



Alabama Broadband Accessibility Fund | Lookout Mountain Application

Farmers Telecommunications Corporation

Alabama Broadband Accessibility Fund 2021 Grant Application and Guide



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APPLICANTS MUST USE THE FOLLOWING APPLICATION FORM, COMPLETE IT IN ITS ENTIRETY, AND LABEL ATTACHMENTS AS INSTRUCTED. FAILURE TO DO SO, MAY RESULT IN A LOSS OF POINTS.

2021 Grant Application

Applicant Information

Project Name: **Lookout Mountain – Alabama Broadband Accessibility Grant**

Legal Name of Entity: **Farmers Telecommunications Corporation**

Mailing Address: **P.O. Box 217 | 144 McCurdy Ave. N. Rainsville, AL 35986**

Name and Title of CEO: **Frederick J. Johnson, Chief Executive Officer**

Name and Title of Contact: **Shane Trotman, Senior Operations Supervisor**

Phone Number and Email of Contact: **1-(256)-638-2144 ext. 2096**
strotman@staff.farmerstel.com

Name and Title of Additional Contact: **Taylor Richards, Marketing Assistant/Digital Marketing Coordinator**

Phone Number and Email of Additional Contact: **1-(256)-638-2144 ext. 2018**
trichards@staff.farmerstel.com

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).

A. Project Description

This section is worth up to 25 points. Up to an additional 10 bonus points may be available to applicants adequately demonstrating the criteria listed in number seven (7) below. Points will be awarded based on verifiable information only.

Please complete the project description sections below. Any additional documentation can be included in an attachment file titled Attachment 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	122
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Number of Businesses / Industries to be served	0
Number of Community Anchors to be served	0

Farmers Telecommunications Corporation recognizes the importance of having high speed broadband for building the future network of tomorrow. Many rural communities are being left behind, including residents in the southern portion of DeKalb County, Alabama.

*Please note that the location name **Lookout Mountain** is used within this application to represent the entire proposed funded service area (PFSA), which consists of portions of communities on Lookout Mountain in DeKalb County, Alabama including the Little River Canyon Community and the Wade's Gap Community.

The proposed funded service area (PFSA) upon which this grant application is based was selected specifically by FTC for its unique characteristic as being unable to receive a minimum of 25 Mbps download and 3 Mbps upload (25/3) service. Residents in the PFSA currently receive inadequate Internet service via satellite, wireless hotspot, or by a wireless Internet 802.11 service. In some cases, there are no Internet service options.

Although the FCC Map shows that broadband service is available within portions of the PFSA, FTC documentation has clearly identified that this area is not being served a minimum speed of 25 Mbps download and 3 Mbps upload (25/3). This discrepancy is due to the size of the Census Blocks. If one person within the Census Block has broadband available, the reporting mechanism lists all subscribers within this block as having the same service level available. FTC is the competitive local exchange carrier (CLEC) service provider for broadband and voice services for much of the area adjacent to the PFSA. Because of this, FTC has developed detailed mapping records of households within the Lookout Mountain PFSA footprint. Also, FTC field engineers have conducted a field inspection of the poles along the routes within the PFSA and confirmed that neither Charter, nor any other CATV wireline service provider offers broadband service within the Lookout Mountain PFSA footprint. Finally, in addition to FTC documentation and field inspections, FTC mailed letters to residents within the PFSA asking them to complete a survey. Survey results can be found in **Attachment A, Project Description – Survey Results**. The subscribers within the area of the PFSA are unable to receive the minimum service threshold according to all internal documentation.

The PFSA will require approximately 6.98 route miles of buried and aerial fiber-optic cable in a mountainous region that has layers of rock to contend with throughout much of the service area.

For clear identification of households to be served, refer to the PFSA maps in **Attachment A, Project Description – Lookout Mountain PFSA Maps**.

The Lookout Mountain proposed funded service area is located just outside the city limits of Fort Payne. Any area within this state not included within the boundaries of any incorporated city or town having a population of over 25,000 inhabitants according to the last federal census is defined as a rural area. Due to the proximity, the city of Fort Payne demographics is representative of the proposed funded service area. The population of Fort Payne is 14,074.

24.1% of Fort Payne's population live in poverty, which is higher than DeKalb County's percentage of 18.2. 14.5% of families live below the poverty level. 27% of homes with children under 18 years of age live below the poverty level. 7% receive supplemental security income and 25.1% receive food stamps/SNAP benefits. 17.2% of workers have household income and benefits ranging between \$15,000 and \$24,999, 10% range between \$25,000 and \$34,999, and 17.6% range between \$35,000 and \$49,999. The median household income for Fort Payne is \$40,273. Workers have a mean travel time to employment of 18.9 minutes. 45% of the population 16 and over are not in the labor force. 18.5% of the population, under age 65 years, have no health insurance coverage. Median house value is \$124,900 compared to Alabama's, which is \$142,700. 22% of households with children in the area are single-parent families. There are 19.3% of the population between the ages of 18 and 64 with a disability. A high percentage, 29%, of the population between the ages of 25 and 64 have no high school diploma compared to Alabama which is 14%. Only 17.1% persons that are 25 years and over have a bachelor's degree, compared to the United States, which is 32.1%. The cost of living in Fort Payne is 16% lower than the U.S average.

DeKalb County is part of Alabama's Appalachian Region, which is considered one of the most impoverished regions of the United States.

The Appalachian Regional Commission (ARC) was created by Congress in 1965 to bring the 13 Appalachian states into the mainstream of the American economy. The Commission is a partnership of federal, state, and local governments, and was created to promote economic growth and improve the quality of life in the 13-state region stretching along the Appalachian Mountains from southern New York to northern Mississippi.

FTC's goal to obtain the Alabama Broadband Accessibility Act grant funding to expand broadband into rural Lookout Mountain absolutely meets the stated ARC objectives listed below.

1. Invest in entrepreneurial and business development strategies that strengthen Appalachia's economy.
2. Improve the education, knowledge, skills and health of residents to work and succeed in Appalachia.
3. Invest in critical infrastructure- especially broadband, transportation, and water/wastewater systems.

4. Strengthen Appalachia's community and economic development potential by leveraging the Region's natural and cultural heritage assets.
5. Build the capacity and skills of current and next generation leaders and organizations to innovate, collaborate and advance community and economic development.

Tennessee Valley Authority (TVA) Special Opportunities County (SOC):

TVA designates two of the 13 AL TVA Counties as Special Opportunities Counties (SOC). Only counties with the lowest per capita personal income, the highest percentage of residents below the poverty level, and the highest average annual unemployment rates are eligible for the SOC program. The list of eligible counties is updated annually. The designation is for one-year periods and DeKalb County has been designated multiple times within the past 10 years and is currently a TVA SOC county.

The lack of broadband in Lookout Mountain prevents economic growth, creates educational challenges, and generates a barrier for members within the communities to have quick and reliable access to public safety and health care resources. These communities are in desperate need of broadband to strengthen their economy and economic development, improve education and skills of residents to work and succeed, to build a generation for tomorrow who will have the resources to keep alive and advance their rural community.

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.

The PFSA will be served with an all fiber-optic FTTH network utilizing a Passive Optical Network (PON) design providing fiber connectivity to each home. Service will be delivered over the Calix E series platforms. FTC will also offer industry-best carrier class Wi-Fi inside the home using the Calix GigaSpire to deliver a mesh-enhanced experience throughout the home. The fiber connectivity to the side of the home will deliver broadband speeds up to 1 Gig (1,000 Mbps) symmetrical with unlimited scalability, allowing this network to grow to meet future broadband needs.

Each of the PFSA establishments will be passed with a fiber-optic cable network providing a dedicated fiber pre-assignment to each establishment as well as 20% overhead in distribution fiber capacity for growth in any area. Additionally, 20% overhead in feeder fiber capacity allows for field GPON cabinets to be deployed meeting future "Greenfield" demands within any portion of the PFSA.

As requested by the customer, drops will be placed to each establishment and terminated in network access points. FTC has already deployed close to 2,180 miles of fiber-optic cable in other markets and connected over 15,100 customers with fiber. So, FTC is very confident that all of the processes needed to connect any home within the PFSA have already been addressed and any home can be served, usually with a 3 week

or less wait time. Home connectivity, including both indoor ONT and outdoor ONT options, are shown in **Attachment A, Project Description – Home Connectivity Options**.

The PFSA will be fed from FTC's existing Valley Head and Beason's Gap network locations. These locations are existing telecom huts with redundant fiber feeds back to FTC's NOC, with generator and battery backup, and with existing 10 Gbps redundant transport equipment. The additional electronic costs are for additional access line cards, SFP transceivers, and two field splitter cabinets with splitters. The electronic cost estimate is much lower than what it would have been if FTC were not able to leverage the existing switch hut locations and associated power components. The proposed network to provide these services is shown in more detail in **Attachment A, Project Description – Proposed Network**.

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

Voice, broadband and security services will be offered to every home and business within the PFSA. Standard broadband data speeds will be symmetrical - 100 Mbps download and 100 Mbps upload, with 1 Gig (1,000 Mbps) download and 1 Gig (1,000 Mbps) upload also available.

IP voice and unlimited long-distance service with calling features will be available.

FTC will offer two (2) tiers of broadband service with no data caps to customers within the PFSA. Tier 1 will have symmetrical speeds of 100 Mbps priced at \$73.00 per month for residential services. Tier 2 will have symmetrical speeds of 1 Gig (1000 Mbps) priced at \$93.50 per month for residential services. All broadband plans include Wi-Fi access.

With access to broadband, security and home automation services will be available including security monitoring, burglary alarms, video surveillance, fire alarms, emergency panic alarms, and severe weather monitoring.

4. A preliminary technical evaluation of the project that is certified by an engineer. This evaluation should document the ability of the proposed infrastructure to provide the minimum speeds required to all potential customers in the project area. The evaluation shall also include a project cost estimate, project schedule and timeline to include a completion date of no more than two years, and maps showing the proposed project area. Furthermore, the evaluation should demonstrate how promised speeds will be delivered consistently to the project area, show how the network will work using the proposed equipment, and demonstrate how the backhaul will be provided. **Maps shall be in .shp, .kml, or .kmz formats.**

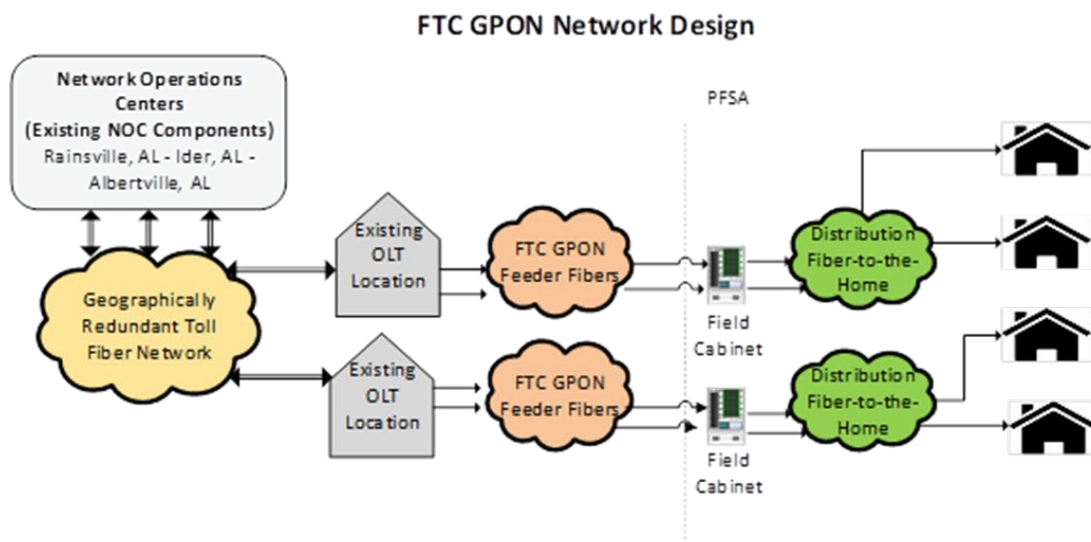
Additionally, maps shall clearly show area eligibility (unserved areas and rural areas). Generally, applicants may establish that an area is unserved by using the ADECA Broadband map showing unserved areas (<http://adeca.alabama.gov/broadband>). However, applicants are strongly encouraged to conduct a field review. If an area shown

as unserved on ADECA's map but becomes served prior to the execution of the grant agreement, the project may not be eligible for funding. **An applicant will be required to receive approval from ADECA for methodology prior to submitting an application. Generally, the methodology will include testing or documentation at both ends of a street in question. A map showing all test sites must be included in the application.**

Please see **Attachment A, Project Description – Certified Preliminary Technical Evaluation** for the engineer certification.

The PFSA will require two field splitter cabinets which will be fed via existing fiber-optic infrastructure from FTC's Valley Head and Beason's Gap network locations. These locations have fiber-optic 10 Gbps transport feeds through a fully redundant ring offering diverse paths back to the Network Operations Center (NOC) in Rainsville, AL and supported by Network Operations Centers in Ider, AL and Albertville, AL for additional redundancy.

The PFSA will be served with an all fiber-optic FTTH network utilizing a Passive Optical Network (PON) design providing fiber connectivity to each home over the Calix E series platform. The fiber connectivity to the side of the home will deliver broadband speeds up to 1 Gig (1,000 Mbps) symmetrical with unlimited scalability, allowing this network to grow to meet future broadband needs. For example, in other markets FTC has offered 10 Gig service through the same type fiber-optic distribution network utilizing XGS-PON optics. The proposed network is illustrated in the diagram below with a more detailed layout provided in **Attachment A, Project Description – Proposed Network**.



PFSA Construction Costs
Wade's Gap Portion of PFSA

Unit	Qty.	Labor	Materials	Price	Labor Total	Materials Total	Ext. Total
BDO5 Fiber Ped	40	\$100.00	\$189.00	\$289.00	\$4,000.00	\$7,560.00	\$11,560.00
BFO12	6,972	\$2.60	\$0.46	\$3.06	\$18,127.20	\$3,221.06	\$21,348.26
BFO48	13,500	\$2.60	\$0.62	\$3.22	\$35,100.00	\$8,316.00	\$43,416.00
BM71 Rock	500	\$15.00	\$0.00	\$15.00	\$7,500.00	\$0.00	\$7,500.00
GPON Cabinet {96F}	1	\$500.00	\$5,000.00	\$5,500.00	\$500.00	\$5,000.00	\$5,500.00
1 x32 Splitter Module	2	\$50.00	\$600.00	\$650.00	\$100.00	\$1,200.00	\$1,300.00
HO1 Fiber Splice	144	\$20.00	\$1.00	\$21.00	\$2,880.00	\$144.00	\$3,024.00
Wade's Gap Subtotal	20,472	(ft)			\$68,207.20	\$25,441.06	\$93,648.26
	3.88	(mi)					

Little River North Portion of PFSA

Unit	Qty.	Labor	Materials	Price	Labor Total	Materials Total	Ext. Total
BDO5 Fiber Ped	38	\$100.00	\$189.00	\$289.00	\$3,800.00	\$7,182.00	\$10,982.00
BFO24	2,800	\$2.60	\$0.53	\$3.13	\$7,280.00	\$1,489.60	\$8,769.60
BFO96	5,000	\$2.60	\$1.22	\$3.82	\$13,000.00	\$6,090.00	\$19,090.00
BFO48	8,600	\$2.60	\$0.62	\$3.22	\$22,360.00	\$5,297.60	\$27,657.60
BM71 Rock	500	\$15.00	\$0.00	\$15.00	\$7,500.00	\$0.00	\$7,500.00
GPON Cabinet {144F}	1	\$500.00	\$5,000.00	\$5,500.00	\$500.00	\$5,000.00	\$5,500.00
1 x32 Splitter Module	2	\$50.00	\$600.00	\$650.00	\$100.00	\$1,200.00	\$1,300.00
HO1 Fiber Splice	120	\$20.00	\$1.00	\$21.00	\$2,400.00	\$120.00	\$2,520.00
Little River Subtotal	16,400	(ft)			\$56,940.00	\$26,379.20	\$83,319.20
	3.11	(mi)					
Total PFSA Construction Estimates			36,872 (ft)		Labor	Materials	Ext. Total
			6.98 (mi)		\$125,147.20	\$51,820.26	\$176,967.46

Middle Mile Construction Costs
Little River North Middle Mile Feed

Unit	Qty.	Labor	Materials	Price	Labor Total	Materials Total	Ext. Total
BDO5 Fiber Ped	7	\$100.00	\$189.00	\$289.00	\$700.00	\$1,323.00	\$2,023.00
BFO96	2,500	\$2.60	\$1.22	\$3.82	\$6,500.00	\$3,045.00	\$9,545.00
BM71 Rock	200	\$15.00	\$0.00	\$15.00	\$3,000.00	\$0.00	\$3,000.00

HO1 Fiber Splice	96	\$20.00	\$1.00	\$21.00	\$1,920.00	\$96.00	\$2,016.00
Total	2,500 (ft)				\$12,120.00	\$4,464.00	\$16,584.00
	0.47 (mi)						

Installation Costs

Unit	Qty.	Labor	Materials	Price	Ext. Total
Buried Drop	74	\$195.00	\$54.00	\$249.00	\$18,426.00
NAP Closure & Splicing Tray	74	\$130.00	\$200.00	\$330.00	\$24,420.00
ONT, Enclosure, & Battery Backup	74	\$65.00	\$389.00	\$454.00	\$33,596.00
Gigaspire & Inside Wire	74	\$130.00	\$200.00	\$330.00	\$24,420.00
Total					\$100,862.00

Engineering/Design Costs

Unit	Qty.	Price	Ext. Total
Design	1	\$5,806.54	\$5,806.54
Staking	1	\$11,613.09	\$11,613.09
Inspection/Layout/Inventory Management	1	\$11,613.09	\$11,613.09
As-Built	1	\$5,806.54	\$5,806.54
Admin/Closeout	1	\$3,871.03	\$3,871.03
Total			\$38,710.29

Summary

Construction Costs	\$176,967.46
Middle Mile Feeder Fiber Costs	\$16,584.00
Installation Costs	\$100,862.00
Engineering/Design Costs	\$38,710.29
Total Project cost	\$333,123.76
35% Grant Coverage	\$116,593.31

Please see **Attachment A – Project Description – Project Schedule and Timeline** for the project schedule and timeline.

Please see **Attachment A – Project Description – Lookout Mountain PFSA Maps** for maps of the proposed funded service area. Shape files of the maps are also available in a separate attachment labeled **Attachment A, Project Description – Lookout Mountain PFSA Maps .shp**.

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. Please be aware that grants shall be conditioned on project completion within two years of awarding of the grant. If a recipient fails to complete a project within the two-year deadline due to reasons other than delay caused by a government entity, ADECA may revoke the grant in its entirety.

Farmers Telecommunications Cooperative, Inc. is the largest member-owned telecommunications cooperative in the state of Alabama. Directly through the Cooperative, along with its wholly-owned subsidiary, Farmers Telecommunications Corporation, thousands of homes and businesses across DeKalb, Jackson, and Marshall counties are served. We are dedicated to bringing world-class telecom services to the rural areas, cities, and towns in our service area.

Serving the northeastern-most corner of Alabama south and east of the Tennessee River, FTC has long borne a history of technological progress and commitment to the economic infrastructure of its served areas. FTC deployed Alabama's first digital switch in 1976. In 2007, it embarked upon an RUS financed \$36,000,000 overbuild of optical fiber to a planned 72% of its ILEC locations. Through careful refinement of its engineering design, persistence in wisely using its financing resources, and a general responsiveness to changing economics, FTC stretched this original budget and was able to achieve 92% fiber availability within its ILEC area.

Our optical fiber network offers customers access to some of the fastest Internet speeds in the country, including gigabit access in most areas. This optical fiber network positions the region to attract new jobs, support economic growth, increase access to telemedicine and introduce improved opportunities in education.

With the ever-increasing demands for smart homes, FTC also offers its Connected Life Security and Home Automation services to protect what matters most, home and family.

As features and technology continue to evolve, we continue our commitment to providing the best and most advanced voice services to homes and businesses in the region.

In November of 2015, NTCA - The Rural Broadband Association, the premier association representing nearly 900 independent, community-based telecommunications companies that are leading innovation in rural and small-town America, awarded FTC as a Certified Gig-Capable Provider for delivering gigabit broadband speeds and enabling technological innovation in its service area. FTC was one of the first companies to have this designation, which has now grown to 150 companies.

In May of 2018, FTC designated and recognized the 20 cities and towns in its service area as being certified Gig Communities in order to promote economic growth in rural Northeast Alabama. FTC's gigabit-speed Internet network is available to all the city and town municipalities and industrial parks within its service area.

In September of 2018, NTCA – The Rural Broadband Association also honored FTC with the Smart Rural Community Showcase award for deploying advanced technologies and leveraging those technologies to enable innovation in the areas of economic development and commerce, education, enhanced health care, government services, security and energy use. The NTCA Smart Rural Community initiative recognizes and celebrates the efforts of rural telecommunications providers and their communities to deliver technologies that make rural communities vibrant places in which to live and do business. The goal of the initiative is to foster the development of Smart Rural Communities throughout rural America by recognizing trailblazers, like FTC, and providing resources to assist broadband providers and connected industries.

In January of 2019, FTC was awarded a grant through the Alabama Broadband Accessibility Fund that allowed us to extend our world-class optical fiber network to the Pea Ridge community. This project was completed in December of 2019 and 21 of the 39 projected homes have been connected.

In July of 2019, FTC was awarded an additional grant through the Alabama Broadband Accessibility Fund that allowed us to extend our world-class optical fiber network to the Fabius community. The outside plant components of this project were completed in November of 2019 and by August of 2020 FTC crews completed the placement of drops and installation of fiber to the homes. This project is now complete and in closeout stage.

In October of 2019 Calix, a global provider of the cloud and software platforms, systems and services required to deliver unified networks, recognized FTC as one of the 2019 Innovations in Next Generation Network award recipients. FTC received this award for demonstrated outstanding creativity to deploy best-in-class services and innovation in the use of cloud and software platforms, systems and services to transform business models, networks and the subscriber experience.

In November of 2019, FTC received a \$2 million loan as part of the first round of USDA's ReConnect Pilot Program investments. These funds are the lynchpin in FTC's plan to extend its fiber-to-the-home network to 100% of the Cooperative members. The project consists of building approximately 85 miles of fiber and will make fiber available to an additional 1,676 homes in these communities.

In 2020, FTC received \$1.5 million in grant funds through the Alabama Broadband Accessibility Fund to expand broadband with optical fiber in rural parts of DeKalb and

Jackson counties. This project is still a work in progress by FTC and its construction crews.

In October of 2020, the Better Business Bureau awarded FTC with the BBB Torch Award for Ethics in the large business category. The Torch Award was established to gain public recognition for local companies that maintain a solid commitment to conducting their business practices with the highest standards in leadership and character ethics. This award is designed to promote not only the importance of ethical business practices but the willingness and efforts made by outstanding businesses to ensure that our marketplace remains fair and honorable for all.

In the decades since FTC was founded, the technology and services we provide have changed immensely for the people we serve across DeKalb, Jackson, and Marshall counties. But some things haven't changed. Just as in 1952, we remain focused on serving our customers and strengthening our local connections to better carry out our cooperative mission. We're proud to be member-owned and to provide the advanced, reliable telecom services that keep our neighbors connected.

FTC is professionally led by J. Frederick Johnson, MBA CPA, its CEO. Mr. Johnson has served the rural telecommunications and rural electric industry for 38 years, first in an auditing capacity, then nine years as the CFO of a rural electric cooperative, followed by 28 years at FTC, the past 20 years as its CEO. Mr. Johnson was responsible for securing the funding for the fiber buildout project of \$36 million, of which, \$24 million was financed with USDA with the N-Loan project. This project brought world-class broadband to the majority of its members. His efforts have led the company to expand in profitable CLEC markets paving the way to reduce FTC's reliance on universal service funding support. He is also very active in working with state and federal policymakers to ensure that there continues to be a focus on expanding broadband to rural America. He currently serves as chairman of the NTCA – (The Rural Broadband Association) board of directors. He holds a Master of Business Administration from the University of Tennessee at Chattanooga and a Bachelor of Arts in both Accounting and Business Administration from Southern Wesleyan University.

Mr. Johnson relies heavily upon an Assistant General Manager, Chris Bryant, with over 33 years of experience at FTC. He manages all department heads and supervisors that are responsible for designing, building, and deploying fiber to the customer premise and connecting the customers to fiber services. Under his supervision, approximately 2,180 route miles of fiber have been built and over 15,100 customers are connected with fiber services. He holds a Bachelor of Science in Business Administration from Auburn University.

Tyler Pair, the company's CFO, has 30 years of accounting experience with FTC and a strong knowledge of the reporting requirements of being a RUS borrower. Under his leadership, the company's financial reporting, internal control policies, and record

retention policies allowed for a clean closing audit for the N-Loan project and no deficiencies were found. He leads his team to ensure the company operates in compliance with US GAAP standards. His continued efforts have kept the company financially strong and the company continues to find new revenue streams that make the company less reliant on universal service funding support. He holds a Master of Business Administration from Alabama A & M University and a Bachelor of Science in Accounting from Auburn University.

FTC's network engineering and operations manager, Charles Austin, designs and implements the company's broadband network to ensure it complies with industry best practices and provides an exceptional customer user experience. During his time at FTC, he has led the company's efforts in a comprehensive network redesign, added complete network redundancy and has implemented the next generation customer access equipment. His expertise in owning and managing a technical support company has allowed FTC to create a new trouble reporting process that has brought significant savings to the company while providing a better customer experience. He holds a Master of Business Administration from the University of South Carolina, a Master of Theological Studies from Harvard University and a Bachelor of Arts from Notre Dame.

Goodrich "Dus" Rogers, the manager of business development and customer service has attributed his economic development experience to grow FTC. His relationships and deep understanding of the economic development process has guided the company to build broadband networks in areas of need and importance for community and economic growth. He and his teams' efforts have added over \$2.6 million in annualized revenue to the company. Rogers has been in this role since August 2016. He was previously the President & CEO of the Jackson County Economic Development Authority for 15 years and served as a County Extension Agent for 15 years prior. He also served 30 years in the AL Army National Guard and US Army Reserves and retired as a Colonel. He holds a Master of Science in Management from the University of Alabama in Huntsville and a Bachelor of Science in Agricultural Business and Economics from Auburn University.

Brandi Lyles, the manager of marketing and public relations, is diligent in building and maintaining the company's brand and presence within the community. She continually works to ensure that the company provides and meets the customers' needs with its products and services. She plans events and publishes customer education information to promote broadband adoption. Her efforts have secured the company as being Gig-certified by NTCA and recognized as being a "Smart Rural Community" designated by NTCA. She holds a Master of Business Administration and a Bachelor of Science in Marketing from Jacksonville State University.

FTC's engineering and operations group is led by 31-year veteran Shane Trotman who was personally responsible for the majority of the oversight of FTC's most recent optical fiber overbuild. Mr. Trotman's wealth of outside plant engineering and operations experience coupled with his professional business training affords him an outstanding

platform upon which to base the design and execution phases of optical fiber networks. He holds a Master of Business Administration from the University of Alabama in Birmingham and a Bachelor of Science in Organizational Management from Covenant College.

This was the primary leadership team responsible for FTC's successful deployment of the first widely adopted optical fiber gigabit capable network within the state of Alabama and one of the first such in the Southeast based upon an active Ethernet platform. FTC's optical network now reaches approximately 98% of its ILEC locations, 100% of its CLEC locations and serves a population of over 87,000 residents.

The balance of FTC management ranks is comprised of well-educated and experienced professionals, all considered well versed in their particular area of responsibility. The senior staff alone, apart from Johnson and Bryant, offers a combined 88 years of experience in their respective areas of responsibility.

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).

Does not apply to FTC.

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. Please be advised if an applicant chooses to claim consideration under this criterion, a quarterly report documenting activities will be required.

Does not apply to FTC.

8. A discussion of Middle Mile Projects (if applicable). The applicant shall demonstrate that the project will connect other service providers eligible for grants under this section with broadband infrastructure further upstream in order to enable such providers to offer broadband service to end users; provided that eligible projects under this subdivision may include projects in (i) an unserved area or (ii) a rural area that does not meet the definition of an unserved area but otherwise meets the requirements of this section, for which the grant applicant demonstrates, by specific evidence, the need for greater broadband speeds, capacity, or service which is not being offered by an existing service provider. An example of specific evidence can be found in the Alabama Broadband Accessibility Fund Frequently Asked Questions.

The proposed funded service area (PFSA) upon which this grant application is based was selected specifically by FTC for its unique characteristic within the FTC incumbent local exchange service territory as being unable to receive a minimum of 25 Mbps download and 3 Mbps upload (25/3) service via the existing facilities in use. In order to serve the

entirety of the PFSA, one middle mile project is required to reach portions of the funded area.

Isolated pockets of subscribers in the areas adjacent to the PFSA do receive broadband via Charter's coax cable distribution network. For the purposes of this grant application, FTC engineers conducted field inspections of the poles along the routes in this area of Lookout Mountain, identified any location with access to Charter's network, and assumed these locations as able to achieve speeds greater than 25/3. These areas do not have fiber optic cable present, but due to the 25/3 broadband service availability, the areas were not included in the PFSA. One of these areas is located along feeder routes into portions of the Little River North portion of the Lookout Mountain PFSA. Therefore, in order to provide broadband to subscribers in portions of the PFSA, middle mile fiber must be built through this area. The cost of the middle mile builds can be found in **4. Preliminary Technical Evaluation – Project Cost Estimate** in this application and shown graphically at the bottom of the maps labeled **Attachment A, Project Description - Middle Mile Projects Map**.

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). The applicant must demonstrate by specific evidence, the need for greater broadband speeds, capacity, or service which is not being offered by an existing service provider. Specific evidence may include documentation such as letters from local hospitals, public schools, and public safety institutions. An example of specific evidence can be found in the Alabama Broadband Accessibility Fund Frequently Asked Questions.

- a. Healthcare Challenges

There are no hospitals located within the PFSA. However, with expanding broadband access to underserved areas, healthcare will improve dramatically with the use of telehealth services. Telemedicine provides 24/7 access to patient health portals, telemedicine clinicians, remote patient monitoring, telepsychiatry solutions, store and forward technologies, patient-care education, etc. Telehealth services have been vital through the COVID-19 pandemic to help mitigate the exposure and spread of COVID-19 to healthcare personnel and other patients. Recent policy changes have reduced barriers and increased adoption by both healthcare providers and patients. With Telehealth, patients can receive necessary care that may help them avoid delayed preventative, chronic or routine care. Broadband access in rural areas of DeKalb County, AL are necessary now, more than ever, in providing proper and critical health care access. Research indicates that Telehealth reduces hospital admissions by 25% and overall length of stay by 59%. Telehealth access enables patients to have convenient access to specialists, eliminates the cost to commute long distances, reduces the hours of work missed due to travel, and now helps mitigate potential exposure during a global pandemic. It also makes doctor-patient communication easy, improves the patient's

self-care ability, promotes the sharing of educational content that helps maintain and prevent poor health conditions, and promotes a comfortable environment for patient care. Broadband access can also provide important healthy lifestyle resources that may improve the quality of life for those living in this poverty-stricken area.

26% of DeKalb County, AL, is in poor or fair health. 16% of the DeKalb County population is in frequent physical distress and 16% is in frequent mental distress. Counties in the southern and Appalachian regions of the United States tend to have the highest incidence of diabetes prevalence. DeKalb County, AL, is at 13%, and the national rate is 7.2%. 21% of the county are adult smokers. 30.5% of the county's population is classified as obese adults. 32% are physically inactive and only 45% have access to exercise opportunities. It is reported that 36% of the population gets insufficient sleep. 12% experience food insecurity. 14.4% of DeKalb County's population is uninsured. The ratios for doctor to patient are as follows: Primary Care Physicians 2,390 to 1, Dentists 3,570 to 1 and Mental health providers 3,760 to 1. 30% of children in DeKalb County are in poverty. It is reported that there have been 5,868 preventable hospital stays in 2020. The serving hospital for this area is DeKalb Regional Medical Center in Fort Payne, AL.

b. Educational Challenges

Most students from this area attend Fort Payne City Schools. These schools are designated as Title I schools. Fort Payne City Schools have 64% of students receiving free or reduced lunches.

The need for Broadband access has become more evident than ever before as students and teachers have, at times, been forced to a virtual learning platform during the COVID-19 pandemic. Students and teachers use Google Classroom and School PLP (professional learning plan) for assignments. They now use Google Meet and Zoom for classroom engagement and student/parent/teacher meetings. Students use Chromebooks and iPads to access many different learning programs such as IXL, I-Ready Reading and Math, Nearpod, Global Scholar, Compass Learning, Accelerated Reading and Math, Reflex, Spelling City, ACT preparation programs, ACCESS distance learning courses, and more. Due to the COVID pandemic, some students are now enrolled in all virtual classes, where their entire coursework and curriculum is completed in an online learning experience.

The lack of broadband at home for these students is a barrier and limits their ability to work on collaborative assignments, access teacher support documents, deny access to necessary research, limit their ability for online tutoring assistance and limits communication access to their teacher and school. Also, the lack of broadband access limits the ability to participate in a virtual learning environment, which has become common and necessary due to the pandemic.

Learning does not stop at the high school level. Today's learning opportunities are limitless in the postsecondary education world with broadband access. Many classes are available online now that provides flexibility for those in college. Many college students choose to continue to live at home so they can work and attend college. Some adults with families and full-time jobs decide to go back to college. With broadband access, anyone can complete college coursework at their convenience. In fact, the local community college transitioned to a full virtual learning platform for its fall 2020 semester and the beginning of the spring 2021 semester due to the COVID-19 pandemic. Many students at other universities also transitioned to a full online learning college experience this year. With expanding broadband access, those without a high school diploma can enroll online with an Adult Education Program that will give them full access to the MyGED™ online portal to study, schedule, check scores, and learn about jobs and college.

With broadband access in students' homes, there will be access to all the tools needed to be on a level playing field with other students with different socioeconomic backgrounds. They will have complete access to the cloud-based learning programs provided by schools, online research capabilities, the ability to enroll in online classes and tutoring programs, collaborate with other students and teachers on assignments, etc. Today, broadband internet access is not a luxury in education; it is a necessity.

c. Public Safety Issues

DeKalb County, AL, sits in the path of being at very high risk for tornadic activity. On average, DeKalb County experiences at least two tornadoes per year and averages at least one fatality as a result. It is documented that there have been 134 tornadoes since 1950 in DeKalb County. The most destructive of those being April 27, 2011 which resulted in thirty-seven deaths and over 200 injuries. Therefore, public safety is of the utmost importance to our first responders. A broadband network enables first responders to share critical information, video and other important data to address mission-critical communications needs of our public safety agencies. During emergencies and when natural disasters occur, first responders need a reliable communications network with access to dedicated bandwidth. Broadband is necessary to share large volumes of data reliably, securely and quickly - including photos, videos, building plans, maps and medical information - that can save lives during times of destruction. FTC has been a trusted partner of our local first responders for years. In fact, FTC hosted the first responders command center for DeKalb County at its headquarters in Rainsville, AL during the April 27, 2011 disaster. It played host to the EMA (local and state), Sheriff's Department, Red Cross, State Troopers, local authorities and government officials for approximately three weeks during the immediate recovery period. FTC had the back-up power and communications network capabilities needed by the first responders' team. Broadband access would be a critical need in these areas should a need arise for a disaster recovery command center. FTC would dedicate

resources to ensure that all public safety needs were met in regards to communications assistance.

The ongoing global COVID-19 pandemic has proven the need for broadband access for all persons. The entire population needs real-time data and access to information regarding the global pandemic and public health updates. Most importantly, everyone needs access to educate themselves on how to protect themselves and others from spreading a deadly virus such as COVID-19 as part of public safety measures.

Technology today demands IP connectivity to take advantage of the latest products and services. Some of these include Burglar and Fire Alarm Monitoring, Weather Alert Notifications, Managed Video Surveillance, Personal Emergency Response Systems, Home Automation – Interactive Systems, Access Control, etc.

Many of these applications are vital for rural residents (especially the elderly). These applications are vital for rural small businesses: agricultural (poultry farms), medical clinics, banking, manufacturing, and educational facilities. Rural municipalities (gas, water, sewer and electric) rely heavily on remote connectivity for monitoring their operations.

Broadband access would enable residents to subscribe to FTC security services. Security systems, home monitoring, and video surveillance assist in protecting families, homes, businesses, properties and valued possessions.

B. Application Budget

This section is worth up to 25 points. Points will be awarded based on verifiable information only.

For the table, please complete the shaded boxes. The unshaded boxes will populate automatically. If you are unable to use the formulas in the table, use the following formulas to calculate the percentages: i) 65 percent of total project cost is calculated by multiplying the total project cost by .65, ii) 35 percent of total project cost is calculated by multiplying the total project cost by .35. The total grant amount cannot exceed the lesser of 35 percent of total project costs, or \$1,500,000. If federal funds are involved in the project, please see number 4 below.

Total Project Cost	\$333,123.76
65% of Total Project Cost (minimum match)	\$216,530.44
35% of Total Project Cost (grant maximum)	\$116,593.32
Total Grant Amount Requested (not to exceed \$1.5 million)	\$116,593.31

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

1. Itemize eligible project expenses. Generally, eligible expenses will be limited to construction and construction related costs of broadband infrastructure. For the table below, please complete the shaded boxes. The unshaded boxes will populate automatically. Operating expenses will not be eligible expenses. Any additional expenses associated with the project, but not part of the grant budget, should be included in the narrative.

Eligible project expenses are subdivided into two categories, initial construction and installation costs.

Initial construction costs include engineering/design, materials, and labor. These expenses are shown in the first three rows in the table below, totaling \$232,261.75.

Subsequent to the completion of initial construction, FTC expects to incur an additional \$100,862 in costs associated with connecting 74 subscribers to the optical fiber network. These costs include the materials, labor, and electronics required to connect the subscribers to the newly constructed network additions. These costs are shown in the Cost to Connect\Install Homes Passed table below.

A detailed listing of the materials and labor units can be found in **4. Preliminary Technical Evaluation – Project Cost Estimate** in this application.

Budget Item	Total Cost	Grant	Match
Engineering/Design	\$38,710.29	\$13,548.60	\$25,161.69
Materials	\$137,267.20	\$48,043.52	\$89,223.68
Labor	\$56,284.26	\$19,699.49	\$36,584.77
Construction/Installation	\$100,862.00	\$35,301.70	\$65,560.30
Other (Please Specify)	\$0.00	\$0.00	\$0.00
Total	\$333,123.75	\$116,593.31	\$216,530.44

2. A discussion of the applicant's necessary financial resources to:

- a. sustain service to the project area (business model); and
- b. provide adequate project financing (additional documentation may be requested by ADECA).

FTC does not expect any adverse financial issues arising out of the project upon which this grant application is based. The consolidated enterprise, with assets of approximately \$80 Million and annual operating revenues of approximately \$36,000,000, now maintains approximately 2,180 route miles of optical fiber and serves as the most robust component of the telecommunications infrastructure within a geographic area covering 632 square miles with a population of approximately 80,792.

FTC reported net margins of \$2,660,454 and \$1,522,611 for 2019 and 2018 respectively. During 2019, FTC retired \$4,065,645 in both long-term and short-term debt. FTC also continues to maintain a strong position with regard to the equity of its members. On December 31, 2019, total member equity was \$52,095,187 or 65% of total assets.

In addition to its strong financial performance and solid equity position, FTC has been able to sustain positive cash flows sufficient to meet operating obligations, service its long-term debt, continue to retire member equity, and self-fund minor plant expansion. FTC reported net positive cash flows of \$231,318 and \$512,724 respectively for 2019 and 2018. Due to its current cash position and, if needed, access to debt capital, FTC is confident that financing will not be a barrier to constructing and maintaining the assets associated with the Lookout Mountain PFSA.

3. 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.

- A. Project management – FTC has already deployed approximately 2,180 miles of fiber-optic cable in other markets and connected more than 15,100 customers with fiber, largely through an RUS FTTH loan program. Project management was conducted by FTC staff. Project management for this program will also be performed by FTC staff members.
 - B. Engineering –
 - a. **System design** – Has already been completed as a joint effort by FTC engineering staff and engineering consultants, LADD Engineering
 - b. **Staking of routes** – Will be completed as a joint effort by FTC engineering staff and qualified engineering consultants
 - c. **Permitting** – Will be performed by FTC engineering staff
 - d. **Right-of-Way** – Will be performed by FTC engineering staff
 - e. **Inspect** – Will be performed by FTC engineering staff
 - f. **Inventory & Close-out** – Will be completed as a joint effort by FTC engineering staff and qualified engineering consultants
 - C. Contractor selection – Will be performed by FTC staff members.
 - D. Construction – Will be completed as a joint effort by FTC crews and private contractors chosen as part of FTC’s bid or vetting process. Contractors will be highly qualified and trained in all code and RUS guidelines. Construction contracts for projects of this size in the past have been awarded to Red Stag, Electricom, Benchmark, and others.
 - E. Splice and test – Will be performed by private contractors chosen as part of FTC’s bid or vetting process. Contractors will be highly qualified and trained in all code and RUS guidelines. Splicing contracts for projects of this size in the past have been awarded to Red Stag, QB Telecom, and others.
 - F. Customer location connection – Will be performed by FTC crews.
4. A discussion of any funds associated with the project. Please explain if the following provisions apply to your project:
- a. Projects to serve unserved areas in which the grant applicant is either or both: (i) an existing or future service provider which has or will receive support through federal universal service funding programs designed specifically to encourage broadband deployment in an area without broadband access; or (ii) an existing or future service provider which has or will receive other forms of federal or

state financial support or assistance, such as a grant or loan from the United States Department of Agriculture.

Does not apply.

- b. Any award of state funds under this act, when combined with other forms of state or federal support or assistance dedicated to the project, other than interest—bearing loans, may not exceed 60 percent of the total project costs.

Does not apply.

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.**

Does this project seek to leverage grant funds through private investment?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	If yes, include an explanation and documentation in a file titled Attachment C
Will this project be an extension of existing infrastructure?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	If yes, include an explanation and documentation in a file titled Attachment C
Does this project serve locations with demonstrated community support?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	If yes, include an explanation and documentation in a file titled Attachment C
Will this project serve the highest number of unserved homes, businesses, and community anchor points for the least cost?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	If yes, include an explanation and documentation in a file titled Attachment C
Does this project emphasize the highest broadband speeds?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	If yes, include an explanation and documentation in a file titled Attachment C

Will this project provide material broadband enhancements to hospitals located in rural areas?

YES

☐

NO

☒

If yes, include an explanation and documentation in a file titled Attachment C

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?

YES

☐

NO

☒

If yes, include an explanation and documentation in a file titled Attachment C

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?

YES

☐

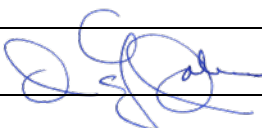
NO

☒

If yes, include an explanation and documentation in a file titled Attachment C

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: 02/05/21
Title of Applicant: Chief Executive Officer	

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.