



## **Response to South Carolina Rural Broadband Grant Program**

**By AT&T**

**May 14, 2021**

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## Applicant Contact

Application Name/Organization, Applicant FCC Registration Number (FRN), primary contact name, title, mailing address, phone number and email.

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**FRN:** 0008644056

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### Broadband Provider's Experience

For more than a century, AT&T has consistently provided innovative, reliable, high-quality products and services, and excellent customer service. AT&T has industry leading scale in broadband and voice services and a trusted name in communications services around the globe. Our mission is to connect people with their world, everywhere they live and work, and do it better than anyone else. We are fulfilling this vision by creating new solutions for consumers and businesses and by driving innovation in the communications and entertainment industry. Our network includes extensive wired access capabilities, as well as one of the world's most advanced and powerful IP backbones.

AT&T is well positioned to bring an all fiber gigabit network to the citizens of the participating community. AT&T has deployed Fiber-to-the-Premises (FTTP) to millions of customer locations and operates one of largest Tier 1 Internet backbones globally.

- Recent FCC Form 477 - In April 2021 AT&T provided SC Office of Regulatory Staff our Form 477 data that was filed with the FCC on Dec. 31, 2020, but not yet publicly available.

AT&T regularly files form 477 with the FCC throughout the year. These forms are readily available from the FCC website. Due to time constraints on this response more information on FCC 477 filings are not included but can be provided at a later date should it be necessary.

## Project Area

List the Project Area County, nearest city/town, and Project Area Census Block(s). Provide the approximate number of households, businesses, health care facilities, community anchor points, and educational institutions located in the Project Area. Attach a .pdf map file and digital shapefile of the project area depicting the project area and number of households and businesses the project area would include.

AT&T has initially targeted 8 Distribution Areas (DAs) where expansion of our fiber footprint is practical and targets underserved/unserved living units. The addition of these area would connect an estimated 1,917 living units to high speed fiber internet as well as other AT&T product offerings. Of those 1,917 living units there are an estimated 1,531 locations that are underserved/unserved and grant fund eligible. There are 46 business customer locations. This proposed footprint may serve whole or partial census blocks.

Complete maps of all 8 AT&T Distribution Areas (DAs) including corresponding census block project area maps are in **Attachment A**.

### **Evidence of Universal Broadband Service Within the Proposed Broadband Project Area**

Provide evidence that the provider will serve all residences and businesses requesting service within the Project Area on a non-discriminatory basis, at speeds equal to or greater than the minimum required in these Guidelines, and without additional construction or startup costs to the customer.

AT&T provides broadband connectivity to many customers in South Carolina using various types of network technologies including DSL, IPDSL and Fiber solutions.

This response focuses on fiber. Speeds offered are up to 940Mbps symmetrical.

Fiber facilities have the capacity needed to satisfy growing bandwidth consumption habits and upload and download speeds people need. With a network powered by AT&T Fiber<sup>SM</sup>, our customers can enhance their online experience with ultra-fast speeds, a reliable connection, and enough bandwidth to support all their compatible devices. AT&T Fiber<sup>SM</sup> is provisioned over a fiber-to-the-premises (FTTP) network. **Attachment C** shows the evolution of network technology used to deliver broadband services to AT&T's customers in South Carolina.

AT&T Fiber<sup>SM</sup> is already available in many major metro areas, including parts of South Carolina. This response proposes an expansion of the AT&T Fiber<sup>SM</sup> network to better serve more customers including those that are underserved/unserved in the proposed expansion areas.

At a high level, there are three customer location types with potential serving architectures and business models appropriate for each:

- **Single family residential** – The desired serving arrangement is FTTP where possible. The planned deployment is guided by unserved and underserved areas with anticipated customer demand for very high-speed broadband, as well as the cost of deploying in each neighborhood, aided by efficient network deployment, and predicted customer demand.
- **Residential MDUs** – The most appropriate commercial offers to serve MDUs are subject to the availability and condition of building wiring. The service coverage of MDUs will be conditioned on the ability of AT&T to agree to terms with the MDU property owners.
  - MDUs require several serving architectures to effectively serve. In properties not yet built, fiber to each living unit typically offers the most cost/benefit. Fiber can be placed during construction at relatively low cost, with minimal aesthetic impact or disruption to tenants.
  - In existing MDU properties, it may be practical under certain conditions to pull fiber to each unit, but in many cases the use of fiber-to-the-building (FTTB) and use of existing copper inside (the building) wiring will provide the best cost/benefit. If the wiring is category 5 or better, Ethernet from a central point in the building may be practical. Otherwise, VDSL provides higher customer broadband speeds.
- **Businesses** – Serving some business locations with a fiber gigabit network would likely be part of a FTTP deployment described above for residential areas; businesses are often part of neighborhoods that would meet a deployment threshold. Areas where multiple businesses are located, e.g., multi-tenant office buildings, could be served by cost sharing the special construction to bring fiber into the building. In some situations, with the landlord's permission, the network (fiber and electronics) could be pre-provisioned (in advance of customer order) to business buildings.

### Broadband Infrastructure

Indicate the type(s) of broadband technology (e.g., hybrid fiber-coax, fiber-to-the-premise, fixed wireless, etc.) to be deployed or extended directly into housing and/or business units for the project, including expected sustainable download/upload speeds to be achieved.

AT&T is proposing to deploy a 100% fiber network with FTTP GPON or XGSPON technology to the previously selected areas outlined above. This would allow for speeds of up to 940Mbps symmetrical. Additionally, this technology architecture type future proofs the network for years to come allowing for speed upgrades as technology and customer demand allows.

For a simple network comparison diagram please see **Attachment C**.

### Broadband Pricing Schedules or Tiers

Indicate all applicable rate tiers for broadband service at sustainable speeds of 100/20 Mbps or faster that will be offered to customers in the Project Area. Indicate low-income packages or pricing to be available. Do not include introductory or promotional pricing or packages.

AT&T intends to serve as many customers as possible including enterprise customers. However, for the purpose of this response we are most focused on residential end users.

Broadband speeds offered within AT&T's fiber footprint range up to 940 Mbps, although speeds available at any location will depend on network factors specific to that location. Speeds for wireline residential customers within AT&T's fiber footprint are broken into 3 tiers. Broadband costs and tiers are as follows in alignment ***without*** current 12-month promotional pricing.<sup>1</sup> Prices shown below exclude cost of equipment, which is currently \$10 per month.

#### 3 pricing tiers in fiber footprint<sup>2</sup>

Package	Speed	Monthly Cost w/o promotional pricing
Internet 100	Up to 100 Mbps	\$55
Internet 300	Up to 300 Mbps	\$65
Internet 1000	Up to 940 Mbps	\$80

No data caps apply for AT&T broadband service provided over fiber. Speeds during peak usage are not degraded on AT&T's fiber network. More information regarding specific AT&T Internet and AT&T Fiber<sup>SM</sup> offers are available at <https://www.att.com/internet/> and <https://www.att.com/internet/fiber.html> respectively.

**Service Discounts.** AT&T offers its broadband services on a stand-alone basis or bundled with other AT&T services. Purchasing service on a bundled basis can provide customers with discounts and better overall pricing and / or billing simplicity.

<sup>1</sup> Currently, a 12-month promotion period reduces monthly rate by \$20.

<sup>2</sup> **Internet speed claims** – Actual customer speeds may vary and are not guaranteed. Download speeds for customers receiving AT&T's Internet 1000 broadband internet access service are typically up to 940Mbps due to overhead capacity reserved to deliver the data. Speeds may also vary based on factors including site traffic, content provider server capacity, internal network management factors, and end user device capabilities. Wi-Fi speeds will decrease per device as more devices are connected to single source and based on device technology. For more information, go to: [www.att.com/speed101](http://www.att.com/speed101) and [www.att.net/speedtiers](http://www.att.net/speedtiers).

Additional services include

- AT&T Wireless
- AT&T TV
- DIRECTV
- VOIP Home phone services

**Affordability** – AT&T offers a discounted wireline broadband service called “Access from AT&T.” The service is offered to locations where network facilities permit within its 21-state wireline footprint. Low-income households that qualify for the government’s Supplemental Nutrition Assistance Program can participate in the Access program. In locations where it is available, AT&T will assign eligible customers the fastest speed tier available up to 25Mbps for \$10 per month. There is a data allowance of 150 GB or 11 TB depending on speed available in the specific area. Complete program details are at [www.att.com/access](http://www.att.com/access).

### Project Timeline and Milestones

List the project’s anticipated start date, date construction activity begins, date construction activity will be complete, date customer premises installations will be complete, and date of completion. Projects **MUST** be completed as soon as possible, and no later than October 31, 2022.

Due to current fiber build commitments in other parts of our network AT&T would be able to break ground on this project shortly after the requested supplemental funding is available, more details on funds in the below section. Therefore, estimated project completion would likely be Q3 of 2022.

### Project Cost

Provide an itemized cost breakdown to include all upfront requirements, cost of building and/or extending infrastructure to the premises, and average cost to serve each customer premise, each housing unit, and each business.

The total cost of the proposed fiber build is estimated to be **\$2,004,137**. This investment would enable **1,917** living units to become eligible for all products and services provided by AT&T that can be offered through our fiber network.

- Total residential & business locations – **1,917**
- Total Project cost - **\$2,004,137**
- Total Avg cost per location - **\$1,045** (Top level numbers, NOT accounting for grant funds)

Additional details can be found in **Attachment B**.

## Project Funding

Indicate the amount funding requested for the project, the amount of funding to be provided by the Applicant, and the amount and source of any funding to be provided by a third-party entity. Applicant must provide proof that it has secured the necessary funds to meet its 50% match requirement.

To best serve these additional 1,917 customers including 1,531 locations that are currently unserved or underserved AT&T requests funding from the SC RBGP in the amount of \$787,414. This requested amount aids in delivering fiber to unserved and underserved high cost areas that would otherwise not be economically feasible to reach. Amount is a 50% match requested based on the 1,531 grant eligible customer locations. AT&T intends to build an additional 386 locations with no grant funding.

The breakdown of costs at a high level are as follows.

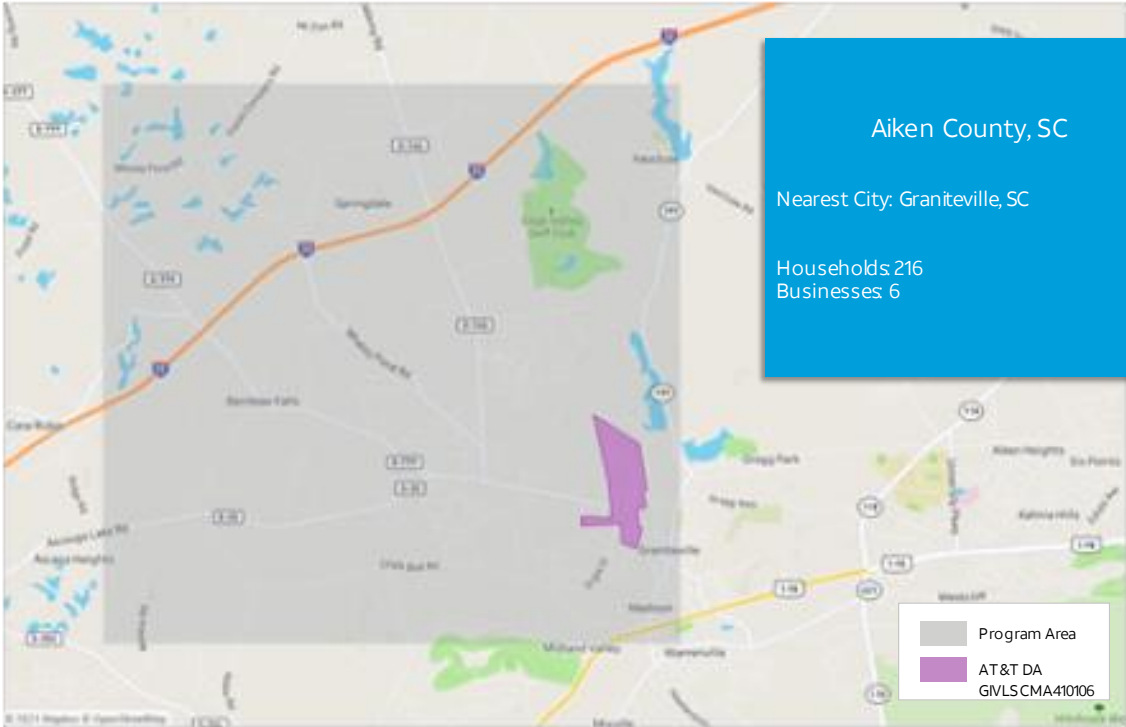
- Total build cost \$2,004,137
- Total build cost for eligible locations \$1,574,828
- AT&T funded \$1,216,723
- Grant funds requested \$787,414
- SC RBGP Cost per eligible location \$552

For a breakdown of high-level costs by distribution area please see attached spreadsheet, **Attachment B**



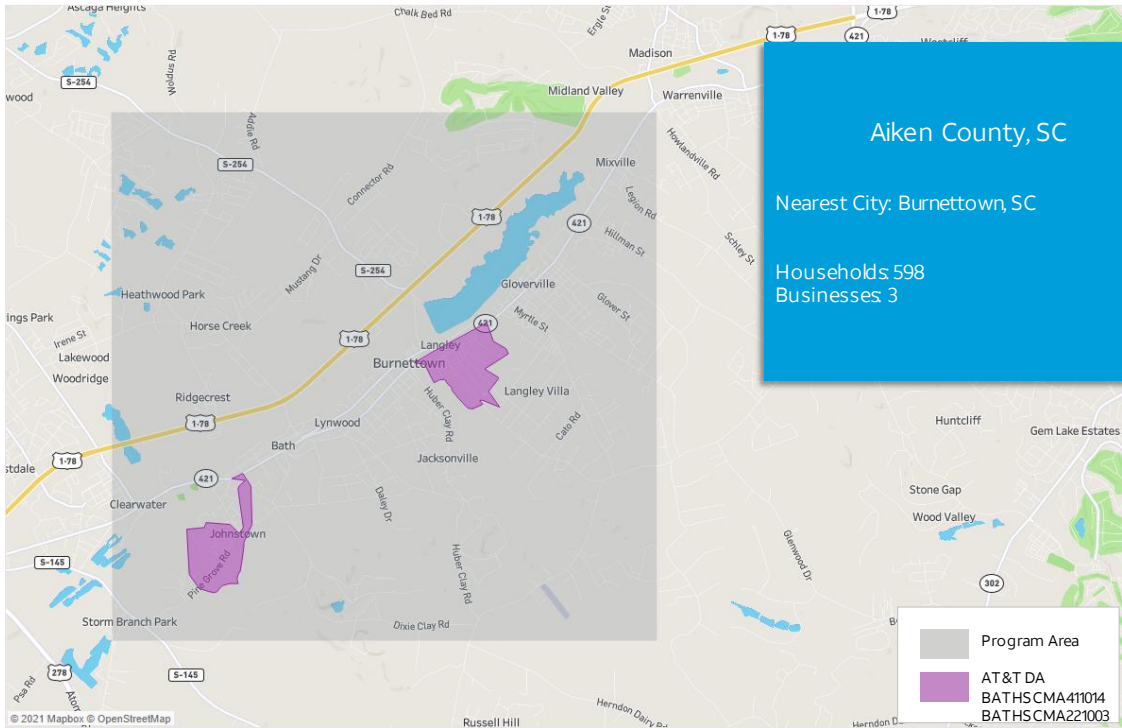
# Attachment A / Maps

## Aiken 11



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# Aiken 17



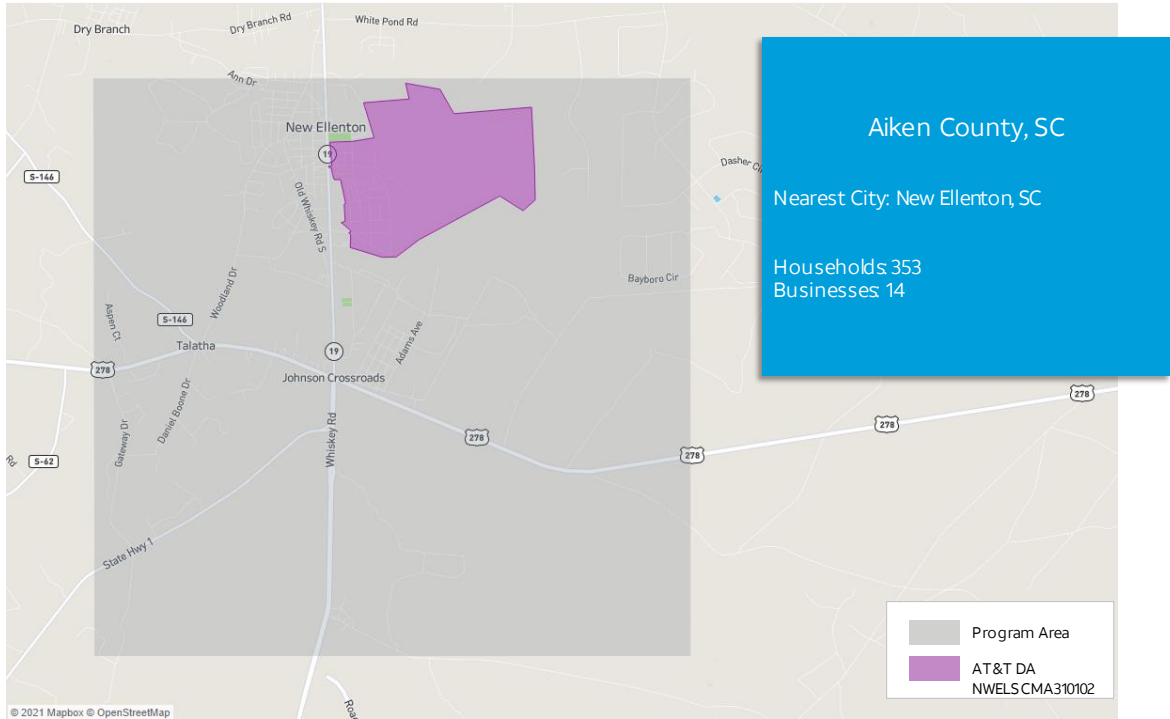
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# Aiken 18



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# Aiken 29



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## Attachment B / Financials

Study Area	Distrobution Area	Eligible Locations for SC RBG	Total Locations	Total Cost	Total Matching funds (% Eligible * Total Cost)			SCBB Grant cost per eligible location	
					ATT Cost	SC BB Grant	ATT Cost per LU		
Aiken 11	GIVLSCMA410106	100	216	\$ 241,705.10	\$ 111,900.51	\$ 185,754.85	\$ 55,950.26	\$ 559.50	\$ 859.98
Aiken 17	BATHSCMA221003	376	433	\$ 420,123.02	\$ 364,818.14	\$ 237,713.95	\$ 182,409.07	\$ 485.13	\$ 548.99
Aiken 17	BATHSCMA411014	136	165	\$ 239,910.12	\$ 197,744.10	\$ 141,038.07	\$ 98,872.05	\$ 727.00	\$ 854.78
Aiken 18	AIKNSCMA122001	138	151	\$ 136,536.99	\$ 124,782.15	\$ 74,145.91	\$ 62,391.07	\$ 452.11	\$ 491.03
Aiken 18	AIKNSCMA122003	61	172	\$ 173,772.36	\$ 61,628.57	\$ 142,958.08	\$ 30,814.28	\$ 505.15	\$ 831.15
Aiken 18	GIVLSCMA110802	87	122	\$ 173,809.13	\$ 123,945.85	\$ 111,836.20	\$ 61,972.93	\$ 712.33	\$ 916.69
Aiken 18	GIVLSCMA220102	288	305	\$ 431,145.40	\$ 407,114.34	\$ 227,588.23	\$ 203,557.17	\$ 706.80	\$ 746.19
Aiken 29	NWELSCMA310102	345	353	\$ 187,134.93	\$ 182,893.92	\$ 95,687.98	\$ 91,446.96	\$ 265.06	\$ 271.07
<b>TOTALS</b>		<b>1,531</b>	<b>1,917</b>	<b>\$2,004,137.04</b>	<b>\$ 1,574,827.58</b>	<b>\$ 1,216,723.26</b>	<b>\$787,413.79</b>	<b>\$ 551.64</b>	<b>\$ 689.99</b>
								<b>AVG per loc</b>	<b>AVG</b>

## Attachment C / Network Diagram

