

# Albemarle Broadband Authority

## Strategic Plan

July 22,2020

### I. Background

In the spring of 2016, Albemarle County was awarded a Virginia Telecommunications Planning Initiative grant through the Virginia Department of Housing and Community Development to develop a community-based telecommunication plan, which was completed in October of 2016. That plan recommended creating a Broadband Authority, and in August, 2017 the Albemarle Broadband Authority, or ABBA, was created.

ABBA consists of two supervisors, two senior county staff members, and two members from the public. ABBA has appointed as its Chief Administrative Officer the current Director of IT for Albemarle County.

In a review of Albemarle County strategies for the future, the Board of Supervisors voted to adopt a [FY 20-22 strategic plan](#) on November 7, 2018. Included as one of 9 points in the strategic plan for the county was to “Expand Broadband: Establish & implement strategic direction to expand broadband affordable access to underserved, rural communities.”

ABBA has defined its goal as follows:

To extend affordable broadband internet service access to every customer in Albemarle county.

#### A. General Approach

ABBA has determined a general approach to accomplish its goal. This approach is to partner with Internet Service Providers (ISPs), and State, Federal and local funding sources. While the Wireless Services Authorities Act under which ABBA was created permits ABBA to itself offer internet services and become an ISP, that is not the strategic approach Albemarle intended when ABBA was created.

ABBA operates under the following principles:

1. ABBA will partner with current or future businesses to provide internet services.
  - a. ABBA will not operate its own internet service provider facilities
  - b. ABBA will facilitate investment in internet infrastructure through grants and public/private partnerships
  - c. ABBA will not establish preferred provider relationships. ABBA may engage specific providers for specific projects based on requirements for that project and provider availability.

2. Broadband technologies with which ABBA works must be robust.
  - a. Some technologies and implementations are subject to significant degradation due to weather, time of day usage, or other factors. A robust solution will normally meet the broadband definition consistently.
  - b. Solutions which do not meet the broadband definition will not be a focus.
3. Funding sources other than debt will be used for all ABBA activities.
  - a. Federal, state, local and private grants will be sought as needed.

## II. Goal

ABBA's simple one sentence goal has very specific meaning:

Extend *affordable broadband* internet service *access* to every *customer* in Albemarle county.

### Definitions:

*Affordable* – Priced at typical user rates. As an example, if customers in the west of the county pay \$60/month on average for broadband, offering this at \$200/month to new customers in the west would not be typical user rates.

*Broadband* - a nominal 25Mbps down/3Mbps up connection is the minimum preferred (25/3).

*Access* – the service is available for purchase by the customer.

*Customer* – residences, businesses, etc. Service access is provided when the service is available to the customer's premises, not when the customer purchases it or distributes it within their premises.

To achieve this goal, ABBA recognizes that it must know where internet services are and are not provided, and to what extent, if any, that those services meet the definition for *broadband*.

While it is not part of the goal, an environment where the *customers* in the county have more than one ISP to select from for *broadband* is believed to offer the most robust solution and is consistent with the belief that competition will produce the most *affordable* solutions.

### III. Strategies

As a part of developing specific strategies and plans:

- ABBA monitors the state's efforts and contributes wherever possible to reach the goal of universal broadband by 2028, preferably much sooner.
- ABBA supports efforts to develop digital literacy through its partnerships with the Schools, Libraries, and Higher Education.
- ABBA considers Central Virginia to be the "heart" of a regional hub for fiber connectivity. ABBA is seeking out ways to partner with adjoining counties in order to document and best utilized the various fiber plants in the planning district.

To achieve its goal, ABBA has identified a short list of strategies which it will actively pursue.

#### A. Track Unserved Areas of the County

The first strategy ABBA follows is to identify and track those locations in the county where broadband service does not exist or the internet service offered does not meet the definition for broadband. Primarily this is in rural areas, but also unserved and underserved areas near urban ring have been identified. Customers all over the county have internet service that neither meets the current definition of broadband, nor does their actual service level come close to the service level they are paying for. In some cases, their service has degraded to less than dial-up speeds or even further to intermittently non-functioning.

ABBA has created a database of more than 1875 addresses where there is either no service, sub-broadband service, or intermittent service. This has been developed with direct resident input via processes in both English and Spanish languages. For those with some form of internet connection, we have a web site where the resident's address and contact information are entered and data including their upload and download speeds, ping time, latency, and ISP can be automatically captured. For residents with no access to the internet from their home or business, we take telephone reports and enter their data into the database manually.

In addition to internet connection data, we also ask for their electrical provider, details on how the internet is used, details on how not having internet access has impacted livelihood/quality of life, attempts to acquire internet access, etc.

From this Unserved and Underserved database, we maintain maps of the areas, regions or pockets where we need broadband projects. These maps are shared with ISPs to drive development in the form of proposals for federal, state, and local funding.

## B. Partner with ISPs for New Broadband Installation

“Partner” in this strategy means that ABBA solicits participation, provides information, provides proposal support, and provides funding. As federal and state funding opportunities arise (e.g., RDOF, VATI) ABBA stays in communication with local ISPs to ensure they are engaged. We identify areas of need for these ISPs, and provide specific details from our Unserved and Underserved database for their proposals.

When appropriate, ABBA will offer some funding to improve a proposal’s chance with a funding agency.

## C. Partner with Neighborhoods to Address Local Issues

“Partner” in this strategy means sharing contact information, experience, and helping to bring neighborhoods and ISPs together. In many areas of the county, the need for broadband or improved internet services is so great that the residents of a neighborhood or small area are willing to explore how they can fund an installation themselves. ABBA will contact ISPs, and introduce the residents and ISP players to one another. When they sit down for informational sessions, ABBA will be present to share other experiences that we have observed. And if the residents and the ISPs can reach an agreement, ABBA will monitor the development to ensure the outcomes sought are the outcomes achieved.

## D. Partner with Schools to Share Information and Address Mutual Goals

The Albemarle County Public Schools (ACPS) have a very specific need to have all of their students have access to broadband from their home. This goal overlaps with ABBA’s. ABBA and ACPS share information and some resources to each further the other’s goals. Free and reduced-price lunch data from ACPS is a key measure for determining areas of economic need.

## E. Identify Resources to Meet Needs

“Resources” for this strategy include both funding sources and ISPs. The public funding landscape is in constant flux, and ABBA must keep abreast of those resources as well as their specific requirements. Doing so will enable us to target specific ABBA projects at the best funding resource.

The ISP landscape in Albemarle County is also in constant flux. Working with ABBA, a new ISP has entered the county providing fiber to the home using electric cooperative power poles to connect the fiber. Ultimately, this will serve about 3600 addresses in the county. Other fixed wireless and fiber providers have talked to ABBA about expanding their service into the county. And we are constantly monitoring the progress of Starlink, OneWeb and others who are looking to create a new, low-Earth-orbit satellite service with far better latency than existing satellite

services. Each ISP is more or less well suited to work on each of the projects we have identified. Knowing the capabilities of each enables us to find the best partner opportunities.

#### F. Fund Specific Projects to Ensure Coverage

ABBA expects that there may be some projects which must be funded locally with ABBA and the ISP providing all of the funding. The reasons for this could be varied: areas which fail some criteria of other public funding grants but which still need to be served, areas which compete for but do not win public funding grants, areas that are too small to consider for public funding grants, areas that are not economically viable for any ISP to build on their own, etc.

When necessary, ABBA will provide the only public funding for some projects. These projects will be selected from our Unserved and Underserved database, and will be selected according to the following criteria.

##### Criteria:

- Projects that include performance criteria that the vendor (ISP) will meet and report on over a two-year period. Performance criteria will be defined by project type; fixed wireless, fiber, cable, hybrid fiber/cable, or DSL.
- Projects that maximize the number of potential school-age beneficiaries as determined by current ACPS transportation data on school-age children's locations. This is a surrogate for where the actual children are, as the transportation data will not address home-schooled or private school children. However, it should serve as a reasonable comparison between projects.
- Projects that will serve economically disadvantaged residents. This will be determined through reliance upon the data expertise of county staff.
- Projects with the least economic viability as commercial projects. In other words, ABBA prefers those projects that will not or cannot be completed without ABBA funds.
- Projects that best leverage ABBA's funds, e.g., where \$1 invested by ABBA is matched by the highest funding level from a partner ISP.
- Projects that arise externally, where ISP partners propose projects which make sense for their business rather than ABBA identifying a need and then searching for a particular ISP or ISPs to fill it.
- Auctions where multiple ISPs compete for the funds and, if applicable, offer varying technical approaches.
- Projects that deliver end user services over projects which only deploy infrastructure.
- Solutions that meet or exceed its broadband definition of 25Mbps down/3Mbps up are strongly preferred. Bandwidth needs have only gone up and are forecast to only go up for the foreseeable future.
- Solutions which are cost efficient. Cost efficiency is measured by the cost to ABBA per Albemarle County resident who benefits.

- Solutions that create a service offering where none exists. While increasing competition is usually good for the consumer, ABBA’s focus is first on ensuring some service is available for all residents of the County.
- Projects that stimulate economic development with improved connectivity in areas zoned to accommodate business growth.

#### IV. Development

Beyond our current strategies, ABBA has identified areas for future growth and development of our goal and principles. These topics may be beyond ABBA’s current remit, and require endorsement from the Albemarle County Board of Supervisors before ABBA would proceed in these areas. At the present time these are unprioritized considerations for ABBA to review in the future.

##### A. Equity

ABBA’s current goal seeks to “Extend affordable broadband internet service *access* to every customer in Albemarle county.” As currently defined, this “access” need only be *available* to a customer and priced at typical rates. This does not address the needs of customers who can not afford an additional monthly charge for broadband. Economic barriers to broadband are just as much barriers as physical ones are. The lack of broadband access can be a symptom of poverty and may be causal in some cases, of poverty as well. This vicious cycle may require governmental intervention to break.

##### B. Competition

ABBA’s current goal does not include the concept of choice of broadband provider. ABBA has reached its current goal when there is at least one offering of broadband for every customer in the county. As noted previously, an environment where the customers in the county have more than one ISP to select from for broadband is believed to offer the most robust solution and is consistent with the belief that competition will produce the most affordable solutions. Ensuring all citizens of the county have a choice of broadband suppliers warrants consideration as a future goal for ABBA.

##### C. Limited Service Provision

As a current principle, ABBA will not operate its own internet service provider facilities. To achieve the goal to ensure “every customer” in Albemarle has broadband, ABBA may find it necessary or expedient to acquire or facilitate access to assets that ABBA, the county or the public schools own to enable vendors to make their offerings. Assets such as existing or new dark fiber which could be leased to a vendor, or real estate locations which could be leased for facilities are examples. While not engaging in direct-to-consumer service provision, these kinds

of activities could make ABBA an internet service provider. For a small number of county residents, it might even be necessary for ABBA to be the direct-to-consumer owner/operator of services if it wants to achieve its goal of “every customer”. Some of the last mile locations in the county will be very costly to connect. ABBA would not be competing with other ISPs if no other ISPs can be found to offer the services.

Embarking on any form of limited service provision would be a significant change, and is recorded here as only a possible item for future consideration.