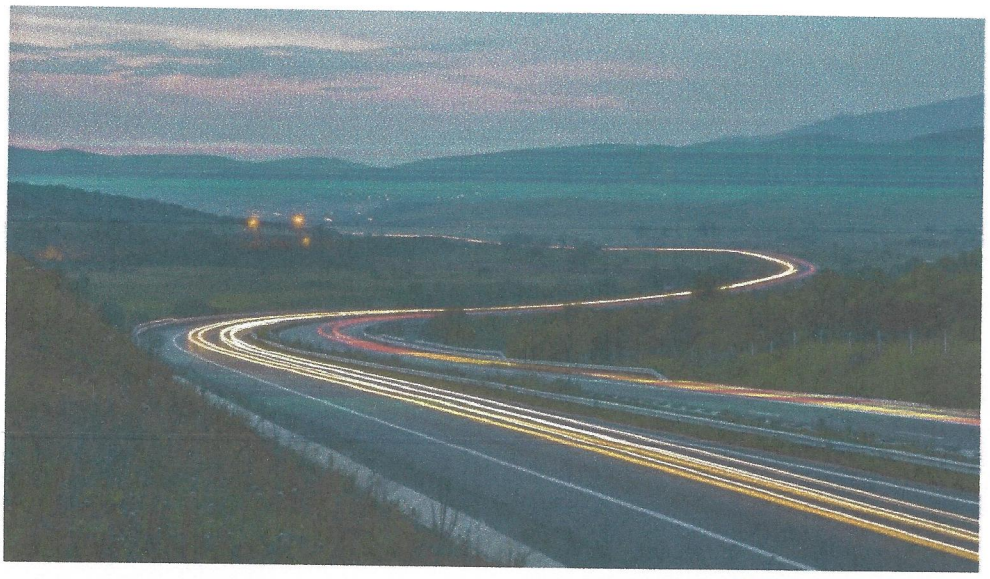
StraightUpNet LLC
& CONXX

COUNTIES OF AMELIA & DINWIDDIE, VIRGINIA

RFP# 19-050719 - Broadband Project



Contents

Proposed Network Map (Section 4.2 B1.ii)

Detailed Network Design Estimates:

Radio Network Planning / Backhaul Design

Network System Designs / Accommodations

Example licensed network backhaul layout. (This is subject to change as detailed planning is produced)

Predicted RF Propagation maps (Section 4.2 B1.iii)

Detailed Equipment Specification / Warranty (Section 4.2 B1.v)

Access Points

Base Station Warranty

Antenna

Antenna Warranty

BackHaul Equipment

Backhaul Equipment Warranty

Acceptance Test Plan (Section 4.2 B1.vi)

Other Services (Section 4.2 B2)

StraightUpNet LLC

CONXX

Proposed Partner Agreement (Section 4.2 B3)

Partnership Structure (Leveraging Amelia & Dinwiddie Counties' Assets)

Timeline (Section 4.2 B4)

Timeframe

Assumptions (Section 4.2 B.5)

Ownership

Amelia & Dinwiddie County Responsibilities

Conceptual Design Proposal (Section 4.2 B.6)

Cost Estimates (Section 4.2 C)

Eligibility Requirements (Section 5.1)

Virginia License (Section 5.1.A)

Cover Letter

Mickie R Hodges Jr
CEO / Co-Owner StraightUpNet LLC
17001 Goodes Bridge Rd
Amelia, Va. 23002
June 11, 2019

Hollie R. Casey
Procurement Technician
14016 Boydton Plank Road
P O Drawer 70
Dinwiddie VA 23841

Dear Ms. Casey:

On behalf of StraightUpNet LLC & CONXX, I am pleased to be presenting this response to RFP# 19-050719.

The team of StraightUpNet LLC and CONXX is an ideal partner for Amelia & Dinwiddie Counties' initiative to provide high-quality broadband service to the underserved and unserved areas. Together we have extensive experience in designing and building state-of-the-art high speed highly reliable networks utilizing both wired and wireless technologies. We have strong sales capabilities as well as the ability to manage large complex efforts with great success.

StraightUpNet's goal is to provide Internet service to Amelia, Dinwiddie and ultimately Virginia rural counties. Amelia was chosen as a starting point because it is and has been the home of Mickie Hodges Jr and his family for generations. His roots in the community will be a driving force and commitment to success. Our goal is to bring the knowledge, experience and success of our team to build a superior internet service company where we will build partnerships and invest to bring state-of-the-art reliable high-speed broadband internet service to underserved areas in Amelia, Dinwiddie and Virginia.

StraightUpNet has been successfully operating and investing in Amelia County to make Internet service available to the citizens that started during the winter of 2016-17. There are three major components to successfully bring high-speed broadband internet to rural communities: technology, cost of infrastructure and market participation. StraightUpNet participated in the original RFP 17-102317 and we believe we solve the technology portion and a partnership with the local government can help remove barriers to infrastructure allowing an ongoing support to the low-density market. We would like to present how a public-private partnership will prove to be very beneficial in helping both Amelia & Dinwiddie Counties, StraightUpNet LLC and CONXX achieve our mutual goals to service the community.

Thank you for your consideration. We look forward to working with you.

Sincerely,

Mickie (Mickey) R Hodges Jr
President/CEO/Co-Owner StraightUpNet LLC
CC: Duncan Fung Co-Owner StraightUpNet LLC , Brent J. Mortensen President CONXX, David E Kartchner Executive VP CONXX.

Specific Proposal Instructions

Qualification and experience: (Section 4.2 A)

Point of Contact: (Section 4.2 A.1)

Mickie R Hodges Jr, President of StraightUpNet LLC located at 17001 Goodes Bridge Rd Amelia Virginia 23002, 804-601-4421 will act as the main point of contact for the offeror.

Legal Structure (Section 4.2 A.2)

Project Core Management Team

StraightUpNet LLC

Mickie R. Hodges Jr -- President / Co-Owner – Project Lead
Duncan Fung – Director Business Relation

CONXX

Brent J. Mortensen – President
David E. Kartchner – Executive Vice-President

Project Contractors

Design Telecom – Tower / Micro Cell Services – Ryan Schock – Vice President
Waldrop Wireless Technician, LLC – Tower / Micro Cell Services – Tommy Waldrop - Owner
ARE Telecom – Micro Cell Manufacturer – Cameron Kilton – Co-Owner

Experience (Section 4.2 A.3)

StraightUpNet LLC

StraightUpNet LLC was founded in Late 2016 as a partnership with the mission and vision to bring premium quality high speed broadband service as well as other network related products and services to residential and commercial customers as a better alternative. We believe that high speed Internet should be available regardless of where you live. We are working hard to find the most economical and innovative solutions that will help close the digital divide seen primarily in the rural communities.

StraightUpNet designed, developed and has been deploying in Amelia County successfully since late 2016. We service residential and business within the community with high speed Internet service, VoIP and consulting services. Like the small communities of our roots we strive to build relationships with our customers to understand their needs as well as provide absolute best customer service. We are a young "local" company making a big difference with an innovative enthusiastic approach to delivering broadband in many places previously with poor to no options. We have made some major accomplishments deploying an innovative LTE network servicing large companies that depend on our service to be successful within the county to students and work from home citizens.

We have farms, trucking, real estate and home-based businesses successfully thriving with our service. We have designed and built the core and WAN required for this project that has been operating since 2016. We go above and beyond with innovate ways to connect as many customers within our footprint with a no one left disconnected approach. A large trucking business relies on loading boards for dispatching trucks. They were losing loads due to poor internet speeds impacting the refresh times of the webpage. We also service them with a full premium phone system allowing them to expand and manage the increased volume of calls.

Residential services have made a huge impact on the quality of the citizens lives that are within our footprint. Many can take full advantage of internet activities at the usage levels normally seen in the cities. Online gaming, work from home, streaming online, live chat and online meetings are all possible with our service.

CONXX

Founded in 2004, CONXX has developed network architecture and infrastructure to help rural communities overcome both digital and economic divides. The CONXX Carrier Communication Platform© combines carrier-grade telecommunications technology at the core with cost-effective Ethernet technology at the edge. The technology that was developed is a proven platform that has now been in operation in its current configuration for over 15 years, and has evolved over a period of 20 years. It is a mature and proven platform, based on sound carrier-grade technology and architecture.

Currently, our networks provide services to over 80 communities in 6 states. Each network provides a comprehensive suite of carrier-grade solutions for state, county and local governments, schools, businesses and residents. Some examples of our projects include:

- The Allconet Network is a county-wide network delivering AMR, Wi-Fi, LMR, broadband, SCADA, backhaul, and video surveillance capabilities.
- The ACNY Network is a county-wide network delivering 911 services, ISP broadband, network extension, County network services, and video surveillance capabilities.
- The Lackawanna County Wireless project is a multi-county network delivering public safety, video, data, Wi-Fi, and economic based services throughout the coverage area.

Each of our networks is designed and operates at a minimum of 99.99% availability for both public safety and traditional municipal based networks. These networks include licensed microwave and fiber components to optimize availability.

We are a partner with Ceragon, Nokia, Radwin, RAD, Motorola, and other vendors to ensure consistent installation and configuration of the hardware equipment. Our installation team is Commscope certified for tower climbers. We follow the best practices for tower installation work including safety meetings, toolbox talks, and safety huddles.

The CONXX GridObserver© is a full-service, web-based network management and operating support system for municipal networks. The privately held company's wired and wireless networks support multiple services and service providers. CONXX is headquartered in Cumberland, Maryland, and maintains regional offices in Jessup, PA and Salt Lake City, Utah.

For more information, visit http://www.conxx.net or http://www.gridobserver.net.

Conxx Government References

Lackawanna County PA, Multipurpose Municipal Network
Contacts:
Chief Information Officer - Jeff Mando
911 Director - Dave Hahn

Allconet (Allegany County Maryland), Multipurpose Municipal Network
Contacts:
CIT - Beth Thomas

Allegany County NY, Multipurpose Municipal Network

Contacts:
County Legislator - Phil Curran
911 Technical Manager - Matt Evans
County Planner - Kier Durlam

CONXX Trade Secrets / Proprietary Information

CONXX has 43 accepted patent claims for Method and apparatus for implementing and managing a network architecture under US Patent US7720050B1. CONXX also has additional patent claims pending for network architecture management under filing 15/455,124.

Goals and Objective

StraightUpNet LLC and CONXX's goal is to offer state-of-the-art high-speed broadband internet with a strong robust core to rural underserved and unserved areas within Amelia & Dinwiddie Counties. StraightUpNet LLC is based in the county of Amelia. StraightUpNet LLC will be a driving force in the effort to bring proprietary proven methods and technology expertise.

To achieve our goal, we will be deploying primarily, not exclusively, wireless technologies leveraging the latest technology to maximize our delivery efforts to rural areas. We build long term partnerships and work with our vendors to bring the best in class technologies while leveraging lowering cost methods. We are investing in the future of the internet as a service provider to provide superior service with the ability to upgrade and expand to keep up with the growth of technology. Our goal is not only to fill a void today by providing internet service to rural areas but to also design into the model a roadmap and means to consistently close the digital-divide gap in the future.

Most of the management team lives in rural areas across Virginia, Maryland and Texas and has vested interest as consumers to improve the Broadband Internet landscape for rural areas to improve our community's ability to take advantage of technologies normally only seen in cities and suburban areas. We have seen many other's failed attempts or the ignored investments of telco's that has led to the digital divide we see today. Our objective is to leverage our team and partner's capabilities, experience and resources to build a successful model that will benefit many rural citizens well into the future.

We build long term relationships and partnerships to achieve excellence.

For tower services, Design Telecom & Waldrop Wireless Technician, LLC are well established and experienced in all types of commercial tower needs working for Verizon, AT&T and T-Mobile. We leverage their capacity, experience and resources to accomplish our tower needs fast and accurately. We have rapid response teams that are available for tower equipment issues, called tiger teams, responding in 24 hours or less. Design Telecom hires climbers from the Wireless for Warriors nonprofit organization that strives to employee veterans in the wireless industry.

For new micro-cells we partner with ARE Telecom that provides an innovative micro-cell structure for efficient and reduced deployment time. The design allows for less permitting and doesn't disrupt the soil thus they can be moved to better fit the demand as required.

For Data Center services, we partner with QTS located in Sandston Virginia as the IXP, carrier neutral, peering services, and hands & feet as needed. The facility is a highly secure state of the art data center and acts as one element of our concentric circles of security. Vast amounts of benefits include redundant power supplies, network feeds (upstream & transit), and access to engineers as needed. We have negotiated roof access to the building that can be leveraged to provide a wireless backhaul point(s) back to the facility that would be an addition to the fiber transits we already utilize.

Our strategy is to introduce the best and the latest technology to the consumer by selecting LTE as the primary protocol for its higher modulations, speeds and industry investment rates. We will also be deploying TVWS to provide additional

coverage required for the goal of the project. We are a participant in the Microsoft Airband initiative that enables us to take advantage of the technology advances they are achieving in the TVWS. We partner and work with Baicells as our primary LTE equipment vendor. We worked closely with them on beta programs providing feedback and improvements from the field with the goal of moving LTE forward in the WISP sector. We get a significant amount of operation support from the Baicells engineering team. We are also working with other key LTE vendors and will be looking to potentially deploy advanced LTE solutions where the design requires. Our installation technicians will be FCC certified as CPI (Certified Professional Installer) that will comply with new guidelines allowing us to increase our broadcasting output EIRP to provide better service to our customers.

Our strategy is to have internal installation consultants with a combination of contracted installers. The internal consultants are to ensure the customer quality is held to our company standards. They build relationships with the customers, perform QC checks on contractors, perform consulting work, and customer premise troubleshooting as well as perform installations. All consultants and contractors will be trained in LTE, TVWS, other wireless technologies and the new upcoming FCC certification.

StraightUpNet & CONXX will work together to build a superior network design and support model. They provide years of WISP experience and profound knowledge that will prove to be the successful choice for this project. By combining our resources, we can obtain / apply quickly the lessons learned and proven strategies from within the WISP industry leaders. Therefore, we are incorporating proven models and we can build on what works the first time.

AfterImage - Provides professional detailed tower RF mapping and would be the primary provider in modeling the detailed design for the Amelia-Dinwiddie project.

Mid-Atlantic Broadband is our primary transit provider and has fiber in both Amelia and Dinwiddie to be utilized and leveraged into our network design.

Resume Of Key Individuals

Mickie Hodges Jr is notably an innovative and customer orientated Information Technology Professional with over 20+ years experience with customer and vendor interfacing in the areas of manufacturing execution systems, IT security, networking, and manufacturing equipment spanning every aspect of the design, implementation, configuration, and support of a complex mission-critical solutions. He has an excellent ability to utilize skills and experience with great versatility under multiple roles (technical and functional in nature), as needed, to accomplish the mission at hand. He has worked for and with a handful of fortune 500 companies in mission critical roles to their operations in the Computer Science, Cybersecurity, Networking, and Manufacturing specific systems. Highly innovative Companies like Primestar, Qimonda, Infineon, Siemens, Micron, Northrop Grumman, and MWV relied on him to successfully design and implement highly critical systems across all facets of Information technologies including innovative and high dependable networks.

Deeply involved with the VITA (Virginia Information Technologies Agency) infrastructure (Private-Public) project with NG (Northrop Grumman) to migrate state agency data centers to NG data center. Prior to Mickie joining the effort there were a few previous failed attempts. His team developed processes and automation that contributed to being able to successfully move several agencies without any issue.

He was the CoE (Center of Expertise) in the support of global Manufacturing Execution Systems (MES) and Safety, Health, and Environmental Systems for MWV/WestRock. Mickie had overall responsibility for the Strategic planning of MES (Manufacturing Execution Systems) applications, working with Business units worldwide on technology road-maps and innovations, and working with vendors and consulting partners. One notable achievement to mention was working with Cisco head engineers to develop a highly secure M2M (Machine 2 Machine) solution for MWV customers by partnering with major cell carriers to provide transport solutions worldwide. This network solution was the first of its kind and was rolled out to MWV/Westrock customers like Coca-Cola, Anheuser Busch, Pepsi, and Kroger. Expertise in IoT, M2M, Cloud

Solutions, and Big Data as well as the network needs and accommodations required. He has the experience, connections, and is an expert at vendor management and being able to leverage resource costs effectively to accomplish complex tasks.

David Kartchner is Executive Vice President and co-founder of CONXX. He was Vice President of Network Technology at UCN, an advanced services telecommunication provider, where he specialized in VoIP applications.

He was responsible for the strategic planning and integration of I-Link VoIP network and MyACD network-based call center technology into the UCN network. David was owner of Telecom Service Bureau, a charter agent firm for US West and Qwest Communications and was part of the startup team for the Salt Lake City operations of Phoenix Fiberlink. He was also a senior consultant with the Tanner Group, with experience in network LAN/WAN design and engineering, network optimization, call center, and telecommunication technology.

SubContractor Reference (Section 4.2 A.4)

Design Telecom

Richard Yates
I. T. Department
Radio & Electronics Technician
Wireless Communications Division
Office: 757-514-4431
Mobile: 757-284-4450
Fax: 757-514-7242
Email: ryates@suffolkva.us

Dan Bendl
T-Mobile
200 Westgate Pkwy, Suite 200 | Richmond, VA. 23233
Mobile 804-548-5500 | Dan.Bendl@t-mobile.com

Casey Bohn
Managing Director, South Region
NETWORK BUILDING + CONSULTING
4435 Waterfront Drive | Suite 100 | Glen Allen, VA | 23060
P 804.548.4079 x 5004 | M 804.212.4105 | networkbuilding.com

ARE Telecom -- http://www.arewindtowers.com/

Christina R. Michaud
Project Manager, RMR-DSW
Work Mobile: 408-706-4750
Mastec

Christine Malone, PMP
RMR Market Engineering Lead, Telecom
Black & Veatch
4600 S Syracuse St., Suite 800, Denver, CO 80237
D +1 720-834-4420
E MaloneCA@BV.com

QTS Datacenters -- http://www.qtsdatacenters.com/data-centers/richmond
References have been requested.

Most Recent Audited Financial Statement (Section 4.2 A.5)

StraightUpNet LLC & CONXX are private companies and as such it is not common practice to have audited financial statements but we would be willing to provide compiled statements. With the timeframe given to react there isn't enough time to provide compiled financial statement with the RFP.

Conflict of Interest (Section 4.2 A.6)

There is no one identified.

Sworn Certificate (Section 4.2 A.7)

Attached

Proposed System and Services (Section 4.2 B.1)

Our Design

One of our strengths is to be able to build successful cost-effective partnerships to provide a superior service to our customers at a low cost. By partnering with StraightUpNet LLC & CONXX, Amelia & Dinwiddie Counties will be able to take comfort in knowing that you are also backed by all our partners. We are building long lasting relationships which include Baicells, QTS, Design Telecom, Waldrop Technician, ARE Telecom and Final Dot (cyber security) to name a few.

Our core network

Our network is based on the MPLS protocol which was developed in the mid-90's and leveraged heavily by telecom's and fortune 500 companies for its ability to isolate traffic (security) it incorporates tagging (labels) of traffic for high speed routing improving overall performance of the network. The protocol meets HIPAA and PCI standards as well as any government requirements for compliance. It is universal or agnostic to be able to transport other popular protocols improving ability to meet all customer's needs. The MPLS network is not hardware dependent and can run on any compatible vendor. It is secure, scalable, expandable, flexible, and very robust. The core is designed from the ground up and modernized allowing the ability to easily be upgraded to meet the future demands of the network. It is designed and implemented by top of the class network engineers and allows for 24/7/365 monitoring and alerting with SLA's on break fix issues. Amelia & Dinwiddie Counties and the citizens will benefit greatly with a scalable and stable network design.

Facilities / Transport

Our core network is currently in QTS data center with redundancy of power to our equipment and weeks of standby generator fuel on site. It is environmentally controlled and a fully redundant network coming in and out of the facilities. We will have two redundant paths across MBC fiber out of Amelia to QTS. All equipment is physically secured and 24/7 monitored.

We utilize QTS's carrier neutral facility to leverage cost effective Internet upstream providers in a competitive environment. We are also working with QTS and partners on OCA (Open Connect Appliances) for Netflix, Google, and other traffic caching when possible. This approach will improve performance for user's experiences, and it will also reduce cost for the internet in general while allowing better utilization of the non-caching Internet traffic.

Our equipment located at the towers / micro cells is also secured within an enclosure and backup battery with the ability to plug in generator power for extended outage situations.

We are deploying a fiber to wireless middle mile model where we will run fiber as far as it is cost effective then build a robust licensed wireless backhaul to lower cost. We will deploy LTE and TVWS wireless for last mile distribution points. MBC has a good footprint of fiber transport in both counties. We will be leveraging transit fiber wherever it makes sense to transport our traffic back to our network core. All the transit providers in the Counties have end points in the meet-me room at QTS. We also have roof access to the QTS facility allowing us to build a wireless transit backhaul directly from the building allowing for a balanced cost-effective transport solution. This is very stable, scalable, and cost-effective approach.

Vertical Infrastructure / Support

We have established a relationship with American Tower, Crown Castle and SBA which has existing tower structures in both Counties. As part of our negotiations we have been able to take advantage of some attractive price points. We have successfully deployed our solution on several of those towers allowing us to have a good starting footprint in Amelia.

We own or have agreements with three other verticals in Amelia that can be deployed. It is worth noting that these verticals also are in locations where the County doesn't have any assets to offer for such structures essentially filling any gaps beyond the RFP offering.

We have partners that are certified to climb any tower in Virginia and use 95% veterans. All our work is RF designed for maximum coverage to get best utilization of the equipment. The tower service teams are broken into two categories. We have project teams that are focused on new installations of equipment on new verticals to turn up a new service area. Then we have what we call a "tiger" team that can be deployed within <24 hours' notice for break fixes. We have negotiated some very competitive price points and SLA's to provide superior service at a sustainable cost. Microcell construction traditionally has been either 45G guided or lightweight self-supporting model and will be deployed as deemed necessary. However, these are very limited in wind load, require more site work, more engineering work, and typically require extra offsets for guide wires or fencing. ARE microcells will be deployed 80' to 130', small contained footprint, functioning support wall that acts as fencing, and can be moved easier. The cost is about a quarter of a traditional microcell.

Wireless / Fiber Approach

Our network will consist of both fiber and wireless technologies. Our design would be to run fiber to effective locations (i.e. High occupancy / large buildings / Towers) like schools or county administration buildings and then distribute to surrounding locations via wireless technologies. In the case of running fiber to a building or microcell we would then use very high bandwidth wireless technology (i.e. 5 GHz) to deliver very high-speed internet (near fiber speeds) to surrounding businesses or other county facilities within a short range. This approach is very effective at delivering very high-speed internet in short distances to distribute the cost of running the fiber without sacrificing quality or speed.

Our plan is to build a primarily LTE and TVWS based network leveraging licensed 3.65 band CBRS (Citizens Broadband Radio Service). We have acquired the necessary license to deploy these base stations. Amelia and Dinwiddie for the most part fall outside the exclusion zone so there is very little coordination that is required with any of the proposed sites. We would also like to partner with the counties' schools on a plan for obtaining and gaining the right to the 2.5 GHz. This band has a lot of additional benefits and even further coverage capabilities due to several factors. At a very high level the design would be to blanket an area with LTE and /or combination of short-range technologies mentioned above and mesh it with fiber pops for redundancy. (Illustration A - Illustrates a high level of the LTE and Short-range technologies mentioned above.)

The LTE product is designed for outdoor wireless and can be more sensitive and smarter with data management. It can hold up better in foliage (trees) by having the ability to hold a better modulation (signal) and collecting reflections of the radio waves and pieces of information to make sense of it. Tree-based NLOS is the primary

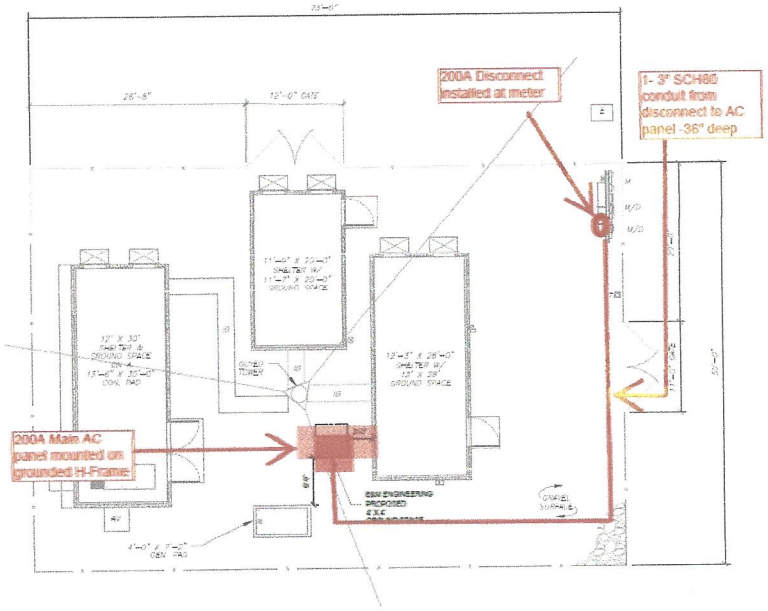
reason keeping most WISPs from being able to connect many of the customers in their footprint who want their service; it is a massive business problem, not just a technical one. Those who can beat NLOS -- or at least deal with it much more effectively can yield more customers per vertical deployment. The WIFI chipset was originally designed for short range line-of-sight applications. We will deploy this type of product in our design but for more specific purpose-built solution.

LTE is a worldwide standard and widely invested at a rate of over $1 billion in R&D a year and used by all major carriers. It has become very cost effective to deploy LTE for "Fixed" Wireless applications. It is not proprietary or tied to a vendor, it is interchangeable and independent. The Internet is evolving and the number of devices connecting is only going to grow. LTE solution allows for us to address this growth and very easily participate in the "Internet of Things" (IoT) market. There will be great value for Amelia & Dinwiddie Counties to leverage this functionality and use it as an attraction to new and existing business. The Counties would have the ability to leverage our network to quickly connect temporary mobile stations. These could be used by emergency crews for triage situations or recreation events like fairs and festivals.

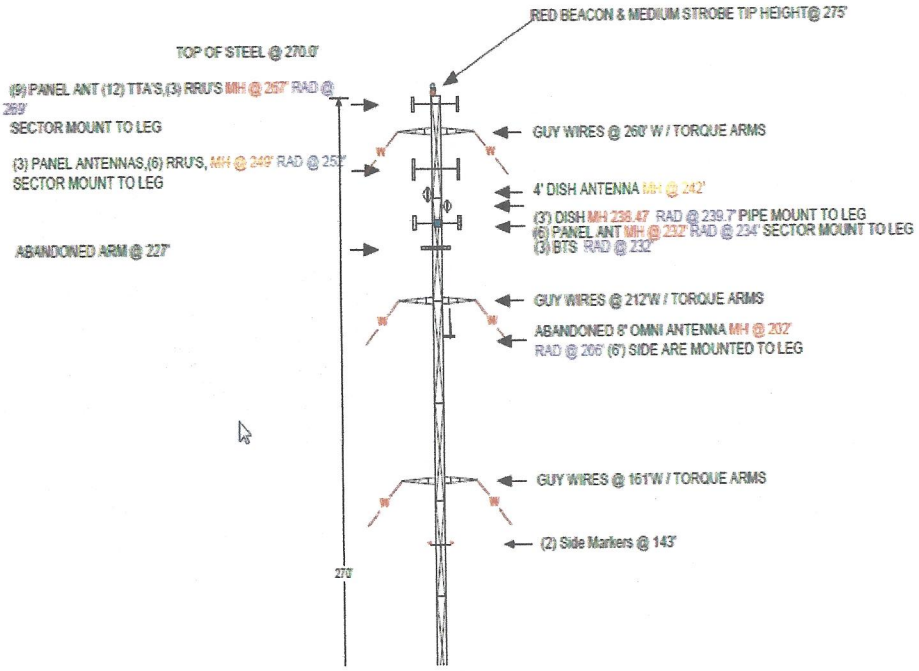
TVWS leverages unused TV channels, can help reduce the cost and reach more customers. The technology has unique properties that allow it to go further from a microcell then the LTE solutions. With recent technology advancements and investments from Microsoft to enable WISP to deploy a cost-effective solution is helping make this a very useful solution to achieve distance and higher speeds.

Equipment Location (Section 4.2 – B1.i)

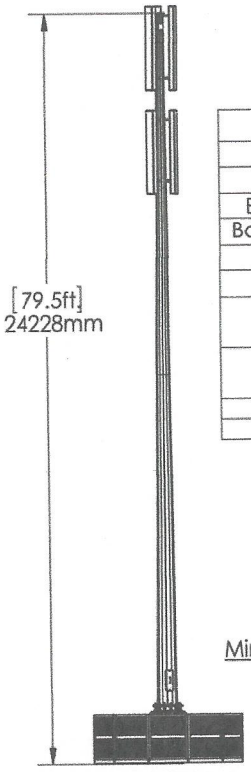
- Example mark-up of a leased site civil work for ground space. Power is run to an H-Frame or a shelter where an enclosure / rack is installed for all ground equipment.



- Example of tower equipment placement on a leased tower.



- Example of a new ARE microcell site with equipment installed on microcell and enclosure locations.

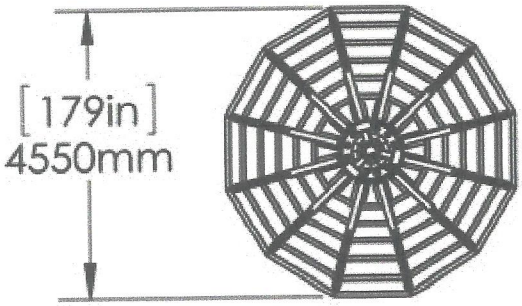


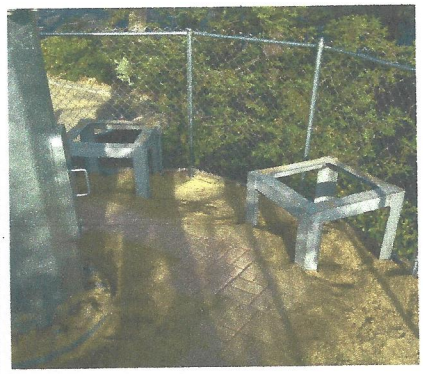
AFS1100	
EPA @ 55m/s (m^2)	5.58
EPA @ 123 mph (ft^2)	60.1
Ballast 16kN/m^3 (m^3)	23
Ballast 2700lb/yd^3 (yd^3)	30
Assembly Time (hr)	5-7
Minimum Crew	3
Price Range ($USD)	Per Quote
Leasing ($USD)	Per Quote
Handholes Standard/ Custom	
Antenna Mounts Not Included	

Moment - 408,240 ft - lbs
Shear - 5,710 lbs
Axial - 6,520 lbs

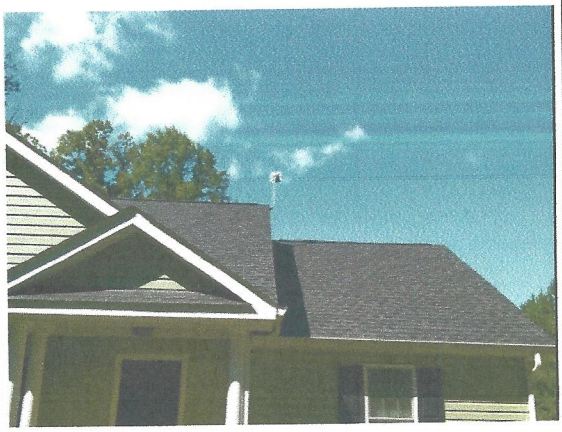
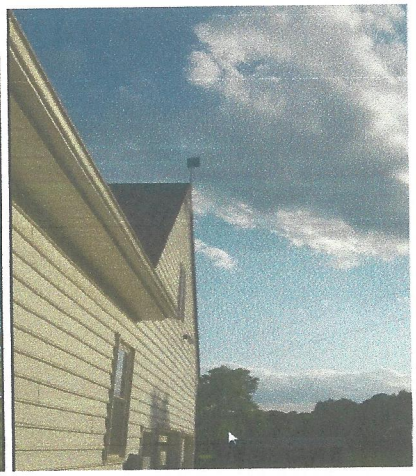
Weight pole/Foundation
12,980 lbs (5900 kg)

Min. Material Handling Requirement
Skid Steer





- Example(s) of Customer Premise Equipment

Proposed Network Map (Section 4.2 B1.ii)

Detailed Network Design Estimates:
Radio Network Planning / Backhaul Design

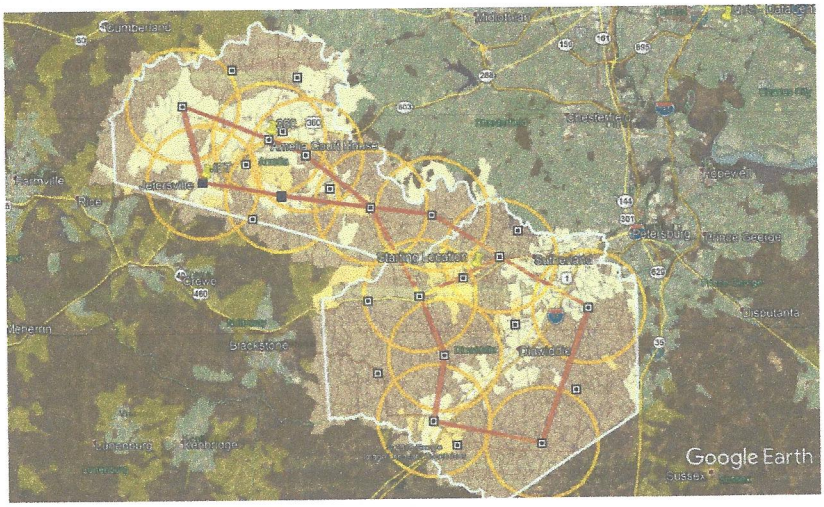
- We use elevation, tree canopy, and clutter data to generate a radio network plan for optimal sites, using 3.65GHz, 2.5Ghz (proposed), 60GHZ, and 5GHz frequency for distributions. We will be using 5Ghz unlicensed, 11GHZ – 18GHZ license link for Point – to – Point.
  - Using LTE as a primary last mile solution drives large bandwidth demands on the network and backhauls. Using licenses links provides much higher bandwidth than what can be achieved with unlicensed equipment. It is critical that the backhauls stay clear of interference and remain stable with the ability to carry up to 1GBPS.
  - For micro-sites or small remote macro sites with low bandwidth requirements unlicensed equipment will be used.
- During the radio planning phase, we will select optimal sites, including azimuths, down tilts, and channel selection.
- Report deliverable includes assumptions, methodology, results, and summary sections. Along with Google Earth KMZ file. Standard coverage plots to show RSRP & C/I, and associated tables.
- Vertical assessment and construction estimate of any proposed towers.
- Estimated cost for vertical access to existing structures.

Network System Designs / Accommodations

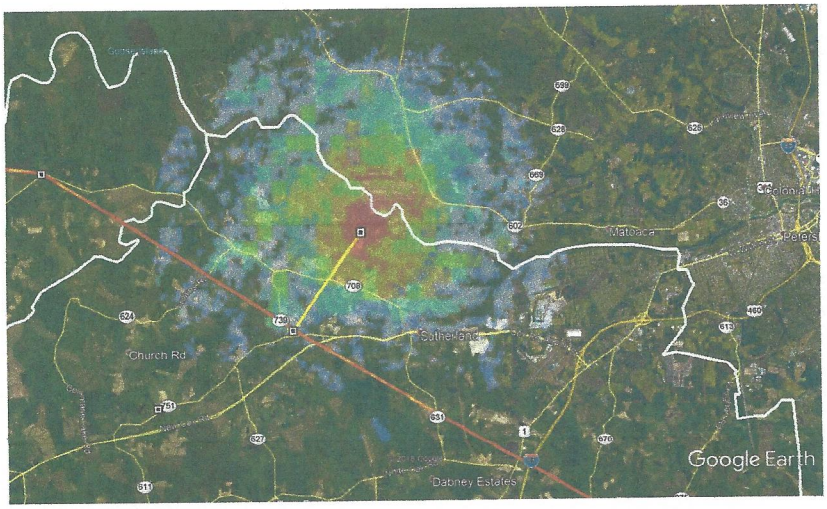
Based on StraightUpNet LLC investment into our current network design we would be able to scale and accommodate Amelia and Dinwiddie Counties' networking needs at a cost-effective rate. Below are the items that would need to be reviewed and designed into our model based on each counties' requirements.

- Professional services / Consulting and requirement discussions.
- Head End (Core) Routing / Switching design considerations
- Field and site Surveys

Example licensed network backhaul layout. (This is subject to change as detailed planning is produced)



Example of TV White Space (TVWS) Propagation for a new cell extender site off of the core network.



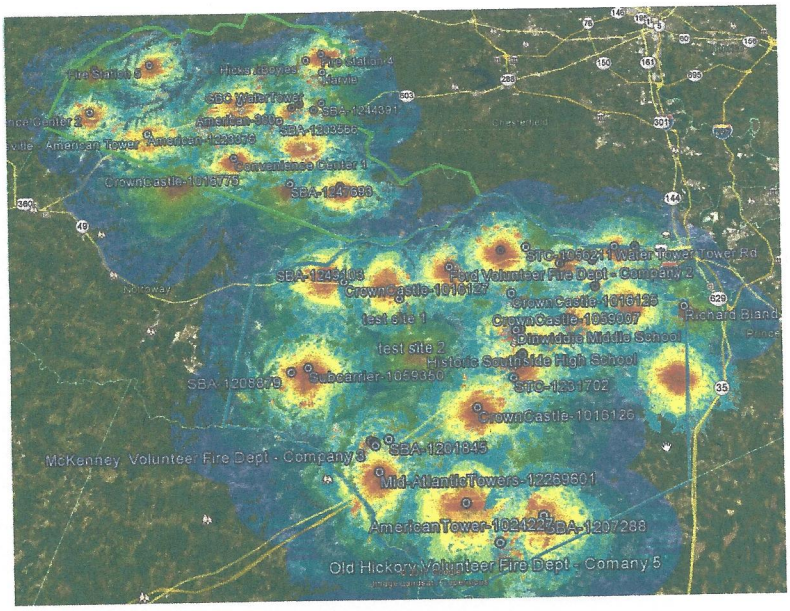
- The cell extender sites support 25/3 Mbps services to the end user with 250 Mbps backhaul to the core tower.

Predicted RF Propagation maps (Section 4.2 B1.iii)

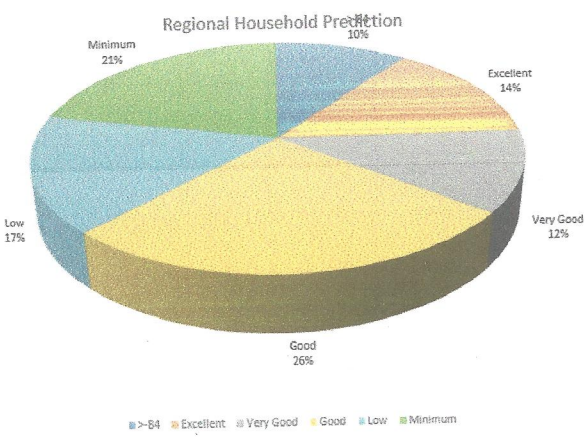
- The Regional Project is estimated to provide coverage for estimated 13 K+ households.
- The propagation maps show selected sites to provide solid coverage throughout both Counties. Strategy is to use as many existing verticals as possible in combination of last mile microcell distribution. However, a detailed analysis could rule out such structures due to lack of available space or other unknown reasons. In these cases, we would need to select another site which could result in a new constructed location.

- The predicted propagation coverage area does not guarantee service availability, and may include locations with limited or no coverage. Even within a coverage area, there are many factors, including customer's equipment, terrain, proximity to buildings, foliage, and weather that might impact service.

Example overall propagation maps. Locations are not exact to protect the confidentiality and can be used for conceptual phase evaluation. Specific locations and detailed propagation mapping will be included in the detail design phase and is a budgetary item.



- The pie chart below breaks down the modulation levels expected.

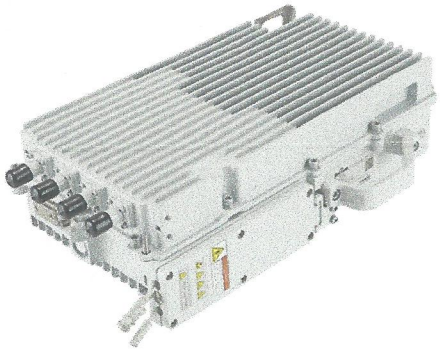


Detailed Equipment Specification / Warranty (Section 4.2 B1.v)

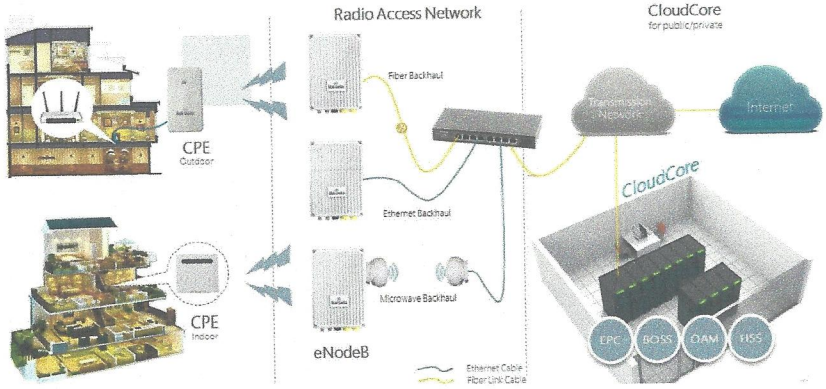
Access Points

- Base stations are primarily used for LTE distribution.
  - Working mode is LTE TDD current Version 9. LTE version 12 has just been released and will be the version or later for this project timeline.

- Fully compatible with FCC CBRS rule changes and additional working bandwidth expected as a result. Models operate in the 3.5 (1W) band and the 2.5 (10W) band.
- Provides outdoor coverage with LOS and challenging NLOS. The powerful LTE base station allows subscribers to continue to enjoy stable bit rates and low latency even with a high concentration of users.
- Base station is built to IP67 standards to withstand harsh conditions and challenging environments.



Baicells WBB Solution



Base Station Warranty

Baicells Technologies North America, Inc. ("Baicells Technologies") warrants your product to be free from physical defects in material and workmanship for a period of 1 year from the date of the original retail purchase. If you discover a defect covered by this warranty, we will repair or replace the product at our option using new or refurbished components.

Additionally, the original purchaser of the product shall be entitled to no cost firmware "bug fixes" software updates for as long as the product is supported by Baicells Technologies, which shall be no less than 3 years post final manufacturer. Firmware updates providing new features may or may not be charged, per Baicells Technologies sole discretion.

Product failures not covered by this warranty: This warranty covers defects in manufacturing that arise from the correct use of the device. It is limited to defects in materials or workmanship and does not cover damage caused by abuse, misuse, unauthorized modification, lightning or power surge damage, extreme heat or cold, and corrosive environments. The warranty also does not cover normal wear and tear on covers, cases, housing, connectors, and accessories. The warranty does not apply to any product with a missing, altered, or defaced serial number.

Antenna

- We select from a variety of antennas based on the site needs. Capacity, population density, foliage type, are examples of factors for antenna selection.
- We Primarily use antennas from KPPerformance & Alpha as they are engaged in the LTE market for WISP and are designing specifically for WISP needs.
- We will use 90-degree, 65 degree, and 33-degree beam width. Depending on the selection they can range from 17dbi - 19dbi gains.
- These are small antennas compared to a typical telco antenna standing about 2-3 ft tall and weighing 16lbs.
- Wind load is minimal and makes it ideal for installing on non-tower structures like water towers and silos.

RF Specs:

RF Specifications

Frequency Range per Input	MHz	3300 – 3800
Polarisation:	NA	+/-45° Slant Linear
Gain		
0 Tilt	dBi	17.3
5 Tilt	dBi	17
10 Tilt	dBi	16.7
Over all Tilts	dBi	17
Azimuth Beamwidth	Degree	65
Azimuth Beam Squint	Degree <	3
Elevation Beamwidth	Degree	7
Electrical Downtilt:	Degree	T0°-T10°
Electrical Downtilt Deviation	Degree <	1
Impedance	Ohms	50
VSWR	NA <	1.4
Return Loss:	dB >	15
Isolation	dB >	28
Front to Back Ratio: Total Power +/-30°	dB >	30
Upper Sidelobe Suppression, Peak to 20°	dB >	18
Cross Polar Discrimination at Sector	dB >	16
Maximum Effective Power Per Port	W	150

Antenna Warranty

Alpha Antenna offers a one-year replacement warranty against manufacturer defects on antenna products that have been manufactured by Alpha Antenna. warranty is extended to the original purchaser, beginning at the time of purchase, when purchase receipt and original product is provided to Alpha Antenna. This warranty is the sole and exclusive remedy, offered in lieu of all other warranties, expressed or implied. Alpha Antenna, Productive Industries, LLC, the online store AlphaAntenna.com, or any other entity sourcing the Alpha Antenna product line will not be liable for any indirect, incidental, or punitive damages arising from the use of this product.

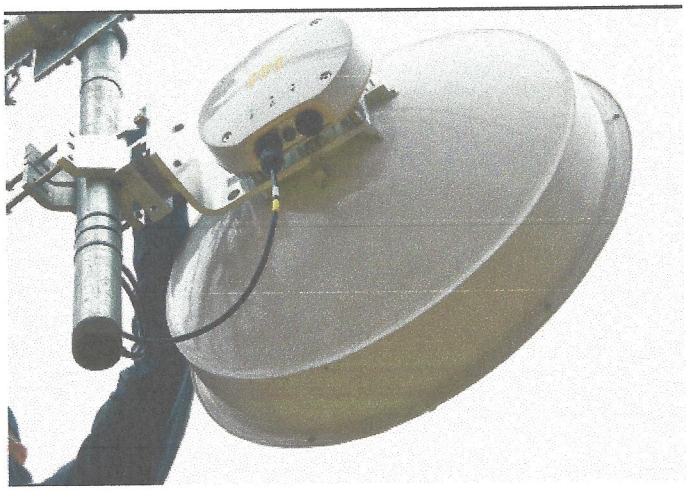
This limited warranty does not cover misuse, partial/complete disassembly of intact components, unauthorized modifications, and external causes such as acts of nature. This warranty does not cover normal wear and tear, or damage to any non-Alpha Antenna product used in connection with this product. This warranty does not apply to damage caused by accident, abuse, disassembly, misuse or modification of the Product. This warranty excludes without limitation any scratching or surface damage to any non-Alpha Antenna product, even if packaged or sold with the Product.

BackHaul Equipment

- We use a variety of backhaul vendors including SAF, Cambium, Mimosa, Mikrotik, and Dragonwave.
- We will be using 5Ghz unlicensed, 11GHZ – 18GHZ license link for Point – to – Point.
  - Using LTE as a primary last mile solution drives large bandwidth demands on the network and backhauls. Using licenses links provides much higher bandwidth than what can be achieved with unlicensed equipment. It is critical that the backhauls stay clear of interference and remain stable with ability to carry 500 mbps up to 1GBPS. This is usually a Radwin, SAF, Mimosa, DragonWave, or Cambium solution.
  - For microcells or small remote sites with low bandwidth requirements unlicensed equipment will be used. This is usually a Mikrotik, Ubiquiti, or Mimosa product.
  - Mimosa Licensed B11 specs

Performance

Max Throughput	Up to 1.5 Gbps IP aggregate UL/DL (1.7 Gbps PHY), 750 Mbps IP aggregate running in TDMA-FD mode typically required in ETSI markets
Low Latency	< 1 ms
Wireless Protocols	TDMA, TDMA-FD

- 

Backhaul Equipment Warranty

Most of the equipment comes with a 1-year warranty.

- 1 year starting after purchase from authorized distributor. Option to purchase an additional 3 years of warranty from the distributor.

Acceptance Test Plan (Section 4.2 B1.vi)

- Provide test results of middle mile (backhauls) that include latency and speed test results between two internal points to demonstrate full capacity.
- Provide various field test location test results. Results are done between internal points to demonstrate full capacity.
- Provide upstream test results and external site uptime and speed interrogation results.
  - Using common tools like iPerf or equivalently recognized network testing tools.
  - Minimally test for bandwidth, latency, jitter, and ping times.
  - A comprehensive test plan will be provided with detailed planning.

Other Services (Section 4.2 B2)

StraightUpNet LLC

- VoIP services (full featured phone systems)
- IT Consulting

CONXX

- Remote Network Monitoring and Support- Provide both real-time and historical data to assist in identifying Bandwidth, Environmental, Backbone, Radio Signal Strength and trending for network equipment.
- Network Engineering - Services related to network engineering and network design for backbone network services.
- MPLS Engineering - Professional MPLS engineering services.
- Project Management - Network Project management services to support plan, design, build, testing, and online services related to network implementation services.
- Installation Services: Professional and insured installers are available for tower, building, or pole installations.

Proposed Partner Agreement (Section 4.2 B3)

Partnership Structure (Leveraging Amelia & Dinwiddie Counties' Assets)

Our first goal is to leverage the latest state-of-the-art technologies and asset management to provide as many citizens as possible with reliable and high-speed internet options that meet the residential and businesses every growing need. Our second goal is to strive to leverage proven models that are effective in cost, yield, and sustainable business model that allows us to build stable relationships while providing a balanced cost structure for internet service to Amelia & Dinwiddie Counties.

We have run a very successful marketing strategy and are prepared to act on our goals. Our goal was to design and bring Internet service to Amelia County prior to learning of the Amelia and Dinwiddie own goals and efforts to partner with private sector to improve internet access for its citizens.

The benefit of engaging in a public to private relationship between StraightUpNet LLC, CONXX and Amelia & Dinwiddie Counties is to leverage our combined resources together to bring a more cost-effective approach to accomplishing our common goal of improving the Internet access to the citizens. The rural communities have underserved and unserved areas because the population density of the market doesn't support the ROI on investments to put in place expensive infrastructure required to provide cost effective service. This public-private partnership is intended to help remove the expensive cost barrier of placing the infrastructure enabling StraightUpNet LLC to provide a cost-effective operating model that supports the daily operation, technology upgrades and ongoing maintenance.

Our proposal is to use as much of the existing infrastructure that is already in place such as existing towers, water towers, fiber, buildings, and other locations throughout the counties that are government owned or regulated. Gaining access to these assets will help us reduce our costs in provisioning and deploying to sparsely populated areas of the county that would normally be considered to have no profit margins to service.

However, by gaining access to these county owned assets it could eliminate the high cost of commissioning wireless verticals and help reduce processing and other fees to lower the cost. Lowering these costs will help balance the business model in such that the cash flow and operating costs come down enough to make the investment and the long-term operations sustainable.

We are proposing at a high level for the partnership between Amelia & Dinwiddie Counties, CONXX and StraightUpNet LLC to allow access to county assets at a preferred no cost or very low-cost model. StraightUpNet LLC would, based on our analysis of the updated project requirements, need to put in place new microcells to meet the project goals. With the Counties' assistance in the building cost of new infrastructure, reducing the permitting fees, and easing the process to expedite our ability to get to market will expedite expanding services to the county residents. By the counties providing reduced or deferred fees and lower rates for longer term utilization of the infrastructure during the startup phases of a site allows time to generate revenue prior to any commitments to the county. StraightUpNet LLC would operate and maintain all equipment and deployment as well as ongoing support and upgrading of the Internet service network for the lifetime of the agreement.

For vertical structures we have a cost-effective model that would help reduce the Counties' cost burden to the citizens to perform these tasks. A more detailed approach can be a topic of discussion in the detail phase.

Timeline (Section 4.2 B4)

Timeframe

- StraightUpNet LLC has already invested into delivering high speed Internet service to Amelia County residents. StraightUpNet LLC and CONXX will be implementing a design that will deliver a robust network for both Amelia and Dinwiddie counties residents.
- Our overall goal is to roll out service to as much of the counties as possible in phases.
- The first phase is to address areas with the "most" citizens where our data shows the highest yield of relieving the pain points of the counties.
- The towers and microcells will be categorized at a high level by the following categories.
    - Highest pain point relief for the county.
    - Building the middle mile core backhaul and/or fiber site.
    - Erect microcells for end user distribution point, last mile access.
- Move progressively from one phase into the next. In some cases, phases may run in parallel.
- If awarded, as part of the detailed planning phase we would put together the phases and the target timeframe for each phase. With an overall target of completing within 36 months or sooner.
- StraightUpNet LLC & CONXX have the ability to leverage vast relationships with towers climbing companies, we can call upon a large experience workforce to perform a large amount of tower work ideally for regional deployments. Thus, the timelines can be confidently achieved on deployment efforts by being able to complete installation of equipment on many towers and put up new microcells in parallel.
- The flexibility to scale up quickly as needed for project work without having to hire and train a large staff internally allows us to handle short timelines and large amounts of deployment effort.

Assumptions (Section 4.2 B.5)

Ownership

- All equipment (Base stations, Microwave, Licenses, CPE's, network equipment...) related to the delivery of the wide area network whether installed on a tower, microcell or customer premise would be owned by StraightUpNet LLC.
- Microcells will be installed and owned by StraightUpNet LLC.
- All Amelia & Dinwiddie Counties' owned property in which StraightUpNet LLC partners with the county will remain under the counties' normal responsibilities of ownership and maintaining. For example all water towers or county owned property will continue to be maintained by the County.
- Any property that StraightUpNet LLC may place on Amelia & Dinwiddie Counties' owned property as a result of the partnership would be owned and maintained by StraightUpNet LLC.
    - Microcells erected on Amelia & Dinwiddie Counties' property and solely owned by StraightUpNet LLC will be the property of StraightUpNet LLC. StraightUpNet LLC will take full responsibility of ownership and maintenance.

Amelia & Dinwiddie County Responsibilities

A successful partnership between a private entity and the counties would be to provide access to valuable infrastructure, property and other assets, expedited zoning, and permitting to help StraightUpNet LLC & CONXX provide a more efficient investment into the Broadband initiative.

Amelia & Dinwiddie County responsibilities would simply be as followed:

- Provide ease of access to any existing towers or water towers at free to low cost.

- Provide ease of access to any county owned property where new infrastructure would need to be constructed.
- Provide assistance in working with other government agencies and / or entities in supporting obtaining agreements to build infrastructure.
- Provide ease of access to any other county owned property asset that could be beneficial in the deployment effort. (I.e. office buildings, equipment cabinets, roof access...etc.)
- Assist in educating the community and promoting the availability of Internet service within the counties. Allow ease of access to county events to promote and illustrate and inform the citizens.

Conceptual Design Proposal (Section 4.2 B.6)

The network will be designed and built on a tier structure consisting of Infrastructure, Network Core and distribution.

- Infrastructure - will be a focus on identifying the most optimal county owned or third party existing structures for the purpose of constructing a strong middle mile distribution of broadband throughout both Amelia and Dinwiddie counties.
- Core - The backhaul will consist of licensed microwave links that will deliver a reliable high speed core network. The middle mile will be designed as a super information highway with a large amount of bandwidth capacity to move large amounts of data.
- Distribution - Microcells are used to connect to the core middle mile backhaul for distributing last mile internet service to the customer using a CPE device.

Cost Estimates (Section 4.2 C)

Provided in a separate sealed envelope

Eligibility Requirements (Section 5.1)

Virginia License (Section 5.1.A)

- StraightUpNet LLC & CONXX are both in the WISP industry and like other industry leaders are not required to register with the Department of Professional Occupational and Regulations for the activities normally performed with the WISP service operation. Both companies contract with licensed tower construction companies to build any necessary structures for our networks.
    - Neither company has a business model or plan to have a business model to support going into the tower construction business. The cost and effort to meet the requirement for starting a tower construction business is not sustainable and not feasible for this project.
    - StraightUpNet LLC and CONXX will hire the licensed companies that meet this requirement to construct microcells and towers to meet the design.
    - The current conceptual design proposed does not anticipate any new tower builds.

USAC Registration (Section 5.1.B)

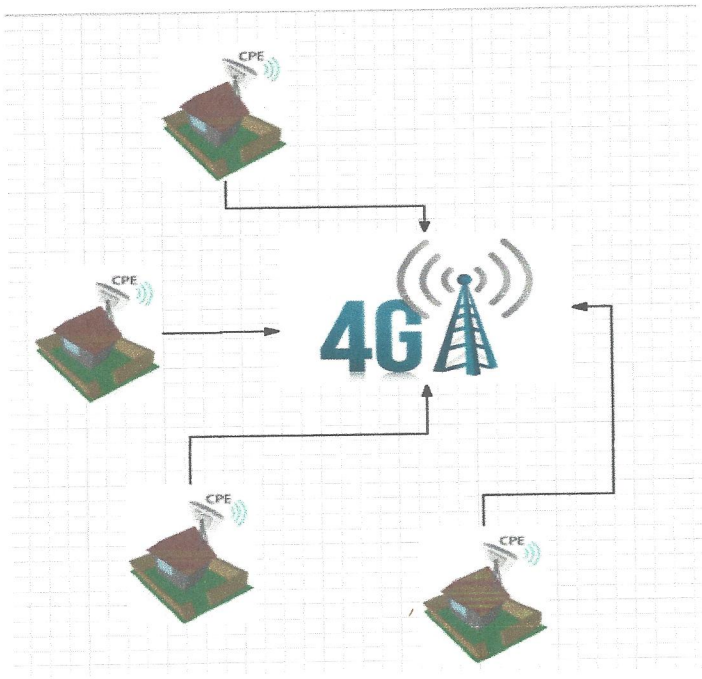
- StraightUpNet is registered with USAC and our SPIN# 143050286
- CONXX is registered with USAC and our SPIN# is 143028989

State Corporation Commission (Section 5.1.C)

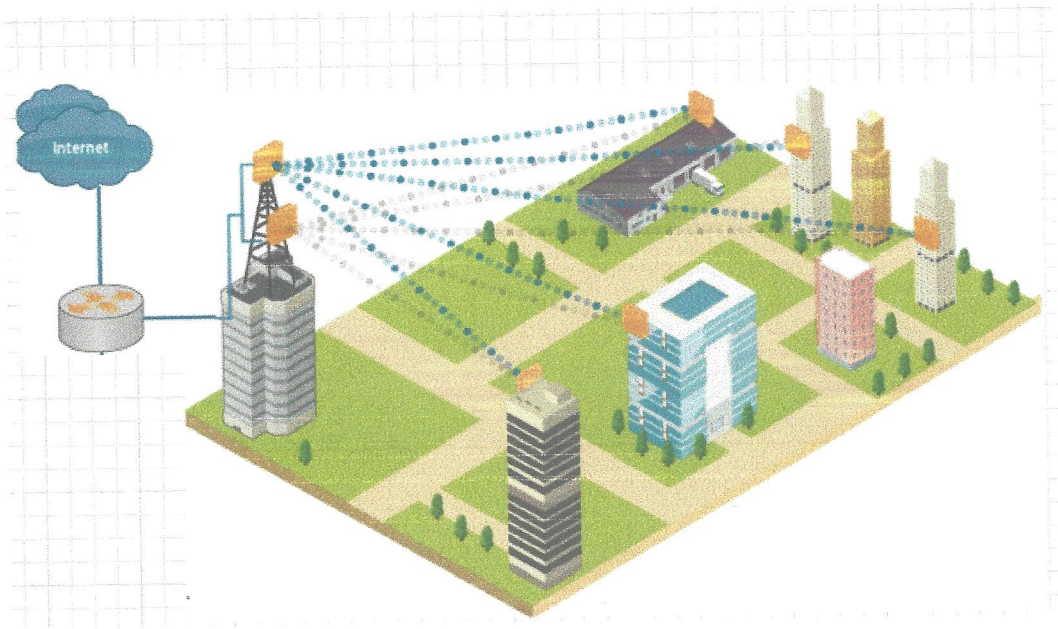
- We are a registered LLC within Virginia at the Virginia state corporation commission.
- StraightUpNet LLC currently has a business license in Amelia County. If award, we will obtain a business license in the county of Dinwiddie.

Illustration A – LTE & Other Wireless technologies Holistic Model

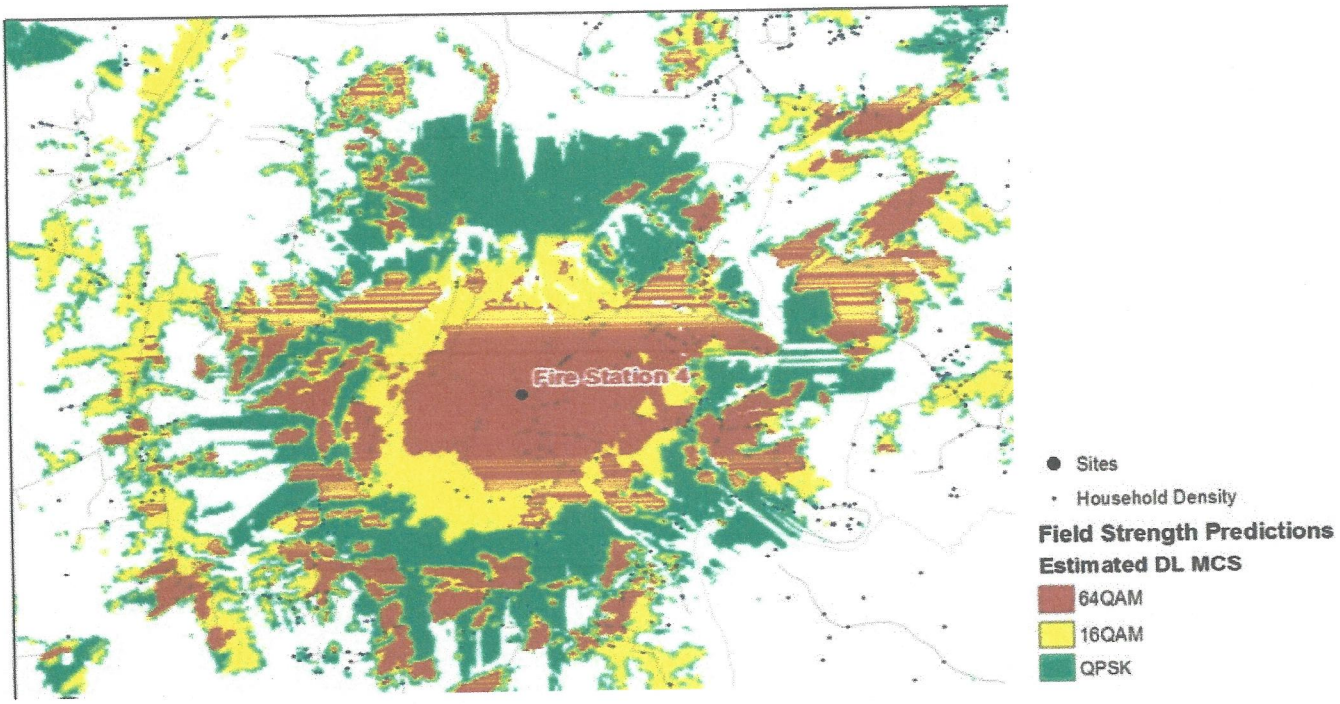
Rural Residential and Businesses will be able to connect to the nearest tower. These will include NLOS (Non-line of Sight) and LOS (Line of Sight) at 4G speeds.



For high populated areas, like in town or clusters of businesses with high bandwidth requirements, we would run fiber to the buildings with the highest personnel counts or bandwidth demand, like a school or administration building. From there we will use short range high bandwidth radio's to distribute very high speed internet to neighboring businesses. Using a fiber-wireless approach is a very cost effective way of distributing high speed internet within a higher populated area.



The following image is intended for illustration only using the Amelia County location, Fire Station 4, showing the household density around the tower.



StraightUpNet LLC

Counties of Amelia and Dinwiddie
14010 Boydton Plank Road
Dinwiddie VA 23841

Subject: Sworn Statement for RFP-19-050719

To Whom It May Concern:

The project team or any of StraightUpNet LLC partners that would be working on the Broadband Project are currently not debarred or suspended by any federal, state or local government entities, nor have any of our principles operated under as another entity that is so debarred or suspended.

If you have any questions concerning the above, please contact the undersigned.

Best Regards,

Mickie R Hodges Jr
President
StraightUpNet LLC

Dinwiddie County Administration Office

14010 Boydton Plank Road
Dinwiddie, VA 23841
Phone: (804) 469-4500
Fax: (804) 469-4503
E-Mail: hcasey@dinwiddieva.us

ADDENDUM #2

Date: June 5, 2019

PPEA Request for Proposals: RFP 19-050719

Broadband Project

Deadline: Tuesday, June 11, 2019

TO ALL POTENTIAL OFFERORS:

The following information is being provided for purposes of clarification or in response to questions received from potential offerors. In the event that any of these specifications conflict with previous specifications, the specifications in this addendum shall control. Prepare your proposals accordingly:

1. Would the counties be willing and able to support negotiations to install wireless devices or other on utility poles (telephone poles, power poles, street light poles, etc.). The support could be in the form of introductions to the decision makers, letters of support, participation in some meetings, etc.

   Answer: Yes.

2. Are there County owned properties which aren't listed in the list of vertical assets (parks, undeveloped land, etc.) where we may be able to plate poles (10-30 ft) for relays if needed?

   Answer: All property owned by Dinwiddie County is listed as attachment 2A of the RFP. All property owned by Amelia County is listed as attachment 3A of the RFP.

3. Are there roads for which the County owns the right of way? Would the counties be willing to provide support for us installing some of these poles on the side of the roadways (whether they are county roads or not)?

   Answer: This would need to be discussed with VDOT. Right of way for poles in unserved areas of Dinwiddie County is likely to be limited. Amelia County does not own any highway, street, or road rights-of-way. Amelia County would be willing to add support for the installation of broadband associated poles along roadways.

4. Would it be possible to get an Excel file with the Tower sites, water towers, and school locations that are in the RFP.

   Answer: This has been posted onto the Dinwiddie website under Procurement.

5. Is it possible to provide Household location information for Dinwiddie. Preferably in an Excel file with street address and Lat/Long info.

   Answer: This has been posted onto the Dinwiddie website under Procurement.

6. On the Dinwiddie County owned tower assets, what RAD center are available for installation of the wireless gear?

   Answer: Availability would be based on the type of equipment being installed. As of next week, the Sycamore Drive Tower will be completely empty. This tower, however, does have a slight tilt to its structure. The County does not see the Weakly Road Tower being used in this project, because it is in a served area. Availability of the Wheelers Pond Road and Boydton Plank Road Towers would need further evaluation.

7. Do you have a list of the Dinwiddie Census blocks or FIP codes for the census blocks that are deemed unserved or underserved?

   Answer: For Dinwiddie, a list of unserved and underserved census blocks is available at https://broadband.cgit.vt.edu/IntegratedToolbox/. Click the boxes that say "Underserved Areas" and "Unserved Areas". That shows on a census block level what is served and unserved.

8. Considering the amount of RF planning and due diligence required for this response will the County consider an extension on the submission date?

   Answer: At this time there will be no extension of the deadline. Conceptual proposals shall describe a broad approach to the project. At a later date, more detailed proposals will be requested from selected companies.

Note: A signed acknowledgement of this addendum must be received by this office prior to the due date and time, or must be attached to your proposal. Signature on this addendum does not constitute signature on the original proposal document. The original proposal document must also be signed per RFP instructions.

Company Name: StraightUpNet LLC

Signature: Mickey R Hodges

Type/Print Name: Mickie R Hodges Jr

Title: CEO/President/co-owner

Date: 10/11/19

Dinwiddie County Administration Office

14010 Boydton Plank Road
Dinwiddie, VA 23841
Phone: (804) 469-4500
Fax: (804) 469-4503
E-Mail: hcasey@dinwiddieva.us

ADDENDUM #1

Date: May 24, 2019

PPEA Request for Proposals: RFP 19-050719

Broadband Project

Deadline: Tuesday, June 11, 2019

TO ALL POTENTIAL OFFERORS:

The following information is being provided for purposes of clarification or in response to questions received from potential offerors. In the event that any of these specifications conflict with previous specifications, the specifications in this addendum shall control. Prepare your proposals accordingly:

1. In the broadband network solicitation, you appear to be seeking a WISP (wireless internet service provider) to solve the broadband problem. However, you only looked at wireline broadband offerings in the analysis of what currently exists to serve residents (Cable, DSL, Fiber). On the tower maps, you show the large number of cellular towers that exist all over the county today.

   Why isn't LTE service (which exceeds both the 10/1 and 15/3 FCC goals) included in the analysis of existing services?

   Would the counties be willing to put the same $$, waivers and other support into helping the LTE networks advance to the latest standards (100+ Mbps service) as opposed to building a separate new network?

   Answer: The TRRC grant requires a wireless broadband solution; however, the specific wireless technology is up to Offerors to propose, and the Counties will consider them as long as the proposed solutions would meet or exceed the project requirements and goals.

2. Would companies be required to provide funding for the project?

   Answer: Project funding is described in Section 3.3 of the RFP. There is a total of $3.4 million currently available for the project. Companies are not required to provide additional funding. However, the Counties are certainly open to considering proposals that include funding from the Offeror or other sources to either help offset County costs or enhance the project and services.

3. StraightUp Internet began to install LTE wireless equipment in Amelia county before they were awarded your previous RFP. It is my understanding that they used Baicells brand wireless equipment that utilizes spectrum "authorized" per location by the FCC; meaning that no one else can utilize that radio spectrum unless StraightUp relinquishes it. If they don't plan to relinquish it, one might assume that they will continue to offer service and will continue to expand. (I know one of the towers is in the Amelia Courthouse area and the census blocks he reaches are not part of the RFP because most have multiple broadband providers, to include us, so that one is not relevant.) However, they also deployed on a tower in Jetersville and because they filed those clients on their FCC Form 477 as of December 2017, that area no longer qualifies for funding for a new build and one cannot deploy LTE wireless over top of him because of the spectrum issues.

   With the FCC form 477 data running so far behind, we really have no way to find out what else he has done in either county. I emailed Mr. Hodges several days ago with these questions, but he has not replied, so I am wondering if you have any information as to what relationship he now has with the counties and any information you might have to assist us in our planning as we consider StraightUp and their current standing.

   Answer: Dinwiddie and Amelia Counties currently have no relationship with StraightUp Net. We have no information to provide on what current services they are providing or what services may be pending in the area.

4. In our experience a network operates best when local people are part of the solution. Are you aware of a local or nearby wireless internet service provider (WISP) or any group looking to become a WISP.

   Answer: The Counties do see this project as possibly having a team of companies to complete all aspects of the project, as long as there is one prime contractor with the overall responsibility under the contract. A copy of the Attendance Sheet from the Pre-Proposal Meeting is attached.

5. What price is considered affordable to end users?

   Answer: The cost to end users should be comparable with the market rates for similar areas in the state.

6. In building vertical assets, would the normal permit and review process be required for both Counties?

   Answer: Yes. Same process must be followed for County projects as would be for a private project.

7. Would Southside Electric and/or Dominion Virginia Power allow the use of their poles for equipment?

   Answer: You would have to contact Southside Electric and/or Dominion Virginia Power directly for this information.

8. Does the policy on 5G apply to this project?

   Answer: To the extent that 5G solutions enter this market, then applicable state and federal laws would apply; however, with the exception of two or three micro-cell applications or placements in in the more urban northeastern corner of Dinwiddie

County, the Counties are not aware of any applications for 5G small cell or other related infrastructure being proposed or considered at this time.

9. Will a hybrid solution be allowed?

   Answer: Yes, even though the grant is for wireless, the Counties will accept solutions that are a hybrid (wireless, fiber, etc). It would be up to the TRRC whether to accept as a part of the grant funding any significant use of fiber for example. The counties expect that certain components of the network will require the use of fiber, but at this time fiber to the customer premise has not been contemplated and is not included in the grant.

10. Will E-rate registration be required?

    Answer: Yes, see Section 5.1B of the RFP.

11. The RFP states that towers paid for by the project will be the ownership of the Counties. What about the equipment ownership? Is there a sample of what the lease agreement would look like?

    Answer: Correct, the towers bought by grant and county funds will remain the ownership of the Counties, at least until the project is complete. Options for purchasing the towers upon project completion will be considered. Network Equipment will remain the ownership of the contracted company.

    The Counties do not have a sample tower lease agreement. Feel free to provide your own sample or suggested leasing terms with your proposal.

12. Will the 25/3 speed goals be required for all census blocks?

    Answer: Yes.

13. Who are the school service providers?

    Answer: Dinwiddie County's internet service provider is currently Windstream. This contract ends in July. Amelia County's provider is TDS.

14. MBC fibers run through both counties. In Amelia, MBC fiber does run into the schools; however, in Dinwiddie County it does not.

15. How far apart does MBC build handholds?

    Answer: Per a meeting participant, this information can be found on MBC's website.

16. What is the time line for spending the grant funds?

    Answer: Per the grant, funds must be spent within 3 years of award date. Since approximately 1.5 years has passed since being awarded the grant, the Counties will request an extension from the Tobacco Commission.

17. What is Comcast's take rate?

    Answer: The project's main focus is on the under and unserved areas of the Counties. We are not interested in competition with Comcast or other current internet service providers that already serve portions of the Counties.

18. Due to the amount of data collection needed for this project, can the deadline for proposals be extended?

    Answer: At this time there will be no extension of the deadline. Conceptual proposals shall describe a broad approach to the project. At a later date, more detailed proposals will be requested from selected companies.

19. How many farmers are there in the Counties?

    Answer: This answer is unknown, but both Dinwiddie and Amelia Counties are agricultural counties.

20. Is GIS information available for the Counties?

    Answer: Neither of the Counties have a full-time GIS position on staff. Dinwiddie County has GIS information available on their website at www.dinwiddieva.us, Interactive Maps. Should you have additional questions, please contact Jamie Sherry at jsherry@dinwiddieva.us or 804-469-4500 x 2146.

    Amelia County has GIS information available at https://www.ameliagis.timmons.com/#/. Should you have additional questions, please contact Kenneth Llewellyn at Kenneth.llewellyn@ameliacova.com.

21. Are there any areas in the Counties that do not have Public Safety Radio Service?

    Answer: All areas of Dinwiddie County have Public Safety Communication through radios. In Amelia, there are poor areas in the fringes of the County, especially the northwestern and southwestern ends.

22. There is one college, Richard Bland College, that is partially in Dinwiddie County and would possibly benefit from this project.

23. Who manages the existing vertical assets?

    Answer: In Dinwiddie County, the Dinwiddie County Water Authority (a separate entity from the County) owns the water towers. They manage and maintain the water towers. Inspection and maintenance of county-owned towers is completed by RCV, whom is a subcontractor of Motorola, as part of the Public Safety Radio Communication contract. When a contractor is selected for the new public safety radio system, that contractor will take over the inspection and maintenance of the towers.

    Amelia County does not own any communication towers. The water tower is owned by the County. Amelia's public works departments is in charge of maintenance but subcontractors are used for most of the tank maintenance.

24. Has an audit been done of mobile carriers and other service providers to verify that the frequencies do not interfere?

Answer: No.

Note: A signed acknowledgement of this addendum must be received by this office prior to the due date and time, or must be attached to your proposal. Signature on this addendum does not constitute signature on the original proposal document. The original proposal document must also be signed per RFP instructions.

Company Name: StraightUp Net LLC

Signature: Mickie R Hodges

Type/Print Name: Mickie R Hodges Jr

Title: President/CEO/Co-Owner

Date: 6/11/19

Mandatory Pre-Proposal Meeting
Joint RFP #: 19-050719
Broadband Project
Monday, May 20, 2019 at 2 p.m.

Company Name/Contact	Address	Phone	Email
Conxx David Kartchner	434 N. Centre Street Cumberland, MD 21502	240-580-2767	Dave.kartchner@conxx.net
Big Wireless Joe Roth	156 N. George Street York, PA 17401	717-801-3895	jroth@bigwireless.net
AcelaNet LLC Lon Whelchel	604 Thomas Nelson Hwy Arrington, VA	804-306-8131	lwhelchel@scsbroadband.com
Kinextel Scott	717 E. 3rd Street Farmville, VA 23901	434-392-4804	scott@kinextel.net
ECC Technologies Jeff Brooks	13441 New Falls of Neuse Rd, Ste 200 Raleigh, NC 27614	919-602-8080	jbrooks@ecctec.com
StraightUp Net Rebecca Giella Tara Hodges	17001 Goodes Bridge Amelia, VA	804-601-4421	admin@straightupnet.com mhodges@straightupnet.com
Roger Scott	13302 Chula Road Amelia	804-240-9886	Roger.scott@ameliacova.com
All Points Broadband Tom Innes	908 Trailview Blvd, 170 Leesburg, VA 20175	703-554-6616	tinnes@allpointsbroadband.com
Elite Contracting Group Forrest Heinle	23220 Airport Drive Petersburg, VA 23803	804-732-2341	Forrest.heinle@elitecontractinggroup.com
Data Stream Sean Lee	1535 S. Perimeter Road Fort Landerdale, FL 33309	407-766-0225 540-295-4290	slee@dswltech.net cthomas@dswltech.net

Ridge Comms James Wilson	PO Box 1121 Marshall, NC 28753	828-649-7680	james@ridgecomms.coom
Lake County Internet David Varner	1874 Daniels Road Boydton, VA 23907	434-374-8558	david@lakecountrysat.com
VA Air Networks Joe Jones	101-C Founders Way Strasburg, VA 22657	540-328-9876	jjones@vaairnet.com
Open Broadband Alan Fitzpatrick Ken Winrich	PO Box 722 Waxhaw, NC 28173	704-237-0102 919-924-3389	alan@openbb.net kent@opennbb.net
CAS Severn Carl Dodson	4509 Cochire Trail Richmond, VA 23237	804-397-9268	cdodson@cassevern.com
Wi4Me LLC / AER Wireless Keith Walker	119 Mable Wood Ave Springfield, MA	202-660-2926	kwalker@wi4me.net
B2X Online Logan DeHart Warren Kane	30 Mill Lane Salem, VA 24153	540-556-4507 540-389-7924	Logan.dehart@B2XOnline.com Warren.kane@B2XOnline.com
RiverStreet Networks Jody Call Greg Coltrain Chad Plemons	1400 River St, Wilesboro, NC 28697 165 Deer Run Rd, Danville, VA 24540 2193 NC Hwy, S. Belhaven, NC 27810	336-467-2388 434-792-2253 252-945-3058	jodycall@myriverstreet.net chadplemons@myriverstreet.net gregcoltrain@myriverstreet.net
North Carolina Wireless Bill Shillito	1985 Tate Blvd SE #43 Hickory, NC 28602	828-322-1505	bill@lightleap.com
InteliPort Fiber Steve Lane	103 W. Church Street Hartford, NC 27544	252-331-3367 252-426-4600	steve@inteliport.com