\$ 15.00
MGW52A	Directional Bore 4 ID	\$ 16.00
MGW55A	Place Hand Hole (Small)	\$ 285.00
MGW55B	Remove Place Hand Hole (Small)	\$ 185.00
MGW56A	Place Hand Hole (Large)	\$ 350.00
MGW56B	Remove Place Hand Hole (Large)	\$ 225.00
MGW57A	Mini-X with Ram Hammer	\$ 14.00
MGW58A	Rock Saw @ 30" Depth	\$ 18.50
MGW59A	Directional Bore Up to 4" Semi-Rock (Pre-Approved)	\$ 26.00
MGW59B	Directional Bore up to 4" Solid Rock (Pre-Approved) (Air Hammer or AT)	\$ 88.00

MGW60A	Place Closure / Fiber Organizer / Prep Cables	\$ 325.00
MGW60B	Remove Place Closure / Fiber Organizer	\$ 225.00
MGW61A	Place Fiber Distribution Panel / Prep Cables	\$ 325.00
MGW61B	Remove Place Fiber Distribution Panel	\$ 225.00
MGW62A	Fusion Splicer Fiber 1-24	\$ 52.00
MGW62B	Fusion Splicer Fiber 25-48	\$ 42.00
MGW62C	Fusion Splicer Fiber 49-96	\$ 32.00
MGW62D	Fusion Splicer Fiber 97-144	\$ 25.00
MGW63A	Ring Cut Slack Loop	\$ 225.00
MGW64A	Maintenance Window Fiber Cut-(10 PM-6:00AM)	\$ 1,350.00
MGW70A	Place Fiber in Conduit	\$ 1.50
MGW70B	Remove Fiber from Conduit	\$ 0.75
MGW71A	Place ID 1.25 in Existing Conduit	\$ 1.70
MGW71B	Remove ID 1.25 in Existing Conduit	\$ 0.85
MGW72A	Place Fiber Drop in Existing Conduit	\$ 1.25
MGW72B	Remove Fiber Drop in Existing Conduit	\$ 0.75
MGW73A	Rod Duct and Place Mule Tape	\$ 1.50
MGW74A	Place Pull Line	\$ 1.25
MGW75A	Manhole Setup	\$ 425.00
MGW76A	Core Drill up to 4" Diameter 12" Thickness	\$ 400.00
MGW85A	Placing Foreman	\$ 45.00
MGW85B	Placing Foreman (OT)	\$ 67.50
MGW86A	Linemen	\$ 38.00
MGW86B	Linemen (OT)	\$ 57.00
MGW87A	Equipment Operator	\$ 35.00
MGW87B	Equipment Operator (OT)	\$ 52.50
MGW88A	Laborer/Groundman	\$ 32.00
MGW88B	Laborer/Groundman (OT)	\$ 48.00
MGW90A	Fiber Splicer	\$ 52.00
MGW90B	Fiber Splicer (OT)	\$ 78.00
MGW91A	Pickup Truck	\$ 16.00
MGW92A	Crew Cab Service Truck	\$ 22.00
MGW93A	Service Bucket Truck	\$ 29.00
MGW94A	Line Truck	\$ 35.00
MGW95A	Cable Placer	\$ 38.00
MGW96A	Dump Truck	\$ 31.00
MGW97A	Air Compressor	\$ 15.00
MGW98A	Wood Chipper	\$ 15.00
MGW99A	Fiber Splicing Trailer	\$ 28.00
MGW100A	Flashing Arrow Board	\$ 16.00
MGW101A	Mini-Excavator w/Hammer	\$ 35.00
MGW102A	Directional Boe Crew (JT20 Dirt includes 2 Men)	\$ 155.00
MGW200A	Materials Furnished (15% plus Sales Tax / Shipping)	
MGW201A	Lump Sum Bid	

Nichols Approval _____

Date _____

MGW Approval _____

Date _____

R. Craig Smith
10-3-18



(RETAIN FOR YOUR RECORDS)
Form 477 Filing Summary

FRN: 0019225366

Data as of: Dec 31, 2019

Operations: Non-ILEC

Submission Status: Revised - Submitted

Last Updated: Apr 15, 2020 16:53:02

Filer Identification

Section	Question	Response
Filer Information	Company Name	MGW Networks, L.L.C.
	Holding Company Name	MGW Communications, Inc.
	SAC ID	
	499 ID	
Data Contact Information	Data Contact Name	Sheri H Smith
	Data Contact Phone Number	(540) 925-5235
	Data Contact E-mail	sheri.smith@mgwnetworks.com
Emergency Operations Contact Information	Emergency Operations Name	R. Craig Smith
	Emergency Operations Phone Number	(540) 925-2258
	Emergency Operations E-mail	craig.smith@mgwnetworks.com
Certifying Official Contact Information	Certifying Official Name	Sheri H. Smith
	Certifying Official Phone Number	(540) 925-5235
	Certifying Official E-mail	sheri.smith@mgwnetworks.com

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	477_MGWNetworksDeployment_20191231(2).csv	Apr 15, 2020 15:40:22	6991
Fixed Broadband Subscription	REVISED-MGWNWORKS_BROADBAND_SUBSCRIPTION_12_31_19.csv	Apr 15, 2020 16:47:44	245
Fixed Voice Subscription	477_MGWNWORKSLINGO_Voice_telephone_subscription_12_31_19(2).csv	Apr 15, 2020 15:40:22	23

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	Lingo Networks	Optical Carrier/Fiber to the End User	376
		Terrestrial Fixed Wireless	6615
Total			6991

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	1	0	1	1
	Optical Carrier/Fiber to the End User	107	290	68	358
	Terrestrial Fixed Wireless	136	953	39	992
West Virginia	Optical Carrier/Fiber to the End User	1	1	0	1
Total		245	1244	108	1352

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
1.500	1.000	99	4	103
1.500	1.500	0	1	1
3.000	1.000	89	9	98
3.000	1.500	1	0	1
5.000	1.000	9	4	13
6.000	1.000	549	19	568
9.000	1.000	15	6	21
10.000	1.000	130	4	134
10.000	2.000	0	1	1
10.000	10.000	0	3	3
15.000	2.000	1	1	2
15.000	3.000	16	2	18
20.000	20.000	1	0	1
25.000	1.500	90	1	91
25.000	2.000	3	0	3
25.000	3.000	3	0	3
25.000	5.000	67	7	74
25.000	25.000	0	1	1
50.000	10.000	89	14	103
50.000	50.000	1	6	7
75.000	15.000	0	2	2
100.000	20.000	56	7	63
100.000	25.000	4	1	5
100.000	30.000	2	0	2

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
100.000	100.000	2	4	6
150.000	25.000	1	0	1
150.000	150.000	0	2	2
200.000	40.000	13	2	15
200.000	200.000	0	2	2
250.000	250.000	0	2	2
350.000	350.000	1	0	1
400.000	400.000	1	0	1
500.000	500.000	0	3	3
1000.000	1000.000	1	0	1
Total		1244	108	1352

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	10.000	2.000	0	1	1
Optical Carrier/Fiber to the End User	1.500	1.000	2	0	2
	1.500	1.500	0	1	1
	3.000	1.000	2	1	3
	3.000	1.500	1	0	1
	5.000	1.000	9	4	13
	6.000	1.000	1	0	1
	10.000	1.000	15	4	19
	10.000	10.000	0	3	3
	15.000	2.000	1	1	2
	15.000	3.000	16	2	18
	20.000	20.000	1	0	1
	25.000	2.000	3	0	3
	25.000	3.000	3	0	3
	25.000	5.000	67	7	74
	25.000	25.000	0	1	1
	50.000	10.000	88	14	102
50.000	50.000	1	6	7	
75.000	15.000	0	2	2	
100.000	20.000	56	7	63	

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	100.000	25.000	4	1	5
	100.000	30.000	2	0	2
	100.000	100.000	2	4	6
	150.000	25.000	1	0	1
	150.000	150.000	0	1	1
	200.000	40.000	13	2	15
	200.000	200.000	0	2	2
	250.000	250.000	0	2	2
	350.000	350.000	1	0	1
	400.000	400.000	1	0	1
	500.000	500.000	0	3	3
	1000.000	1000.000	1	0	1
Terrestrial Fixed Wireless	1.500	1.000	97	4	101
	3.000	1.000	87	8	95
	6.000	1.000	548	19	567
	9.000	1.000	15	6	21
	10.000	1.000	115	0	115
	25.000	1.500	90	1	91
	50.000	10.000	1	0	1
	150.000	150.000	0	1	1
Total			1244	108	1352

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
Vermont	0	0	5	0
Virginia	0	0	286	147
Total	0	0	291	147

Fixed Voice Subscription (iVoIP)

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

State	Total	Consumer	Business / Govt
Vermont	5	0	5
Virginia	3	0	3

State	Total	Consumer	Business / Govt
Total	8	0	8

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
Vermont	0	0	0	0	0	0	0	0	0
Virginia	283	147	136	283	0	282	0	1	0
Total	283	147	136	283	0	282	0	1	0



(RETAIN FOR YOUR RECORDS)
Form 477 Filing Summary

FRN: 0004335873

Data as of: Dec 31, 2019

Operations: ILEC

Submission Status: Original - Submitted

Last Updated: Mar 2, 2020 11:53:09

Filer Identification

Section	Question	Response
Filer Information	Company Name	MGW Telephone Company, Inc.
	Holding Company Name	MGW Communications, Inc.
	SAC ID	190238
	499 ID	807990
Data Contact Information	Data Contact Name	Sheri H Smith
	Data Contact Phone Number	(540) 925-5235
	Data Contact E-mail	sheri.smith@mgwnetworks.com
Emergency Operations Contact Information	Emergency Operations Name	R. Craig Smith
	Emergency Operations Phone Number	(540) 925-2258
	Emergency Operations E-mail	craig.smith@mgwnetworks.com
Certifying Official Contact Information	Certifying Official Name	Sheri H Smith
	Certifying Official Phone Number	(540) 925-5235
	Certifying Official E-mail	sheri.smith@mgwnetworks.com

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	477_MGWTelephoneDeployment_20191231(2).csv	Mar 2, 2020 11:38:17	370
Fixed Broadband Subscription	477_MGWTelephone_BroadbandSubscription_12_31_2019.csv	Feb 26, 2020 16:32:05	26
Fixed Voice Subscription	Interactive data entry		3

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	MGW Telephone	Asymmetric xDSL	293
		Optical Carrier/Fiber to the End User	77
Total			370

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

Fixed Broadband Subscription

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Virginia	Asymmetric xDSL	21	683	43	726
	Optical Carrier/Fiber to the End User	5	11	0	11
Total		26	694	43	737

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
5.000	1.000	440	19	459
10.000	1.000	126	12	138
15.000	1.000	66	9	75
15.000	2.000	3	0	3
25.000	1.000	18	2	20
25.000	3.000	19	1	20
25.000	5.000	3	0	3
50.000	5.000	13	0	13
50.000	10.000	6	0	6
Total		694	43	737

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	5.000	1.000	435	19	454
	10.000	1.000	126	12	138
	15.000	1.000	66	9	75
	25.000	1.000	18	2	20
	25.000	3.000	18	1	19
	25.000	5.000	3	0	3
	50.000	5.000	13	0	13
	50.000	10.000	4	0	4
Optical Carrier/Fiber to the End User	5.000	1.000	5	0	5
	15.000	2.000	3	0	3
	25.000	3.000	1	0	1
	50.000	10.000	2	0	2
Total			694	43	737

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

**Fixed Voice
Subscription**

State	Total VGE Lines	Consumer VGE Lines	Total VoIP Subscriptions	Consumer VoIP Subscriptions
Virginia	1402	1258	0	0
Total	1402	1258	0	0

**Fixed Voice
Subscription
(VGE Lines)****VGE Lines Provided to Unaffiliated Providers by State**

State	Wholesale	UNE-L
Virginia	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
Virginia	1402	737	665	182	1076	54	90
Total	1402	737	665	182	1076	54	90

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
Virginia	1402	1402	0	0	11	0	0	1391
Total	1402	1402	0	0	11	0	0	1391



(RETAIN FOR YOUR RECORDS)
Form 477 Filing Summary

FRN: 0019225366

Data as of: Jun 30, 2019

Operations: Non-ILEC

Submission Status: Original - Submitted

Last Updated: Sep 3, 2019 17:22:15

Filer Identification

Section	Question	Response
Filer Information	Company Name	MGW Networks, L.L.C.
	Holding Company Name	MGW Communications, Inc.
	SAC ID	
	499 ID	
Data Contact Information	Data Contact Name	Sheri H Smith
	Data Contact Phone Number	(540) 712-0000 ext: 300
	Data Contact E-mail	sheri.smith@mgwnetworks.com
Emergency Operations Contact Information	Emergency Operations Name	R. Craig Smith
	Emergency Operations Phone Number	(540) 925-2258
	Emergency Operations E-mail	craig.smith@mgwnetworks.com
Certifying Official Contact Information	Certifying Official Name	Sheri H Smith
	Certifying Official Phone Number	(540) 712-0000 ext: 300
	Certifying Official E-mail	sheri.smith@mgwnetworks.com

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	477_MGWNetworksDeployment_20190630.csv	Sep 3, 2019 16:13:13	6926
Fixed Broadband Subscription	477 MGWNETWORKS Broadband Subscription 06302019.csv	Aug 30, 2019 21:59:06	258
Fixed Voice Subscription	477 MGWNETWORKS Voice telephone subscription 6-30-19.csv	Sep 2, 2019 19:19:58	22

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	Lingo Networks	Optical Carrier/Fiber to the End User	61
		Terrestrial Fixed Wireless	5615
	MGW Networks	Optical Carrier/Fiber to the End User	100

State	DBA Name	Technology	Blocks
		Terrestrial Fixed Wireless	1150
Total			6926

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	1	0	1	1
	Cable Modem	1	1	0	1
	Optical Carrier/Fiber to the End User	102	229	65	294
	Terrestrial Fixed Wireless	154	925	40	965
Total		258	1155	106	1261

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
1.500	0.500	1	0	1
1.500	0.512	114	4	118
1.500	1.500	0	1	1
3.000	0.512	97	3	100
3.000	0.768	6	2	8
3.000	1.000	6	6	12
3.000	1.500	1	0	1
5.000	1.000	9	4	13
6.000	0.768	557	8	565
6.000	1.000	19	10	29
9.000	0.768	11	2	13
9.000	1.000	7	4	11
10.000	1.000	87	5	92
10.000	2.000	0	1	1
10.000	10.000	0	4	4
15.000	2.000	4	3	7
15.000	3.000	17	3	20
20.000	20.000	1	0	1
25.000	1.500	48	1	49
25.000	2.000	2	0	2

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
25.000	3.000	3	0	3
25.000	5.000	66	5	71
25.000	25.000	0	1	1
50.000	10.000	64	13	77
50.000	50.000	1	5	6
75.000	15.000	0	2	2
100.000	15.000	0	1	1
100.000	20.000	24	5	29
100.000	25.000	2	1	3
100.000	100.000	2	4	6
150.000	25.000	1	0	1
150.000	40.000	0	1	1
150.000	150.000	0	1	1
200.000	40.000	2	1	3
200.000	200.000	0	1	1
250.000	250.000	0	2	2
400.000	400.000	1	0	1
500.000	500.000	1	2	3
1000.000	1000.000	1	0	1
Total		1155	106	1261

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	10.000	2.000	0	1	1
Cable Modem	50.000	10.000	1	0	1
Optical Carrier/Fiber to the End User	1.500	0.512	2	0	2
	1.500	1.500	0	1	1
	3.000	1.000	2	1	3
	3.000	1.500	1	0	1
	5.000	1.000	9	4	13
	6.000	0.768	1	0	1
	10.000	1.000	7	4	11
	10.000	10.000	0	4	4

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	15.000	2.000	4	3	7
	15.000	3.000	17	3	20
	20.000	20.000	1	0	1
	25.000	1.500	16	0	16
	25.000	2.000	2	0	2
	25.000	3.000	3	0	3
	25.000	5.000	66	5	71
	25.000	25.000	0	1	1
	50.000	10.000	63	13	76
	50.000	50.000	1	5	6
	75.000	15.000	0	2	2
	100.000	15.000	0	1	1
	100.000	20.000	24	5	29
	100.000	25.000	2	1	3
	100.000	100.000	2	4	6
	150.000	25.000	1	0	1
	150.000	40.000	0	1	1
	150.000	150.000	0	1	1
	200.000	40.000	2	1	3
	200.000	200.000	0	1	1
	250.000	250.000	0	2	2
	400.000	400.000	1	0	1
	500.000	500.000	1	2	3
	1000.000	1000.000	1	0	1
Terrestrial Fixed Wireless	1.500	0.500	1	0	1
	1.500	0.512	112	4	116
	3.000	0.512	97	3	100
	3.000	0.768	6	2	8
	3.000	1.000	4	5	9
	6.000	0.768	556	8	564
	6.000	1.000	19	10	29
	9.000	0.768	11	2	13

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	9.000	1.000	7	4	11
	10.000	1.000	80	1	81
	25.000	1.500	32	1	33
Total			1155	106	1261

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
Vermont	0	0	5	0
Virginia	0	0	249	135
Total	0	0	254	135

Fixed Voice Subscription (iVoIP)

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

State	Total	Consumer	Business / Govt
Vermont	5	0	5
Virginia	3	0	3
Total	8	0	8

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
Vermont	0	0	0	0	0	0	0	0	0
Virginia	246	135	111	177	69	245	0	1	0
Total	246	135	111	177	69	245	0	1	0



(RETAIN FOR YOUR RECORDS)
Form 477 Filing Summary

FRN: 0004335873

Data as of: Jun 30, 2019

Operations: ILEC

Submission Status: Original - Submitted

Last Updated: Sep 3, 2019 17:23:44

Filer Identification

Section	Question	Response
Filer Information	Company Name	MGW Telephone Company, Inc.
	Holding Company Name	MGW Communications, Inc.
	SAC ID	190238
	499 ID	807990
Data Contact Information	Data Contact Name	Sheri Smith
	Data Contact Phone Number	(540) 712-0000 ext: 300
	Data Contact E-mail	sheri.smith@mgwnetworks.com
Emergency Operations Contact Information	Emergency Operations Name	R. Craig Smith
	Emergency Operations Phone Number	(540) 925-2258
	Emergency Operations E-mail	craig.smith@mgwnetworks.com
Certifying Official Contact Information	Certifying Official Name	Sheri Smith
	Certifying Official Phone Number	(540) 712-0000 ext: 300
	Certifying Official E-mail	sheri.smith@mgwnetworks.com

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	477_MGWTelephoneDeployment_20190630.csv	Sep 3, 2019 14:27:55	283
Fixed Broadband Subscription	477_MGWTELEPHONE_Broadband_Subscription_6_30_2019.csv	Aug 29, 2019 13:19:14	17
Fixed Voice Subscription	Interactive data entry		3

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	MGW Telephone	Asymmetric xDSL	257
		Optical Carrier/Fiber to the End User	26
Total			283

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	14	674	47	721
	Optical Carrier/Fiber to the End User	3	8	0	8
Total		17	682	47	729

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
5.000	1.000	458	21	479
10.000	1.000	117	12	129
15.000	1.000	75	12	87
15.000	2.000	3	0	3
25.000	1.000	25	2	27
50.000	10.000	4	0	4
Total		682	47	729

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	5.000	1.000	453	21	474
	10.000	1.000	117	12	129
	15.000	1.000	75	12	87
	25.000	1.000	25	2	27
	50.000	10.000	4	0	4
Optical Carrier/Fiber to the End User	5.000	1.000	5	0	5
	15.000	2.000	3	0	3
Total			682	47	729

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	1410	1262	0	0
Total	1410	1262	0	0

VGE Lines Provided to Unaffiliated Providers by State

**Fixed Voice
Subscription
(VGE Lines)**

State	Wholesale	UNE-L
Virginia	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
Virginia	1410	729	681	192	1070	57	91
Total	1410	729	681	192	1070	57	91

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
Virginia	1410	1410	0	0	8	0	0	1402
Total	1410	1410	0	0	8	0	0	1402



(RETAIN FOR YOUR RECORDS)
Form 477 Filing Summary

FRN: 0019225366

Data as of: Dec 31, 2018

Operations: Non-ILEC

Submission Status: Original - Submitted

Last Updated: Mar 8, 2019 08:55:59

Filer Identification

Section	Question	Response
Filer Information	Provider Name	MGW Networks, L.L.C.
	Holding Company Name	MGW Communications, Inc.
	SAC ID	
	499 ID	828775
Data Contact Information	Data Contact Name	Sheri Smith
	Data Contact Phone Number	(540) 712-0000 ext: 300
	Data Contact E-mail	sheri.smith@mgwnetworks.com
Emergency Operations Contact Information	Emergency Operations Name	R. Craig Smith
	Emergency Operations Phone Number	(540) 712-0000 ext: 301
	Emergency Operations E-mail	craig.smith@mgwnetworks.com
Certifying Official Contact Information	Certifying Official Name	Sheri Smith
	Certifying Official Phone Number	(540) 712-0000 ext: 300
	Certifying Official E-mail	sheri.smith@mgwnetworks.com

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	477_MGWNetworksLingoDeployment_20181231.csv	Mar 8, 2019 07:52:54	6895
Fixed Broadband Subscription	477 Broadband Subscription MGWNETWORKSLINGO_12_30_18.csv	Mar 6, 2019 21:29:58	254
Fixed Voice Subscription	477 Voice telephone subscription MGWNETWORKSLINGO_123118.csv	Mar 6, 2019 22:46:53	20

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	Lingo Networks	Optical Carrier/Fiber to the End User	58
		Terrestrial Fixed Wireless	5615
	MGW Networks	Optical Carrier/Fiber to the End User	73

State	DBA Name	Technology	Blocks
		Terrestrial Fixed Wireless	1149
Total			6895

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	1	0	1	1
	Cable Modem	1	1	0	1
	Optical Carrier/Fiber to the End User	93	198	68	266
	Terrestrial Fixed Wireless	159	925	43	968
Total		254	1124	112	1236

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
1.500	0.500	2	0	2
1.500	0.512	126	5	131
1.500	1.500	0	1	1
3.000	0.512	112	3	115
3.000	0.768	8	2	10
3.000	1.000	6	6	12
3.000	1.500	1	0	1
5.000	1.000	18	5	23
6.000	0.768	571	7	578
6.000	1.000	19	13	32
9.000	0.768	14	2	16
9.000	1.000	10	4	14
10.000	1.000	55	3	58
10.000	2.000	0	1	1
10.000	10.000	0	7	7
15.000	2.000	9	4	13
15.000	3.000	29	5	34
20.000	20.000	1	0	1
25.000	1.500	14	1	15
25.000	2.000	4	0	4

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
25.000	3.000	4	0	4
25.000	5.000	70	5	75
25.000	25.000	0	1	1
30.000	30.000	0	1	1
50.000	10.000	26	9	35
50.000	50.000	1	5	6
75.000	15.000	0	2	2
100.000	15.000	0	1	1
100.000	20.000	17	6	23
100.000	25.000	0	1	1
100.000	100.000	2	4	6
150.000	25.000	1	0	1
150.000	40.000	0	1	1
150.000	150.000	0	1	1
200.000	40.000	1	1	2
200.000	200.000	0	1	1
250.000	50.000	0	1	1
250.000	250.000	0	2	2
400.000	400.000	1	0	1
500.000	500.000	1	1	2
1000.000	1000.000	1	0	1
Total		1124	112	1236

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	10.000	2.000	0	1	1
Cable Modem	50.000	10.000	1	0	1
Optical Carrier/Fiber to the End User	1.500	0.512	2	0	2
	1.500	1.500	0	1	1
	3.000	1.000	2	1	3
	3.000	1.500	1	0	1
	5.000	1.000	18	5	23
	10.000	1.000	4	3	7
	10.000	10.000	0	7	7

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	15.000	2.000	9	4	13
	15.000	3.000	29	5	34
	20.000	20.000	1	0	1
	25.000	1.500	4	0	4
	25.000	2.000	4	0	4
	25.000	3.000	4	0	4
	25.000	5.000	70	5	75
	25.000	25.000	0	1	1
	50.000	10.000	25	9	34
	50.000	50.000	1	5	6
	75.000	15.000	0	2	2
	100.000	15.000	0	1	1
	100.000	20.000	17	6	23
	100.000	25.000	0	1	1
	100.000	100.000	2	4	6
	150.000	25.000	1	0	1
	150.000	40.000	0	1	1
	150.000	150.000	0	1	1
	200.000	40.000	1	1	2
	200.000	200.000	0	1	1
	250.000	50.000	0	1	1
	250.000	250.000	0	2	2
	400.000	400.000	1	0	1
	500.000	500.000	1	1	2
	1000.000	1000.000	1	0	1
Terrestrial Fixed Wireless	1.500	0.500	2	0	2
	1.500	0.512	124	5	129
	3.000	0.512	112	3	115
	3.000	0.768	8	2	10
	3.000	1.000	4	5	9
	6.000	0.768	571	7	578
	6.000	1.000	19	13	32
	9.000	0.768	14	2	16

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	9.000	1.000	10	4	14
	10.000	1.000	51	0	51
	25.000	1.500	10	1	11
	30.000	30.000	0	1	1
Total			1124	112	1236

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
Vermont	0	0	5	0
Virginia	0	0	224	115
Total	0	0	229	115

Fixed Voice Subscription (iVoIP)

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

State	Total	Consumer	Business / Govt
Vermont	5	0	5
Virginia	3	0	3
Total	8	0	8

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
Vermont	0	0	0	0	0	0	0	0	0
Virginia	221	115	106	166	55	220	0	1	0
Total	221	115	106	166	55	220	0	1	0



(RETAIN FOR YOUR RECORDS)
Form 477 Filing Summary

FRN: 0004335873

Data as of: Dec 31, 2018

Operations: ILEC

Submission Status: Original - Submitted

Last Updated: Mar 8, 2019 08:54:01

Filer Identification

Section	Question	Response
Filer Information	Provider Name	MGW Telephone Company, Inc.
	Holding Company Name	MGW Communications, Inc.
	SAC ID	190238
	499 ID	807990
Data Contact Information	Data Contact Name	Sheri Smith
	Data Contact Phone Number	(540) 925-5235
	Data Contact E-mail	sheri.smith@mgwnetworks.com
Emergency Operations Contact Information	Emergency Operations Name	R Craig Smith
	Emergency Operations Phone Number	(540) 925-2258
	Emergency Operations E-mail	craig.smith@mgwnetworks.com
Certifying Official Contact Information	Certifying Official Name	Sheri Smith
	Certifying Official Phone Number	(540) 925-5235
	Certifying Official E-mail	sheri.smith@mgwnetworks.com

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	477_MGWTelephoneDeployment_20181231.csv	Mar 8, 2019 07:40:44	277
Fixed Broadband Subscription	477 Broadband Subscription TELEPHONE_12_31_18.csv	Mar 6, 2019 21:36:40	17
Fixed Voice Subscription	Interactive data entry		3

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	MGW Telephone	Asymmetric xDSL	257
		Optical Carrier/Fiber to the End User	20
Total			277

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

Fixed Broadband Subscription

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Virginia	Asymmetric xDSL	14	657	48	705
	Optical Carrier/Fiber to the End User	3	8	0	8
Total		17	665	48	713

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
0.512	0.512	1	0	1
5.000	1.000	464	21	485
10.000	1.000	103	12	115
15.000	1.000	72	14	86
15.000	2.000	3	0	3
25.000	1.000	18	1	19
50.000	10.000	4	0	4
Total		665	48	713

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	0.512	0.512	1	0	1
	5.000	1.000	459	21	480
	10.000	1.000	103	12	115
	15.000	1.000	72	14	86
	25.000	1.000	18	1	19
	50.000	10.000	4	0	4
Optical Carrier/Fiber to the End User	5.000	1.000	5	0	5
	15.000	2.000	3	0	3
Total			665	48	713

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	1412	1264	0	0
Total	1412	1264	0	0

VGE Lines Provided to Unaffiliated Providers by State

**Fixed Voice
Subscription
(VGE Lines)**

State	Wholesale	UNE-L
Virginia	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
Virginia	1412	701	711	196	1068	56	92
Total	1412	701	711	196	1068	56	92

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
Virginia	1412	1412	0	0	8	0	0	1404
Total	1412	1412	0	0	8	0	0	1404



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Form 477 Filing Summary

FRN: 0019225366

Data as of: Jun 30, 2018

Operations: Non-ILEC

Submission Status: Original - Submitted

Last Updated: Sep 3, 2018 10:37:51

Filer Identification

Section	Question	Response
Filer Information	Provider Name	MGW Networks, L.L.C.
	Holding Company Name	MGW Communications, Inc.
	SAC ID	
	499 ID	828775
Data Contact Information	Data Contact Name	Sheri H Smith
	Data Contact Phone Number	(540) 925-5235
	Data Contact E-mail	sheri.smith@mgwnetworks.com
Emergency Operations Contact Information	Emergency Operations Name	R. Craig Smith
	Emergency Operations Phone Number	(540) 925-2258
	Emergency Operations E-mail	craig.smith@mgwnetworks.com
Certifying Official Contact Information	Certifying Official Name	Sheri H. Smith
	Certifying Official Phone Number	(540) 925-5235
	Certifying Official E-mail	sheri.smith@mgwnetworks.com

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	477_MGWNetworksLingoDeployment_20180630.csv	Aug 30, 2018 12:43:48	6884
Fixed Broadband Subscription	477_NETWORKSLINGOBroadband Subscription_6_30_2018F.csv	Aug 28, 2018 22:55:44	238
Fixed Voice Subscription	477_NetworksLingoVoiceTelephoneSubscription_6_30_2018.csv	Aug 28, 2018 21:49:21	16

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	Lingo Networks	Optical Carrier/Fiber to the End User	58
		Terrestrial Fixed Wireless	5615
	MGW Networks	Optical Carrier/Fiber to the End User	62

State	DBA Name	Technology	Blocks
		Terrestrial Fixed Wireless	1149
Total			6884

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	1	0	1	1
	Cable Modem	1	1	0	1
	Optical Carrier/Fiber to the End User	80	134	65	199
	Terrestrial Fixed Wireless	156	955	46	1001
Total		238	1090	112	1202

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
1.500	0.500	1	0	1
1.500	0.512	145	6	151
1.500	1.500	0	1	1
1.500	25.000	1	0	1
3.000	0.512	122	3	125
3.000	0.768	10	3	13
3.000	1.000	6	8	14
3.000	1.500	1	0	1
5.000	1.000	22	5	27
6.000	0.768	593	7	600
6.000	1.000	19	11	30
9.000	0.768	13	2	15
9.000	1.000	11	4	15
9.000	2.000	2	0	2
10.000	1.000	31	4	35
10.000	2.000	0	1	1
10.000	10.000	0	8	8
15.000	2.000	13	6	19
15.000	3.000	31	5	36
15.000	15.000	0	2	2

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
25.000	1.500	7	1	8
25.000	2.000	1	0	1
25.000	3.000	5	0	5
25.000	5.000	25	5	30
25.000	10.000	4	1	5
25.000	25.000	0	3	3
30.000	30.000	0	1	1
50.000	10.000	16	8	24
50.000	50.000	1	4	5
65.000	15.000	0	1	1
100.000	15.000	0	1	1
100.000	20.000	4	3	7
100.000	25.000	1	1	2
100.000	100.000	2	3	5
150.000	40.000	0	1	1
150.000	150.000	0	1	1
200.000	40.000	0	1	1
200.000	200.000	0	1	1
400.000	400.000	1	0	1
500.000	500.000	1	0	1
1000.000	1000.000	1	0	1
Total		1090	112	1202

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	10.000	2.000	0	1	1
Cable Modem	50.000	10.000	1	0	1
Optical Carrier/Fiber to the End User	1.500	0.512	2	0	2
	1.500	1.500	0	1	1
	3.000	1.000	2	1	3
	3.000	1.500	1	0	1
	5.000	1.000	22	5	27
	10.000	1.000	2	3	5
	10.000	10.000	0	8	8

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	15.000	2.000	13	6	19
	15.000	3.000	31	5	36
	15.000	15.000	0	2	2
	25.000	2.000	1	0	1
	25.000	3.000	5	0	5
	25.000	5.000	25	5	30
	25.000	10.000	4	1	5
	25.000	25.000	0	3	3
	50.000	10.000	15	8	23
	50.000	50.000	1	4	5
	65.000	15.000	0	1	1
	100.000	15.000	0	1	1
	100.000	20.000	4	3	7
	100.000	25.000	1	1	2
	100.000	100.000	2	3	5
	150.000	40.000	0	1	1
	150.000	150.000	0	1	1
	200.000	40.000	0	1	1
	200.000	200.000	0	1	1
	400.000	400.000	1	0	1
	500.000	500.000	1	0	1
	1000.000	1000.000	1	0	1
Terrestrial Fixed Wireless	1.500	0.500	1	0	1
	1.500	0.512	143	6	149
	1.500	25.000	1	0	1
	3.000	0.512	122	3	125
	3.000	0.768	10	3	13
	3.000	1.000	4	7	11
	6.000	0.768	593	7	600
	6.000	1.000	19	11	30
	9.000	0.768	13	2	15
	9.000	1.000	11	4	15
	9.000	2.000	2	0	2

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer		Total
			Consumer	Business / Govt	
	10.000	1.000	29	1	30
	25.000	1.500	7	1	8
	30.000	30.000	0	1	1
Total			1090	112	1202

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
Vermont	0	0	5	0
Virginia	0	0	187	82
Total	0	0	192	82

Fixed Voice Subscription (iVoIP)

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

State	Total	Consumer	Business / Govt
Vermont	5	0	5
Virginia	8	0	8
Total	13	0	13

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
Vermont	0	0	0	0	0	0	0	0	0
Virginia	179	82	97	179	0	178	0	1	0
Total	179	82	97	179	0	178	0	1	0



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Form 477 Filing Summary

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Filer Identification

Section	Question	Response
Filer Information	Provider Name	MGW Telephone Company, Inc.
	Holding Company Name	MGW Communications, Inc.
	SAC ID	190238
	499 ID	807990
Data Contact Information	Data Contact Name	Sheri Smith
	Data Contact Phone Number	(540) 925-5235
	Data Contact E-mail	sheri.smith@mgwnetworks.com
Emergency Operations Contact Information	Emergency Operations Name	R.Craig Smith
	Emergency Operations Phone Number	(540) 925-2258
	Emergency Operations E-mail	craig.smith@mgwnetworks.com
Certifying Official Contact Information	Certifying Official Name	Sheri Smith
	Certifying Official Phone Number	(540) 925-5235
	Certifying Official E-mail	sheri.smith@mgwnetworks.com

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	477_MGWTelephoneDeployment_20180630F.csv	Aug 30, 2018 14:23:56	217
Fixed Broadband Subscription	477 Broadband Subscription MGWTELEPHONE 06302018.csv	Aug 14, 2018 16:00:55	18
Fixed Voice Subscription	Interactive data entry		3

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	MGW Telephone	Asymmetric xDSL	214
		Optical Carrier/Fiber to the End User	3
Total			217

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

Fixed Broadband Subscription

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Virginia	Asymmetric xDSL	15	671	47	718
	Optical Carrier/Fiber to the End User	3	8	0	8
Total		18	679	47	726

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
0.512	0.512	1	0	1
5.000	0.768	2	0	2
5.000	1.000	476	21	497
10.000	1.000	108	12	120
15.000	1.000	73	14	87
15.000	2.000	3	0	3
25.000	1.000	12	0	12
50.000	10.000	4	0	4
Total		679	47	726

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	0.512	0.512	1	0	1
	5.000	0.768	2	0	2
	5.000	1.000	471	21	492
	10.000	1.000	108	12	120
	15.000	1.000	73	14	87
	25.000	1.000	12	0	12
	50.000	10.000	4	0	4
Optical Carrier/Fiber to the End User	5.000	1.000	5	0	5
	15.000	2.000	3	0	3
Total			679	47	726

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	1422	1279	0	0
Total	1422	1279	0	0

**Fixed Voice
Subscription
(VGE Lines)****VGE Lines Provided to Unaffiliated Providers by State**

State	Wholesale	UNE-L
Virginia	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
Virginia	1422	726	696	205	1074	56	87
Total	1422	726	696	205	1074	56	87

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
Virginia	1422	1422	0	0	8	0	0	1414
Total	1422	1422	0	0	8	0	0	1414



Here is a clearer view showing the actual Map made by MGW over our map so there is no confusion of the overlap:

