ABOUT BAND-NC

The BAND-NC (Building a New Digital Economy) initiative was announced in February 2020 to address the challenges of broadband adoption across North Carolina, and to spark long-term planning efforts to bridge the digital divide. The issue of broadband inequity was evident before the coronavirus pandemic; internet access has become an essential utility in our modern world just like electricity, water and gas. The widespread implementation of working from home, online education and telehealth as a result of the pandemic has made this even more clear. Rural communities, lower income populations, communities of color and older people have a higher likelihood of lacking access to broadband services, and as such have disproportionately suffered from the increasing reliance on digital functions in our modern world.

THE NEED

Over 1.1 million North Carolinians either lack access to broadband, cannot afford broadband, or do not have the digital literacy skills to utilize the full potential of broadband.\(^1\) The ultimate goal of BAND-NC is for all 100 counties in North Carolina to publish digital inclusion plans in order to reduce this number and close the digital divide. Digital inclusion goes beyond infrastructure access issues to include the need for affordable internet subscriptions, device access and digital literacy skills. Digital inclusion plans assess what tools and resources counties currently have, what areas and populations of people do not currently have access to broadband service (or insufficient, slow connections), and what resources or strategies are needed in the future in order to fully connect everyone in North Carolina. As of August 2022, 15 counties have adopted digital inclusion plans through the BAND-NC program; nine have been published as part of collective plans from their respective councils of government (the Upper Coastal Plain and Land of Sky COGs), and six others have been published individually (Rockingham, Alamance, Carteret, Forsyth, Durham and Randolph counties). The City of Charlotte adopted a “Digital Inclusion Playbook” in 2017, before the BAND-NC program existed; therefore, it is not discussed in this review. All BAND-NC supported plans can be found published on the BAND-NC Resources page\(^2\), along with a map of counties currently engaging in the digital inclusion planning process.

This review aims to be a helpful resource for counties and stakeholders who have just started or are hoping to begin the digital inclusion planning process.

[1] https://www.ncbroadband.gov/#:~:text=At%20least%201.1%20million%20North,advantage%20of%20the%20digital%20economy
[2] https://iei.ncsu.edu/band-nc/resources
LESSONS LEARNED

Who is Leading These Efforts?

All digital inclusion planning efforts have started with a planning team or coalition. Local digital inclusion planning teams have taken different strategies; some have created county-level coalitions, while other planning efforts have been led by regional Council of Governments (COGs).

The Upper Coastal Plain COG (UCPCOG) and Land of Sky Regional Council took the regional approach because the counties within their regions have similar demographics, economic levels or challenges in addressing the digital divide. All counties in the UCPCOG are rural and Tier 1 economically distressed counties, with an average of 59% of residents having internet speeds below 25/3 mbps. The counties in the Land of Sky Regional Council vary slightly in their economic tiers, but they all share similar issues in addressing the digital divide.

For larger, more urban counties that have unique demographics or economic features, it may make more sense to publish individual plans. For example, Durham County has unique priorities, resources and challenges compared to other counties in the Triangle region; therefore, Digital Durham opted to publish their own plan.

Consultants can help digital inclusion planning teams with conducting research, writing and subject matter expertise. However, using a consultant is not always necessary and may depend on the capacity, expertise and budget of the group. Some groups, like Digital Durham, wrote plans internally, without the assistance of outside consultants. Some counties drafted plans entirely with consultants; Forsyth County utilized the services of A/R360 Consultants. Some counties created plans with both internal and external assistance; the Upper Coastal Plain Digital Inclusion Plan was created both with internal personnel and the assistance of Broadband Catalysts.
Who Should Be Involved in the Planning?

Participants in the planning committee should be knowledgeable about the impact the digital divide has on both their respective area of expertise and the overall community. For example, planning committees have been made up of the following different stakeholders:

- Churches/other faith institutions
- Community colleges and universities
- County cooperative extension offices
- Internet service providers
- Local businesses
- Local chambers of commerce
- Local government officials and organizations
- Nonprofits
- Public libraries

For Carteret County, a coastal county with a high retirement aged population, the Carteret County Department of Aging Services was an important partner in their digital inclusion plan. Areas with distinct population differences or unique challenges, such as a higher than average percentage of Spanish speaking population, or an economy heavily reliant on agriculture, should be mindful of these differences when crafting digital inclusion plans, and involve pertinent stakeholders to address issues fully.
Engaging Community in the Planning Process

The inclusion of diverse community members' voices in the digital inclusion planning process is crucial for creating a plan that addresses the needs and best interests of everyone in the community. Including feedback from groups historically affected by the digital divide, such as non-English speaking, older, minority and low income people in focus groups, surveys and data collection is required for a plan to accurately reflect the status of the digital divide in each county.

To ensure the inclusivity in their planning process, Digital Durham held seven focus groups to allow residents to voice their concerns and thoughts to address the digital divide in Durham County. These groups led to thousands of ideas, discussing potential community partners, the need for support, shortcomings of current solutions, and the need for increased awareness of services already available locally. Digital Durham also made several modifications to their initial outreach strategy, including the creation of a Spanish language survey to reach more Hispanic residents, targeting advertisements on Facebook to reach more male residents, and using volunteer assistance to distribute paper surveys to reach older residents and those without any internet access.

Forsyth County included input in their planning process from a community advocate with extensive community outreach experience. They were able to include her in the planning process by paying her with a stipend utilizing funding they had received from BAND-NC. Her inclusion efforts were vital to ensure that members of the community were represented in the planning process and findings of the report.
Rockingham County incorporated community input from leaders of three sectors strongly impacted by the digital divide: healthcare, business and education/families. The plan includes personal stories from individuals involved in their respective fields, including stories from doctors detailing how the lack of internet access has negatively impacted their ability to serve patients, how slow internet speeds prevented a security camera manufacturer from completing a project, and how Rockingham Community College’s Wi-Fi hotspot program would allow a mother who works full time to complete her courses from home. These stories increase interest in digital inclusion efforts by providing an opportunity for people who may not lack broadband access to see real world examples of how addressing the digital divide can positively impact other people’s lives.

The Land of Sky Regional Council continues to collect public and community input. Their regional digital inclusion plan is a continually evolving interactive website, which allows changes to be made as more partners, resources and challenges are added. A unique feature of the Land of Sky plan is the ability for community members to submit information regarding broadband inventory in the region. Businesses, churches and community centers offering Wi-Fi hotspots and other digital inclusion services are encouraged to add their locations to the regional map, which provides an up-to-date list of access points. The continually updated list of community partners serves as an accurate inventory for the Land of Sky planning team to monitor, as well as a resource for residents in the county to find public Wi-Fi access points closest to their homes.
What Data are Counties Using?

Accurate and up-to-date data is a major challenge in the digital inclusion and broadband field. It is well-known that the Federal Communications Commission overestimates the number of households connected to broadband, which has led to large discrepancies in data at the federal and state levels. For example, according to the FCC, 98.1% of people in Rockingham County have access to broadband. In reality, these percentages are much lower. Responses from the NC Broadband Infrastructure Office (NCBIO) Survey\(^3\) estimate that 46.7% of households lack broadband access, and an even higher share of the population lack internet connections that meet the basic “high speed” standard of 25/3 mbps. More detailed data for each county can be found using the NC Broadband Availability Index.\(^4\)

The most important information to determine true gaps in broadband service has been the NCBIO survey along with surveys conducted by individual counties, but reaching residents with the survey has been challenging for some counties. Several counties have come up with creative methods to distribute surveys to residents, such as including surveys in utility bills, pre-loading surveys on students’ school-provided devices that can be filled out at home and returned to school, and including information about the survey in local newspapers. These have all resulted in an increase in responses from county residents.

Funding

All of the counties mentioned in this report received a $5,000 BAND-NC grant to be utilized for digital inclusion efforts (for regional efforts, grantees were provided $5,000 per county), but some counties received additional funding from various sources. Forsyth County included philanthropic partners in their planning efforts; both the Z. Smith Reynolds Foundation and the Kate B. Reynolds Foundation contributed to ensure the planning team had appropriate funds. In Carteret County, the Economic Development Foundation provided a financial match to the $5,000 BAND-NC grant.

Digital inclusion planning teams utilized funding in several ways to develop their plans, including:

- Hiring a consultant to support some or all of the research and writing (Forsyth County)
- Providing stipends for planning team members with lived experience (Forsyth County)
- Developing, printing and mailing surveys and other materials (Durham, Randolph counties)
- Traveling to visit with stakeholders and community members

\(^{3}\) [www.ncbroadband.gov/north-carolina-broadband-survey](http://www.ncbroadband.gov/north-carolina-broadband-survey)
\(^{4}\) [experience.arcgis.com/experience/1ca29805a2454fba6b9579702b99e59](http://experience.arcgis.com/experience/1ca29805a2454fba6b9579702b99e59)
DIGITAL INCLUSION PRIORITIES

The single most important and widely agreed upon finding present in every county’s plan is the need for improved and more accurate data collection efforts. The data currently available from the FCC is far too inaccurate to properly identify gaps in service and target solutions to address the digital divide. The NCBIO survey has been vital for counties to gather data for their residents, but participation rates and the success of the survey has not been equal in every county. North Carolina would greatly benefit from a unified, well-funded statewide effort to expand survey data and participation in each county to help paint a more accurate and updated picture of the state of broadband access.

Other findings for each county varied, particularly between rural and urban areas, but many counties reached similar conclusions during the digital inclusion planning process. One common finding was that vulnerable and underserved populations in each county are strongly affected by the digital divide and should be prioritized in digital inclusion efforts. For example, Carteret County has a significantly higher proportion of retired residents compared to the rest of North Carolina. With a median age of 48, 10 years older than the state median of 38.6, and 40% of its population over age 55, focusing on addressing digital literacy skills and device access for older people was a major priority for Carteret County. For counties with significant populations of non-English speaking residents, low income residents, or rural residents, those groups were prioritized in each plan.

Increasing the number of public Wi-Fi access points was a recurring conclusion in many plans. Rockingham County only has 43 public Wi-Fi access points for the entire county; the need to increase the number of free, public Wi-Fi hotspots was the top priority regarding access in the county.

Digital Durham, Randolph County, the Land of Sky COG and others identified the need for a full time staff member or members (a Digital Navigator or Digital Literacy Coordinator) to focus specifically on making it easier for residents to get involved with digital literacy and access programs. People in these positions could connect residents with information sessions regarding the Affordable Connectivity Program, which is a federal initiative to subsidize internet service subscriptions and device costs, digital literacy programs offered by libraries/schools, or local device access programs.
RECOMMENDATIONS
FOR THE PLANNING
PROCESS

- **Provide Definitions.** Digital inclusion or digital equity may be a new or unfamiliar concept for people, and defining digital inclusion in plans provides an important orientation. (See page 10 of this guide for our definitions.)

- **Remain Flexible.** There is no “one size fits all” approach to creating plans; counties may have unique priorities, strengths or resources that shape their plans. Communities may have different levels of support from councils of government or elected officials, along with staff members able to contribute to creating a plan. Using the tools and support available in each county; e.g., relying on COG support to create a plan in partnership with other counties, assigning staff to create the plan, and/or utilizing grant funding to hire consultants, will help create the digital inclusion plan that is best for the county.

- **Include a Diversity of Stakeholders.** It is important to include a diverse range of stakeholders in order to cover all the areas the digital divide impacts; stakeholders from local government, education, business, technology, the faith community, and more should be involved in the planning process to create a more comprehensive and encompassing plan.

- **Include Community.** Ensuring the community is involved in the planning process, whether that is through expanded survey efforts, the actual placement of community members in planning committees, or allowing community members to continually update available resources, allows digital inclusion plans to be more representative of the actual people that live in the area.

- **Collect Data.** The collection of accurate and up-to-date data is vital to making sure the plan includes all people affected by the digital divide. With FCC data being unrepresentative to the true percentage of the population without internet access, collecting data from the NCBIO survey and other community surveys is important. There is also information that may not be collected by surveys that is still beneficial to the development of plans; engaging focus groups and allowing open-ended responses may result in gathering new information. Creative methods to reach underserved populations should be employed to reach as large of a sample as possible.
Additional Statewide Support

In July of 2021, Governor Roy Cooper announced the creation of the Office of Digital Equity and Literacy, housed within the N.C. Department of Information Technology. This office is the first of its kind in the country and is a clear indication of the importance that bridging the digital divide has for North Carolina now and in the future. Broadband expansion has seen increased attention and budgetary considerations from the federal government as well, with $10 billion being allocated to broadband and digital connectivity through the American Rescue Plan Act and an additional $65 billion being allocated for broadband expansion through the Bipartisan Infrastructure Deal.

DIGITAL INCLUSION DEFINITIONS

The Digital Divide: The gap between people who are connected to, can afford, or have the skills to use the internet and those who cannot.

Broadband Access: The ability to connect and use broadband internet, defined by the FCC as internet speeds of 25 mbps download and 3 mbps upload.

Device Access: Having the ability to use technology capable of accessing broadband connection.

Broadband Adoption: The amount of people subscribed to internet services.

Digital Equity: When all communities are able to connect to and use the internet to its full potential.

Digital Inclusion: Ensuring that all communities, especially the most disadvantaged populations of lower income, rural, minority, older people, etc. people have the ability to connect and use the internet.

Digital Literacy: The ability to use an internet connection and technology for various functions, ranging from basic tasks such as searching on Google and sending emails, to more advanced functions like coding and using technical software.