



3196 County Hwy 55 * Hamilton, AL 35570 * Phone: 205-921-6712 * Fax: 205-921-6738

2021 Grant Application

Applicant Information

Project Name: Spruce Pine

Legal Name of Entity: Tombigbee Electric Cooperative, Inc

Mailing Address: 3196 County Hwy 55 Hamilton, AL 35570

Name and Title of CEO: Steve Foshee President / CEO

Name and Title of Contact: Brenda Overton CFO

Phone Number and Email of Contact: (205) 921-6741 boverton@tombigbee.org

Note: All successful applicants will be required to complete and submit the Beason-Hammon Alabama Taxpayer and Citizen Protection Act Certification, submit a complete copy of their E-Verify Memorandum of Understanding (MOU), complete and submit the State of Alabama Disclosure Statement, complete and submit the Signatory Authority Form, and register in the State of Alabama Accounting and Resource System (STAARS).



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A. Project Description

1. A discussion of the area served including boundaries, number of households, businesses, and any community anchors (libraries, schools, police and fire stations, hospitals, etc.). This response shall also identify if the project area is located within an unincorporated area and provide information regarding how the area meets the definition of rural (US Census data). Please complete the following table.

Number of Households to be Served	323
Number of Businesses / Industries to be served	10
Number of Community Anchors to be served	0

Spruce Pine: the proposed funded service area in this application is made up of the most rural parts of Franklin County, AL. As shown in Attachment A - Project Description – Spruce Pine.pdf, the proposed funded service area will serve 323 households, 10 businesses and no community anchor institution with a fiber to the premise network constructed as a broadband IP Ethernet network with one (1) gigabit per second (Gbps) of bandwidth for each location. By constructing this network, Tombigbee will provide a significant increase in the quality of life for the individuals living here by providing access to high speed Internet that will be used for education, employment, safety, and an overall improvement in circumstance. As shown on the map attachment, this project will cover approximately 48 road miles in an area of the state that does not currently have 25/3 service. The census blocks located within the proposed funded service area have a population of 743 according to 2010 census data.

Tombigbee firmly believes in serving the community. With that overarching principle guiding them, the goal is not only to provide broadband, but to empower those living in Franklin County to take advantage of this life changing technology. It is the ultimate goal of Tombigbee, to provide the community with broadband services that will promote much-needed economic development in this area. With the pandemic in 2020, an even greater emphasis has been put on the need for broadband across this country and with even more demand in the rural areas. The students living in Vina have little to no access to internet causing many to struggle with their education when forced to attend online.

Economic Characteristics – According to “DataUSA,” Franklin County has a poverty rate of 20.2%; 7.1% higher than that of the United States. The average annual household income for the areas represented within this proposed funded service area is \$42K, which is below the state average by \$7,840 and below the national average by \$19,916. There are ten small businesses but no major employers in the proposed funded service area. This is leading to a declining population that is in persistent poverty with an annual out-migration of 2% per year.



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Educational Challenges – The students living in this area attend the Phil Campbell School System. The school system itself has access to broadband services, but many of the teachers and students attending these schools do not have access to any services at home. This makes it next to impossible for teachers to prepare lessons and in light of the pandemic, teach virtually and the students in this area to do not have the ability to compete with those from other areas of the state and nation and are very much being left behind. These students struggle with completing research, getting tutoring when they are behind and, because the school systems in this area are small, they do not have the ability to receive the same education level as students in other areas of the state. With the pandemic, this has become a crisis of the largest magnitude. The students have very little to no access at home making it impossible to learn when having to be home due to quarantine restrictions. Many of the teachers are stating these students are now 2 years behind students who have access to high speed internet.

Franklin County is also the home to Northwest Shoals Community College, located in Phil Campbell. Glenda Colagross, President of NWSCC, has written a letter of support describing the economic and educational challenges the county faces due to the lack of high speed internet. Timmy James, Associate Dean of Academic Programs describes his personal challenges in performing his role with the college. He has no access to internet at home and must rely on a cellular wi-fi hotspot to do any type of work from home (see Attachment A – Project Description – NWSCC President.pdf and Attachment A – Project Description – NWSCC Dean.pdf).

Based on repeated discussions with the state superintendent, the county superintendent, principals, and teachers, lack of high-speed Internet access at home is the number one barrier Franklin County students face regarding homework. Students living in this area couldn't even take advantage of the ABC for Students opportunity because there wasn't a provider in the area that could provide service. This grant will allow Tombigbee Electric Cooperative to build the needed facilities to each home and to provide affordable broadband services with speeds up to 1/1 Gbps, well above the 25/3 Mbps grant speed requirement. Using this broadband connectivity, students in the proposed area will benefit from the ability to access, watch, and download assigned educational materials from home and will be better equipped to complete their homework accurately and on schedule and with the pandemic affecting everyone today, this cannot get to these students quick enough.

Broadband availability in the proposed service areas will also remove the limitation of students relying on outdated, over-utilized school facilities that are only available during school hours. Currently, students must complete any work assignments that require online access on-campus during the hours of 8:00 am – 3:00 pm, Monday – Friday. The only way to break the chain of poverty is through education and this grant is the vehicle that will drive opportunity to an area in critical need of outreach and support.

Attached are letters from the Superintendent of Education for Franklin County, Greg Hamilton, the Principal of the Phil Campbell School System, Jennifer Warhurst, and the teachers of Phil Campbell School, describing the challenges they face on a daily basis due to the lack of broadband access. (See Attachment A - Project Description – Superintendent – Franklin County.pdf, Attachment A – Project



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Description – Phil Campbell Principal.pdf, and Attachment A - Project Description – Phil Campbell Teachers.pdf).

Health Care Needs – While there are no public medical clinics and hospitals in the proposed area, the locations served will gain access to www.teladoc.com and other nationally known and utilized telemedicine websites at a higher rate of broadband speed which will increase the likelihood of proper and expedited care for the patient. Also, clinics, hospitals, and physicians located in other areas will be able to monitor patients through Wi-Fi in the home as provided by the 1 Gigabit connection to each residence. As a result, patient outcomes will significantly improve as will overall quality of life. While the Russellville Hospital and the Bay Health and Wellness Clinic aren't in the proposed funded service area, they are both very close and many of the residents of the proposed area use these facilities. Attached is a letter from the CEO of the hospital and the president of the clinic, describing their challenges as well as what broadband in this community means to them (see Attachment A - Project Description – Russellville Hospital.pdf and Attachment A – Project Description – Bay Health and Wellness.pdf).

Public Safety Issues – In addition to the economic, education, and health care concerns of the residents living in the proposed area, the local emergency, law enforcement, and fire protection agencies will gain significant boosts in their ability to provide safety to the people in this area of Franklin County. As a part of Tombigbee's pledge to increase the quality of life for the area, they will give 24/7 high speed Internet access to all relevant emergency crews, sheriff department personnel, and fire station teams. This access will provide these agencies with the unprecedented ability to search files, conduct work, and deliver online training for maximum efficiency and operational improvement. Included with this application are letters from the Town Clerk of Phil Campbell, Blue Springs Fire Department, and the Gravel Hill Fire Department describing their support (see attached Attachment A – Project Description – Phil Campbell Town Clerk.pdf, Attachment A – Project Description – Blue Springs Fire Department.pdf, and Attachment A - Project Description – Gravel Hill Fire Department.pdf).



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2. A discussion of the technology to be deployed (fiber, cable, DSL, etc.). Additionally, include a discussion of future usage projections and the ability to upgrade.

Network Architecture Description

Introduction

Tombigbee Communications, LLC, a wholly owned subsidiary of Tombigbee Electric Cooperative, Inc., was formed in February 2017 for the sole purpose of building a Fiber-to-the-Home (FTTH) network throughout Marion, Lamar, Winston, Walker, Franklin, and Fayette Counties.

Beginning in June 2017, Tombigbee has constructed 1,120 miles of both transport and distribution fiber. Today, there are over 8,800 customers receiving fiber-based high-speed internet (HSI) and voice services. And, with more than 6,000 additional customers signed up and waiting for construction to be completed in their areas of the community, demand for FTTH services continues to be high.

The primary operation center or “Central Office” (CO) is collocated within the Tombigbee Electric Cooperative office building in Hamilton, AL. There are additional network elements located in Winfield, Bear Creek, Haleyville, Vernon and Fayette.

Architecture and Design

The GPON (Gigabit Passive Optical Network) architecture deployed at Tombigbee Communications is compliant to the International standard ITU-T G.984. GPON was selected for its reliability and longevity, both in terms of durability and deliverable bandwidth. GPON also provides distinct economies of scale for network construction, delivery, and maintenance. GPON shares a single fiber among many users—typically 32—though more are technically possible. Upstream and downstream data is transmitted over two different wavelengths using the same fiber capable of providing at least 1Gbps of throughput symmetrically both upstream and downstream. Near the end of the circuit a passive splitter is installed, which allows the single fiber to be split into 32 separate fibers. The output of the splitter is used to connect homes or businesses to the network.

As mentioned previously, GPON architecture delivers advantages in both longevity and scalability. This fiber architecture can remain in place for 30 to 40 years, which equates to the life of the fiber plant. As demand for bandwidth increases, the fiber plant remains in place and unaffected, while simple changes affecting the GPON electronics at either end of the fiber circuit accommodate innovation and product evolution. GPON architecture represents the best broadband solution for the future and its bandwidth, latency, and reliability will remain unmatched by competing solutions for decades to come.

The GPON solution deployed at Tombigbee Communications is in use worldwide and is compliant with regulatory standards in both the United States and international communities.



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ANSI regulatory compliances include:

- NEBS Level 3
- GR-1089 CORE
- GR-63 CORE
- NRTL listed
- FCC Part 15
- ETSI regulatory compliances include:
- EN 60950-1
- AS/NZ 60950
- IEC 60950-1
- EN 300 386

International Optical regulatory compliances include:

- ETSI EN 300 19
- ETS 300 753
- ETSI EN 300 386
- ETS ES 201 468
- ETSI EN 60950
- ITU-T K.20/21/27/31/35/45

Detailed Description of the Existing Network

Tombigbee has deployed a state-of-the-art, all-fiber, Gigabit-capable network that is scalable and highly redundant, with a sub-10ms latency value. Below is a network breakout by function:

1. **Redundant Dedicated Internet Links:** Tombigbee has two (2) geo-redundant circuits which are implemented using 100Gbps physical interfaces. Each circuit carries a 30Gbps commit-rate of Internet bandwidth and is burstable; Capable of scaling to the full capacity of the 100Gbps physical interfaces. The primary circuit is hosted by Tier 1 provider Windstream and terminates in Atlanta, GA. The back-up circuit is also hosted by Tier 1 provider Windstream and terminates in Dallas, TX. The links utilize BGP to announce Tombigbee's prefixes and route traffic to the Internet
2. **Core Router:** The core router (Juniper MX480) provides a non-blocking architecture that utilizes industry standard protocols. The router is equipped to accept and deliver 100Gbps continuity with the ability to deliver more bandwidth as requirements increase. The network delivery ports are located on separate line cards adding an additional layer of equipment redundancy. The core router is connected to the aggregation switches via a 200Gbps active/active LAG with LACP and can scale as demand warrants. The core router is in the Hamilton CO and accepts both DIA connections. Tombigbee is currently commissioning two additional Juniper routers (MX204) in the Fayette and Bear Creek facilities (Hubs) for redundancy
3. **Aggregation Switches:** The aggregation switches (Juniper QFX5110) have 10Gbps and 100Gbps ports that deliver continuity to the access nodes dispersed throughout the serving area. The switches are stacked and function as



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one network element. By utilizing a stacking architecture, Tombigbee provides for equipment redundancy on the 200Gbps active/active LAG with LACP that, in turn, provide network continuity to the access nodes via 20Gbps active/active LAGs throughout Tombigbee's footprint. The aggregation switches are in the Hamilton CO, the Bear Creek facility (Hut) and the Fayette facility (Hut)

4. **Access Equipment:** The FTTH network will utilize GPON technology from the non-blocking ADTRAN TA5000 octal OLT line cards. The TA5000 nodes are equipped with redundant SM40 Switch Modules with the capability of accepting 80Gbps of continuity. The backplane path from the switch modules to the GPON line cards is redundant and non-blocking. Internet and voice continuity for each TA5000 in the network is delivered via a 20Gbps active/active LAG from the aggregation switches. The design includes support for 20km and 27km optical budgets. There are currently nine (9) TA5000 nodes in the network located in the following locations: Hamilton CO (2 nodes), Winfield cabinet (2 nodes), Bear Creek hut, Fayette hut, Haleyville cabinet, Vernon cabinet and the Walnut Grove cabinet. All TA5000s are in environmentally hardened locations. Additional planned deployments for Franklin County would include two (2) more GPON capable appliances to include the Vina cabinet and the Spruce Pine cabinet. The DC plant at each location has 16 hours of runtime on the battery plant and the AC plant is connected to generators to ensure network uptime in the event of commercial power loss
5. **Fiber Optic Cable Plant:** The fiber architecture is primarily aerial and consists of high fiber count mainline construction which connects to laterals that terminate into multi-station terminals. These terminals have outputs that allow a pre-connectorized fiber drop to be installed. The drop terminates at a network interface device (NID) installed at the customer premise
6. **Customer Premise:** The customer premise equipment consists of a TA411 indoor Optical Network Terminal (ONT) with 1 Gigabit Ethernet connection and 1 POTS port which is coupled with a residential gateway. The residential gateway also serves as a high-performance wireless router utilizing the 802.11ac protocol and has four wired Gigabit interfaces for customer connectivity
7. **Industry-Leading Throughput:** The Tombigbee network delivers sub-10ms latency across a 100% non-blocking fiber infrastructure
8. **Gigabit Speed Delivery:** Tombigbee Communications has technology in place to monitor peak utilization of the dedicated Internet circuits. Once a peak sustained utilization of 80% is met, additional bandwidth will be added
9. **Existing Load Information:** Tombigbee currently has 100Gbps continuity to their upstream Internet providers managing a peak load of 27Gbps with over 8,800 subscribers on-net. Tombigbee also employs edge-caching servers to reduce the bandwidth on the DIA connections. Capacity augment efforts will be enforced at 80% of peak sustained utilization
10. **Existing Network Leverage:** Tombigbee will utilize existing DIA bandwidth to provide services to customers in the grant area. Where capacity is available on the TA5000 nodes, more OLT line cards will be added. Existing fiber infrastructure will also be leveraged to provide continuity to the customers in the serving areas where applicable



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3. A discussion of internet speeds, service tier and pricing levels, data caps, etc.

Service Offerings - Residential

Tombigbee Communications will provide an all-fiber service offering to each resident in the grant area with speeds ranging from a minimum of 100Mbps to 1Gbps, symmetrical. All service offerings have the same download and upload speeds with no data usage cap. Voice services are also included in the service offerings from Tombigbee and they include unlimited local and long-distance calling, along with voice mail, caller id, call waiting, call forwarding, and many other features. All costs in tables 1 and 2 are per month.

Description	Cost	Notes
1 Gbps Data	\$79.95	No usage cap
100/100 Mbps Data	\$49.95	No usage cap
VOIP	\$29.95	Unlimited use; domestic

Service Offerings - Commercial

Tombigbee offers a full suite of business class services. Services offerings range from 100Mbps to 10Gbps and are custom tailored for each business. Service offerings can meet needs spanning from an entrepreneur working from home all the way to the largest multinational corporation. Business customers may take advantage of Managed Services, Tombigbee's version of an easy button for any IT department. Managed Services provide monitoring and maintenance of the network equipment, whether owned by the business or leased from Tombigbee. Tombigbee also provides a hosted voice solution for any businesses that desire to upgrade their phone systems to a cloud-based platform.

Description	Cost	Notes
10 Gbps Data Business	\$1,995.95	No usage cap, additional capabilities included for static IP and SLA
1 Gbps Data Business Enterprise	\$499.95	No usage cap, additional capabilities included for static IP and SLA
200/200 Mbps Data Business Pro	\$199.95	No usage cap, additional capabilities included for static IP and SLA
100/100 Mbps Data Business Lite	\$49.95	No usage cap
VOIP	\$34.95	Unlimited use; domestic



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4. Map - See Attachment A – Project Description – Spruce Pine.kmz

Engineering Cert - Attachment A – Project Description – Engineering Cert Spruce Pine.pdf

Detailed Budget – Attachment A – Project Description –Detailed Budget Spruce Pine.pdf

Timeline – Attachment A – Project Description –Project Milestones and Timeline Spruce Pine.pdf

Network Diagram – Attachment A – Project Description – Network Diagram.pdf

	Tombigbee-funded Costs	Grant-funded Costs	Total Costs
Network and Access Equipment	\$13,000	\$7,000	\$20,000
Outside Plant	\$823,686	\$443,524	\$1,267,210
Customer Premise Equipment	\$67,898	\$36,560	\$104,458
Professional Services	\$99,710	\$53,690	\$153,400
Other Upfront Costs	\$29,538	\$15,905	\$45,443
Grand Total:	\$1,033,832	\$556,679	\$1,590,511



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5. A discussion of the operator's technical and managerial capabilities to complete the project within two years of the effective date of the grant award.

Management Experience

The current management team has successfully led Tombigbee Electric Cooperative in providing electric power for its residents and businesses for 80 years. This same management team also serves as the management team for the subsidiary, Tombigbee Communications, established in 2017 to provide broadband services to its members. Tombigbee Communications has employed a Communications Engineer and contracted with FiberRise, a highly experienced Fiber Network design, implementation, and management consultant, Fail Engineering, an engineering consulting that provides engineering design and supervision of construction, and Heritage Communication, a limited liability company providing services with respect to the installation of high speed broadband network. Tombigbee has also established strong working relationships with bankers and financiers.

In 2016, Tombigbee Electric Cooperative launched an education campaign for the board members, community leaders, and staff that provided several days of training on all aspects of a fiber to the home project. A feasibility study was completed and reviewed in depth for nine months in the monthly board meetings. In January of 2017, the Board of Directors for Tombigbee Electric approved the first phase of the project and Tombigbee Communications, LLC was formed to provide and operate broadband services. TEC hired a professional marketing company for press releases, branding, logos, messaging, material, and a number of other items. From this, the brand name "freedom FIBER" was created as a project name.

In October of 2017, the first connections were made, two police departments and the school entrepreneur center. In December 2017, they began adding customers. After 36 months they are serving over 8,800 homes and have built approximately 1120 miles of line out of around 2,500 total to be built. The take rates Tombigbee has experienced has been over 60%. The project continues to construct on budget and exceeding all goals.

To date, fiber optic cables have been installed in the cities of Hamilton, Winfield, Guin, Brilliant, Haleyville, Bear Creek, Hackleburg, Beaverton, Vernon and Sulligent passing around 18,000 households. The original projections were a take rate of 30% of the households. The project is now around 56% and creeping up a half a percent each month. In December 2019, the project reached a net profit status which was two years ahead of schedule. The project is now in Phase 4 and instead of only serving the households of the original 2 counties, the plan is to now serve every household in the 5 County region. To date TEC has invested \$48 million of its own capital.



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The management team has collectively worked through this project from those initial education campaigns all the way to construction and continue to manage the project. The team established a detailed dashboard system to monitor performance and detailed accounting processes to keep up with capital costs and eventually revenue and expenses. The management team hired an outside accounting firm with expertise in fiber to the home to review the feasibility study and their performance. The management team are making certain they are continuously reviewing and being reviewed for the success of the project.

The following is a brief description of the management team and their education and job experiences:

The team is led by Steve Foshee, CEO, with over thirty years' experience in the management of cooperatives making him a strong leader for this team and their project efforts. He holds a Master of Science and a Bachelor of Science degree in Economics, both from Auburn University.

Mark Carden, Operations Manager, also has thirty years of experience in the operations of the cooperative. His experience has been instrumental in the planning and executing stages of the fiber project and ensuring construction is according to proper standards.

Member Services is led by the Billing Manager, Heather Haney, who has fifteen years of experience in business, most recently in member relations. She has a Bachelor of Science Degree from Auburn University in Business Administration.

Leading the accounting staff and managing the financial part of the fiber project is Brenda Overton, the CFO, who also serves as IT Manager, making her valuable not only in financial planning and analysis but also to the understanding of the fiber to home infrastructure. She serves as a member for SEDC Broadband Together Steering Committee and key member on their new Velocity broadband software which was implemented in the Winter of 2019. She has a Bachelor of Science degree in Accounting from Athens State University.

Kris Stidham is the Purchasing manager and also administers the Safety Programs. His responsibilities include procuring and managing material for both electric and fiber projects. He has a Bachelor of Science degree in Business Management from the University of North Alabama and is a Certified Loss Control Professional from the University of Wisconsin-Madison School of Business and NRECA.

Belinda Lovett, Accountant/Human Resource Administrator, brings a career of twenty-eight years' experience. She has also been instrumental in the start-up marketing responsibilities of the communications company and serves on the weekly fiber team meeting group that monitor and review the project to ensure its success. She holds an Associate Degree in Office Administration/Accounting from Beville State Community College.



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Matilda Harrison, Accounting Supervisor, completes the Tombigbee Electric management team. She is one of the newest members to the staff. She comes from a career of twenty-seven years in corporate accounting for a manufacturing company that also had a subsidiary set-up, making her experience there beneficial to the parent/subsidiary structure at Tombigbee. She holds a Bachelor of Science degree in Accounting from the University of North Alabama.

In addition to this management team, Tombigbee Communications has employed Nick Tucker, a Communications Engineer. He is the newest member to the team but his expertise stems from eight years of experience in the communications industry serving in installation, engineering, and sales roles. He holds a Bachelor of Science degree in Agricultural Information Science from Mississippi State University.

6. A discussion of the applicant's average pole attachment rates charged to an unaffiliated entity (does not apply to a utility as defined under Section 37-4-1 (7)a).

Tombigbee currently has pole attachment contracts with AT&T, CenturyLink and Charter Communications. These contracts were negotiated and executed through the Alabama Rural Electric Association. The 2019 average pole attachment rate charged to these three companies is \$24.13 per pole. Tombigbee also has an agreement and process in place with Alabama power to attach to their poles in areas where Tombigbee doesn't have poles. The average make ready cost is approximately \$35 per pole with an annual rent of \$10.86 per pole. Tombigbee also has an agreement in place with Franklin Electric Cooperative for the use of their poles for the buildout of the fiber network.

7. A discussion of the applicant's plan to use vendors and subcontractors that have been certified as a Minority Business Enterprise by the Alabama Minority Business Enterprise program and/or certified by another government entity as being a Disadvantaged Business Enterprise.

One of the primary reasons Tombigbee elected to build their fiber to the home network is because the management is committed to economic development in the region. Tombigbee will review the list of contractors and vendors in the Alabama Minority Business Enterprise Program or any such vendor or contractor who is certified by another government entity as being a Disadvantaged Business Enterprise when issuing RFQ's for this project. Currently Tombigbee purchases the majority of all material from KGP Telecommunications, a certified Women's Business Enterprise.



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8. A discussion of Middle Mile Projects (if applicable).

One of the main goals of Tombigbee is to make the community in which it serves a place where people want to live and work. Tombigbee would like to see the entire region of Northwest Alabama grow and become an important economic part of Alabama and the Southeastern United States. Tombigbee is working with several cooperatives across Alabama, Mississippi, and Tennessee to form an organization of other service providers enabling us to connect to each other to make our fiber rings stronger across the region. Tombigbee is willing and wants to help anyone wanting to provide broadband service to everyone.

9. A discussion of hospital, public school, public safety, or economic development projects that do not meet the definition of unserved area, but otherwise meets the requirements of the program (if applicable).

While there are no public medical clinics and hospitals in the proposed area, Tombigbee is offering high speed internet to every hospital and medical clinic in their current serving area. With this high-speed internet connection, the locations served will gain access to all nationally known and utilized telemedicine websites at a higher rate of broadband speed which will increase the likelihood of proper and expedited care for the patient. Also, clinics, hospitals, and physicians located in other areas will be able to monitor patients through Wi-Fi in the home as provided by the 1 Gigabit connection to each residence. As a result, patient outcomes will significantly improve as will overall quality of life. While the Russellville Hospital and Bay Health and Wellness aren't in the proposed funded service area, they are very close and many of the residents of the proposed area use these facilities. Attached are letters from both, describing their challenges as well as what broadband in this community means to each of them (see Attachment A, Project Description – Russellville Hospital.pdf, Attachment A and Project Description – Bay Health and Wellness.pdf).



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B. Application Budget

Total Project Cost	\$1,590,511.00
65% of Total Project Cost (minimum match)	\$1,033,832.15
35% of Total Project Cost (grant maximum)	\$556,678.85
Total Grant Amount Requested (not to exceed \$1.5 million)	\$556,678.85

1. Please complete the project budget sections below. Any additional documentation can be included in an attachment file titled Attachment B, Project Budget.

Budget Item	Total Cost	Grant	Match
Engineering/Design	\$153,400.00	\$53,690.00	\$99,710.00
Materials	\$591,962.00	\$207,187.00	\$384,775.00
Labor	\$779,706.00	\$272,897.00	\$506,809.00
Construction/Installation	\$0.00	\$0.00	\$0.00
Other (Make Ready & Elec	\$65,444.00	\$22,906.00	\$42,538.00
Total	\$1,590,512.00	\$556,680.00	\$1,033,832.00



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2. A discussion of the applicant's necessary financial resources to:
 - a. sustain service to the project area (business model); and

The proposed funded service area is a small part of a very large project Tombigbee has undertaken. In January 2017, the board of Tombigbee Electric Cooperative elected to start freedomFIBER. In three years, Tombigbee has built over 1100 miles of fiber, has connected service to more than 10,000 consumers and continues to build their planned network which will provide service to five Northwest Alabama counties. Tombigbee has worked tirelessly for all possible resources to ensure the success of fiber to the home network and will continue to do so long after the completion of construction. Attachment B - Application Budget – 5 year proforma.pdf demonstrates Tombigbee's ability to sustain the project.

- b. provide adequate project financing (additional documentation may be requested by ADECA).

To date, Tombigbee has invested \$34.4 million of private capital into their network. They have also received federal grants totaling just over \$21 million and were recently awarded \$7.4 million from the RDOF. The management of Tombigbee is always looking for additional funding opportunities to help with their project such as the opportunity presented in the Alabama Broadband Accessibility Fund, ReConnect Opportunities, as well as those from the FCC. Attachment B - Application Budget – 5 year proforma.pdf demonstrates Tombigbee's ability to adequately finance the project using grant funds as well as borrowed capital.

2. A discussion of any partners or subcontractors associated with the project's deliverables including but not limited to adoption, deployment, and service delivery. Please describe each party's role in the project.

FiberRise Communications has been contracted to assist in construction and managing the network. FiberRise has extensive experience in this field as its employees have provided broadband and communication service to customer across the United States for several decades. Also, to be noted as part of the management team is the Manager of Network Operations for FiberRise, Daniel Watson. He works at the Tombigbee office daily and is responsible for overseeing the maintenance of the network, managing the construction and installation, and overseeing the operations department for the communications company.

Fail Engineering has been contracted to perform the design and layout of the fiber network. Fail has provided telecommunications engineering consulting service continuously since its inception in 1967. Their experiences span all facets of telecommunications including, but not limited to, engineering, design, and supervision of construction covering the areas of inside and outside plant, broadband delivery, and private networks.

Heritage Communication, LLC has been contracted to provide services with respect to the installation of high-speed broadband network including construction (both aerial and underground), moving of



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facilities if needed, mainline splicing, aerial drops, underground drops, drop splicing, installation of all material needed to protect fiber (risers, house cane, conduit, etc.), and premises installation.

3. A discussion of any funds associated with the project. Please explain if the following provisions apply to your project:

The proposed funded service area in this application is not part of any federal universal service funding programs and is not part of any grants or loans from the USDA.

C. Other Program Priorities

Please answer each of the following questions either “yes” or “no.” For each “yes” answer, please provide a brief narrative and any supporting documentation in an attachment labeled Attachment C, Other Program Priorities. Any claims that cannot be verified will receive zero points in our scoring system. “No” answers will receive zero points in our scoring system. **“Yes” answers (that can be verified) will receive up to 10 points.**

	Y		
	E	N	
	S	O	
Does this project seek to leverage grant funds through private investment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If yes, include an explanation and documentation in a file titled Attachment C

	Y		
	E	N	
	S	O	
Will this project be an extension of existing infrastructure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If yes, include an explanation and documentation in a file titled Attachment C

	Y		
	E	N	
	S	O	
Does this project serve locations with demonstrated community support?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If yes, include an explanation and documentation in a file titled Attachment C

	Y		
	E	N	
	S	O	
Will this project serve the highest number of unserved homes, businesses,	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If yes, include an explanation and documentation in a file titled Attachment C



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and community anchor points for the least cost?

	Y		
	E	N	
	S	O	
Does this project emphasize the highest broadband speeds?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If yes, include an explanation and documentation in a file titled Attachment C

	Y		
	E	N	
	S	O	
Will this project provide material broadband enhancements to hospitals located in rural areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If yes, include an explanation and documentation in a file titled Attachment C

	Y		
	E	N	
	S	O	
Will this project support local libraries in this state for the purpose of assisting the libraries in offering digital literacy training pursuant to state library and archive guidelines?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If yes, include an explanation and documentation in a file titled Attachment C

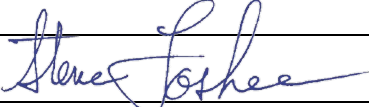
	Y		
	E	N	
	S	O	
Is the applicant a certified Minority Business Enterprise under the Alabama Minority Business Enterprise Program? Or is it certified under another Disadvantaged Business Enterprise Program?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If yes, include an explanation and documentation in a file titled Attachment C



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D. Certifications

1. The applicant certifies that it is a non-governmental entity.
2. The applicant certifies all new customers served as a result of this project will have access to an internet connection that provides a capacity for transmission at an average speed per customer of at least 25 Mbps download and at least 3 Mbps upload.
3. The applicant certifies that all new customers served as a result of this project are not located within the boundaries of any incorporated city or town having a population in excess of 25,000 inhabitants, according to the last federal census.
4. The applicant certifies that it has the technical and managerial capabilities to complete the project within two years of the effective date of the grant agreement.
5. The applicant certifies that the area to be served does not have at least one provider of terrestrial broadband service that is either: (1) offering a connection to the Internet meeting the minimum service threshold; or (2) is required, under the terms of the Federal Universal Service Fund or other federal or state grant, to provide a connection to the Internet at speeds meeting the minimum service threshold by March 28, 2023.

Certification	
I the undersigned am authorized to obligate my entity and enter into agreements for my organization. I understand that the above certifications do not guarantee funding and a grant agreement will be executed prior to project funds being expended. I further understand that if the above statements cannot be verified, no grant funds will be awarded under this program. Finally, to the best of my knowledge the above certifications are true and correct.	
Signature of Applicant: 	Date: 2/8/2021
Title of Applicant: CEO	

For more information regarding the Alabama Broadband Accessibility Fund, please send questions to Chris Murphy at broadband.fund@adeca.alabama.gov, or call (334) 242-5292 between the hours of 8:00 a.m. to 4:00 p.m., Monday through Friday.