

NORTH CAROLINA DIGITAL INCLUSION PLAN LITERATURE REVIEW

Prepared by BAND-NC with support from the NCDIT Office of Digital Literacy and Equity and the Friday Institute

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TABLE OF CONTENTS

Background	3
Key Terminologies	4
BAND-NC Review Process	5
Digital Inclusion Plans	7
Digital Inclusion Plan Guiding Principles	10
Vision and Mission Statements	10
Values	18
Digital Inclusion Plan Values	18
Definitions	18
Digital Inclusion Plan Definitions	18
Identified Needs & Barriers	
Finalized Digital Inclusion Plans	19
Top 5 Western NC Barriers or Needs Identified Out of 24 Counties/Territories	21
Top 5 Central NC Barriers or Needs Identified Out of 12 Counties	
Top 5 Eastern NC Barriers or Needs Identified Out of 12 Counties	23
Future Digital Inclusion Plans	26
Identified Assets & Opportunities	27
Finalized Digital Inclusion Plans	27
Top 5 Western NC Assets or Opportunities Identified Out of 24 Counties/Territories	29
Top 5 Central NC Assets or Opportunities Identified Out of 12 Counties	30
Top 5 Eastern NC Assets or Opportunities Identified Out of 12 Counties	30
Future Digital Inclusion Plans	33
Objectives & Priorities	34
Finalized Digital Inclusion Plans	34
Top 5 Eastern NC Objectives or Priorities Identified Out of 12 Counties	37
Implementation Strategies	40
Finalized Digital Inclusion Plans	40
Top 5 Western NC Implementation Strategies Identified Out of 24 Counties/Territories	42
Top 5 Central NC Implementation Strategies Identified Out of 12 Counties	43
Top 5 Eastern NC Implementation Strategies Identified Out of 12 Counties	43
State Collaboration & Support	49
Finalized Digital Inclusion Plans	50
Future Digital Inclusion Plans	50
Digital Inclusion Plan Recommendations	50
Digital Inclusion Plans' Community Input Strategies	5
Next Steps for Digital Inclusion Plans	
BAND-NC Recommendations	54
References	56









Background

North Carolina is a visionary leader in the quantity and quality of localized digital inclusion planning and implementation. A digital inclusion plan is often the first formal step for a community to "reduce the digital divide and prioritize digital equity for their residents" (*Digital Inclusion Template & Guide* | *Ncbroadband.gov*, n.d.). This literature review of 27 draft and adopted plans represents 48 counties in North Carolina that have completed a thorough analysis of their digital inclusion barriers and opportunities.

A number of strategic statewide partners have helped formulate, fund, and facilitate the digital inclusion planning process at the local and regional levels. North Carolina State University's Institute for Emerging Issues started the BAND-NC, or Building a New Digital Economy in NC (BAND-NC Digital Inclusion Planning Guide, 2022) program in Spring 2020 focusing on broadband adoption in the state. As a key partner, BAND-NC has been involved in almost all of North Carolina's digital inclusion plans, whether through funding plans via the BAND-NC grant program, providing technical assistance, or reviewing independent plans.

Because of BAND-NC's participation in the digital inclusion planning processes, we have compiled a review to lift up the hard work of community leaders to gather important information that will not only inform their digital inclusion work but also North Carolina's statewide digital inclusion plan. With guidance from our partners at NTIA, NDIA, NCDIT, the Friday Institute, and more, this review will parse out common themes, best practices, and challenges our county and regional partners have reflected in their finalized plans. This literature review will provide much-needed context to North Carolina's digital inclusion landscape and provide a path for continued partnership and collaboration across the state. When compiling North Carolina's statewide digital inclusion plan, it is important to honor the hard work of community leaders, and their efforts should be reflected in every section of the state plan to provide a path for further digital inclusion partnership.

Key Terminologies

Access: Though also used in plans to describe the availability of devices, access in this
review refers to Broadband Access. A common definition shared by FCC is that
broadband access means 'the ability to connect and use broadband internet, defined by
the FCC as internet speeds of 25 Mbps download and 3 Mbps upload' (BAND-NC Digital
Inclusion Planning Guide, 2022). The FCC is hoping to update this minimum in the future
(FCC, 2022).









- Adoption: Adoption has two definitions in local digital inclusion plans. One has
 "traditionally been defined as residential subscribership to high-speed Internet access."
 The other refers to elements that increase broadband adoption and use when a resident
 has access: having an appropriate device, reliable speeds, affordable service, digital
 skills, etc. (Jauregui & Knox, n.d.).
- Affordable Connectivity Program: The ACP is 'an FCC benefit program that helps ensure that households can afford the broadband they need for work, school, healthcare and more. The benefit provides a discount of up to \$30 per month toward internet service for eligible households and up to \$75 per month for households on qualifying Tribal lands. Eligible households can also receive a one-time discount of up to \$100 to purchase a laptop, desktop computer, or tablet from participating providers if they contribute more than \$10 and less than \$50 toward the purchase price (Affordable Connectivity Program, n.d.).
- BAND-NC: North Carolina State University's <u>Institute for Emerging Issues</u> is a think tank focusing on the economic vitality of North Carolina. Following IEI's winter 2020 Emerging Issues Forum on Reconnecting to Technological Opportunity and in partnership with NCDIT the BAND-NC program was announced to help communities create and implement digital inclusion plans (*BAND-NC Seeks Broadband Success for All*, 2020).
- **COG:** North Carolina Regional Councils of Government (COGs) are 16 regional organizations composed of member governments (*About Us*, n.d.). Many digital inclusion plans have been funded and planned at the COG level, working with individual local governments to make county and/or regional plans.
- Covered Populations: The Digital Equity Act of 2021 determines the following populations have been historically disconnected: Persons who are 60 years of age or older, incarcerated individuals, veterans, persons with disabilities, members of a racial or ethnic minority group, rural residents, individuals with a language barrier (including those who are English learners or have low literacy levels), and individuals living in households with incomes not exceeding 150 percent of the poverty level (*Digital Equity Act of 2021*, 2023).
- Dark Fiber: Fiber that has been installed but is not being used.
- Finalized Digital Inclusion Plans: Communities are in various stages of creating and updating their digital inclusion plans. For this initial review, BAND-NC reviewed 27 draft or adopted plans, which will be referred to as "finalized".
 - Draft Digital Inclusion Plans: Plans that have been written, but not formally adopted by the appropriate governing local or regional body. Plans might be altered before the adoption process by the planning authors or partners that review the plan.
 - Adopted Digital Inclusion Plans: Plans that have been written and formally adopted by the appropriate governing local or regional body. BAND-NC honors individual procedures and precedents for county/regional-wide programs, but along with NCDIT, considers a plan to be adopted if ratified by a community's local or regional government (ex. County Commissioner, Council of Governments Executive Board, etc.).









- **ISPs:** Internet Service Providers. Private and nonprofit organizations that build, maintain, and monetize broadband access and subscription services.
- "Last Mile" Service: A frequently used term in broadband access and adoption to name
 the gap between an ISPs available service and the connection to individual houses and
 businesses. In many rural and impoverished communities, there is often not a pressing
 financial incentive to connect hard to reach and/or low density areas.
- NCDIT: The North Carolina Department of Information Technology is leading broadband access and adoption efforts for the state of North Carolina, more specifically, the Office of Broadband and Digital Equity established in 2021 (Governor Cooper Establishes Nation's First Office of Digital Equity and Literacy, 2021). NCDIT's staff support, funding, and resources have helped shape many if not all of North Carolina's digital inclusion plans.
- NDIA: The National Digital Inclusion Alliance "combines grassroots community engagement with technical knowledge, research, and coalition building to advocate on behalf of people working in their communities for digital equity" (NDIA, n.d.). Digital inclusion partners use NDIA's staff support, resources, templates, and networks to create and implement their plans.
- NTIA: The National Telecommunications and Information Administration out of the U.S.
 Department of Commerce distributed Digital Equity and Broadband Equity, Access, and
 Deployment (BEAD) grants to North Carolina to create a statewide plan for digital access
 and adoption implementation (BEAD and Digital Equity Planning | Ncbroadband.gov,
 n.d.).

BAND-NC Review Process

In the summer of 2023, BAND-NC staff members conducted an initial review of 27 finalized digital inclusion plans, covering 48 counties. These plans were written by a variety of government leaders, independent contractors, and coalitions/teams between 2020 and 2023. BAND-NC regularly updates its <u>Digital Inclusion Plan map</u> of NC counties with in-progress or adopted plans to showcase planning progress across the state. Plans are hosted on NC State's Google Drive for this literature review as well as the statewide asset mapping project.

BAND-NC used four primary sources to structure this review:

- NDIA's Conducting a Literature Review of Local Digital Inclusion Plans: This template
 includes central questions frequently answered by the digital inclusion plans themselves
 and sorts the vast amount of information provided by planning partners into recurring
 themes.
- 2. <u>NTIA Five-Year Plan Guidance</u>: Central questions from NTIA were considered for each section in order to provide the most thorough review of finalized plans.









- NCDIT Digital Inclusion Template & Guide: This review takes into account that many of NC's local plans were created around this template from the NCDIT's Office of Digital Equity and Literacy.
- 4. <u>BAND-NC Digital Inclusion Guide</u>: Many existing partners participated in an earlier round of interviews and analysis of their plans for this brief guide to assist new digital inclusion planning coalitions.

BAND-NC expanded our analysis of digital inclusion plans through virtual interviews with planners and regional government leaders. We conducted 22 interviews with regional and county leaders who provided context on their finalized plans. Some of those same regional leaders, as well as three county leaders, also were able to provide information about their upcoming plans. The names and organizations of those interviewed can be found in the Digital Plan Profiles below.

For digital inclusion partners with finalized plans, the interviews gathered insights about the planning process- writing the plan, community stakeholder feedback, and implementation next steps. Their answers were added to our data unless it already appeared in their plans under the sections "Finalized Digital Inclusion Plans".

For planners at the beginning stages, we asked about the digital inclusion landscape in their region and their estimated planning processes. Their answers are summarized in sections titled "Future Digital Inclusion Plans".

The review will be comprised of the following sections expanding on the NDIA literature review template:

- Plan Basics (plan name, region, year adopted, planning team, plan funding, primary and secondary sources used)
- Plan Guiding Principles (vision and missions statements, definitions, and values)
- Identified Barriers & Needs Assessment
- Objectives & Priorities
- Implementation Strategies
- State Collaboration

The following sections have been added to incorporate important plan elements:

- Assets & Opportunities
- BAND-NC Recommendations

Each section will sort its corresponding data into three classifications:

 Geographical: for the purposes of trend-spotting, we will be broadly using West, Central, and East as our regional groups. The groupings will be made up of the COGs in their area to share regional similarities and differences as one measure of understanding best practices.









- 2. Repeated Themes: Highlighting the most common five or ten plan components provides a helpful overview at a glance. Full data can be accessed as well.
- Covered Populations: These populations have been historically disconnected and digitally excluded. When mentioned, covered populations will be **bolded** to draw attention to their importance to local (and the statewide) plans in the literature review and corresponding spreadsheets.

Please note, this review does not go into depth about infrastructure, internet service providers, or technical broadband solutions. Infrastructure challenges and solutions are noted on almost every plan and included here, but in-depth analysis focuses on digital inclusion and adoption efforts. Each plan and its corresponding plan profile can be accessed in the Digital Inclusion Plans section of the review to ascertain infrastructure specifics of each county or region, including maps of broadband and cellular access, which counties received GREAT grants, which ISPs provide service in each municipality, etc.

The materials linked throughout the review include Google Drives, Google Sheets, Google Forms, and websites used to review finalized plans and interview insights. Twenty-five plans can be accessed by PDF, one on the ArcGIS website, and one on their county's digital inclusion coalition website.

Digital Inclusion Plans

The table below includes an overview of each of the 27 finalized plans with links to more detailed information, including a plan profile and the plan itself. The plan profile document also includes a link to each plan's "NDIA Template", which distills key information based on NDIA's guiding questions. There are 22 individual counties with plans and five regional plans that have been finalized (drafted or adopted) by July 2023.

The plan profiles provide an overview of plan basics, including plan name, counties covered, and if the plan is in draft form or adopted. It is interesting to see the mix of data under the "Plan Created By" category, ranging from COG planners to digital inclusion teams to consultants. If detailed in plans and/or expounded upon in BAND-NC's interviews with stakeholders, there are insights into how plans came together. Some best practices include forming a coalition or committee of stakeholders from every industry for regional insight and buy-in. Other regions wrote the plan in-house but used kick-off events, focus groups, and one-on-one meetings to collect data from similar stakeholders. Many plans discuss using the NCDIT Template & Guide (Digital Inclusion Template & Guide | Ncbroadband.gov, n.d.) as their outline for informing and writing the plan.

Funding for the planning process commonly comes from grant sources such as BAND-NC, Dogwood Health Trust, and State Employees Credit Union, though some supplemented these grants with local government budgets, ARPA grants, and foundation support.









It is important to highlight the sources groups used to create their digital inclusion plans to contextualize the included data and subsequent analyses. The most frequently used primary sources to gather information were NCDIT's Broadband Survey, FCC Form 477, American Community Survey, NC Broadband Adoption Index. Other counties used additional sources (like Broadband Matters (like Brooking's "The devaluation of assets in Black neighborhoods") and "Why Broadband Matters for Farmers".

Plan	Count(ies)	Plan Name and Profile	Plan Link	Adopted year
1	Alamance	Alamance County Digital Inclusion Plan: Connecting for Success	■ Alamance C	2022
2	Alexander	Alexander County Digital Access Plan	■ Alexander-C	2023
3	Bladen	Bladen County Digital Inclusion Plan	■ Bladen Coun	2021
4	Caldwell	Caldwell County Digital Access Plan	Caldwell DIP	2023
5	Carteret	Connecting Carteret: A Plan for Digital Inclusion	■ Carteret Cou	2021
6	Chatham	Chatham Digital Inclusion Plan	Chatham Co	Draft
7	Chowan	Chowan County Digital Inclusion Plan	■ Chowan Cou	2021
8	Columbus	Columbus County Digital Inclusion	Columbus C	2021
9	Duplin	Duplin County Digital Inclusion Plan	■ Duplin Count	2021
10	Durham	Digital Equity Plan: A Plan for Durham	Durham Digital Inclusion Plan Durham Cou Durham Cou	2020
11	Forsyth	Connecting Forsyth County	■ Forsyth Cou	2021
12	Hoke	Hoke County Digital Inclusion Plan	■ Hoke County	2021
13	Mecklenburg	Center for Digital Equity 5 Year Plan	■ Mecklenburg	2020
14	McDowell	Connecting McDowell County	■ McDowell Di	2022
15	Onslow	Onslow County Digital Inclusion Plan	■ Onslow Cou	2021









16	Pender	Pender County Digital Inclusion Plan	Pender Cou	2021
17	Perquimans	Perquimans County Digital Inclusion Plan	Perquimans	2021
18	Randolph	Building Connections, Starting at Home: Randolph County Digital Inclusion Plan	■ Randolph-C	2020
19	Robeson	Robeson County Digital Inclusion Plan	Robeson Co	2021
20	Rockingham	Connecting Rockingham County: Digital Inclusion Plan	■ Rockingham	2021
21	Scotland	Scotland County Digital Inclusion Plan	Scotland Co	2021
22	Stanly	Digital Inclusion: A Framework for Broadband Availability, Access, Affordability and Adoption in Stanly County	■ Stanly-Count	2022
23	Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey	Digital Inclusion for the High Country: Connection and Engagement for all	■ High Country	2023
24	Buncombe, Henderson, Madison, Transylvania	Bridging the Digital Divide: A Digital Inclusion plan to bring affordable internet service, accessible digital devices and tech skills training to the Land of Sky region	Plan Link	2020
25	Polk, Rutherford	Polk & Rutherford Counties Digital Inclusion Plan	Polk & Ruthe	2023
26	Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, The Qualla Boundary	Region A Digital Inclusion Plan	■ Southwester	Draft









	27	Edgecombe,	Upper Coastal Plain Digital Inclusion	■ Upper Coast	2021
		Halifax, Nash,	<u>Plan</u>		
		Northampton,			
		Wilson			
L					

Digital Inclusion Plan Guiding Principles

Vision and Mission Statements

Each digital inclusion plan begins with vision and mission statements. These directive and aspirational proclamations are foundational and should be honored in the creation of the statewide vision and mission statements. The vision statements capture local commitment to the core of digital equity—access for all that is affordable and appropriate. Almost every mission statement calls for equitable broadband access, availability, and accessibility as well as to provide specific tools and resources based on unique community data. The statements do vary in their scope and audience. They are written as missions or visions for the digital inclusion planning organization itself or to promote digital inclusion in the community more broadly.

Below are the most frequently used terms in county and regional vision and mission statements. Note that the Focus Broadband-created plans¹ (Bladen, Chowan, Columbus, Hoke, Onslow, Pender, Perquimans, Robeson, and Scotland) have almost identical mission and vision statements and therefore impact the most frequently used terms. Though the regional plans have individual county barriers, assets, objectives, and implementation strategies identified throughout this review, they all have shared mission and vision statements, which are counted on a regional not county level.

Frequently Used Terms: Vision Statements	
County (23)	Access (15)
Digital (22)	Affordable (15)
Broadband (21)	Businesses (14)
Residents (21)	Society (14)

¹ Focus Broadband, an ISP, helped create a number of digital inclusion plans for 9 Eastern NC counties in 2021 with the assistance of member governments, consultants, and BAND-NC









Participate (19)	Additional frequently used terms: Sustainable,
Knowledge (17)	Provide, Future, Connections, Accessible/Accessibility, Skills, Internet, Support, Quality, Community

Vision Statements	
1- Alamance County	Our vision is for Alamance County to be a leading example in North Carolina for providing equitable, reliable, and sustainable broadband access for all its residents.
2- Alexander County	The plan's long-term vision is for all county residents to have full access to quality broadband, along with the knowledge and skills that are needed to participate fully in the community.
3- Bladen County	To provide current and future residents and businesses in Bladen County with the knowledge, tools and accessibility to fully participate in the digital society through accessible, affordable and sustainable connections to broadband.
4- Caldwell County	The plan's long-term vision is for all county residents to have full access to quality broadband, along with the knowledge and skills that are needed to participate fully in our community.
5- Carteret County	Every citizen and organization in Carteret County will have affordable access to the knowledge and information required to engage in the social, economic, political and cultural activities needed to thrive and realize their full potential.
6- Chatham County	We envision a dynamic and inclusive community in Chatham County where every resident has access to reliable high-speed broadband, digital technology, and the skills needed to participate and fully achieve their goals in the digital age.
7- Chowan County	To provide current and future residents as well as businesses in Chowan County with the knowledge, tools and accessibility to fully participate in the digital society through accessible, affordable and sustainable connections to broadband.
8- Columbus County	To provide current and future residents and businesses in Columbus County with the knowledge, tools and accessibility to fully participate in the digital society through accessible, affordable and sustainable connections to broadband.
9- Duplin County	To provide current and future residents and businesses in Duplin County with the knowledge, tools and accessibility to fully participate in the digital









	society through accessible, affordable and sustainable connections to broadband.
10- Durham County	All people who live, work, and socialize in the city and county of Durham, NC have access to digital skills training and technology to support their goals.
11- Forsyth County	Forsyth County is a thriving, inclusive community where all residents—especially residents of underserved communities— have equal access to learn, participate, and contribute to society through robust and digital information technology.
12- Hoke County	To provide current and future residents and businesses in Hoke County with the knowledge, tools and accessibility to fully participate in the digital society through accessible, affordable and sustainable connections to broadband.
13- Mecklenburg County	To make Mecklenburg County the most digitally equitable community in America.
14- McDowell County	A connected McDowell County where broadband is considered an essential utility and all residents are empowered to use technology to enhance their education, health, employment opportunities, and overall standard of living.
15- Onslow County	To provide current and future residents and businesses in Onslow County with the knowledge, tools and accessibility to fully participate in the digital society through accessible, affordable and sustainable connections to broadband.
16- Pender County	To provide current and future residents and businesses in Pender County with the knowledge, tools and accessibility to fully participate in the digital society through accessible, affordable and sustainable connections to broadband.
17- Perquimans County	To provide current and future residents and businesses in Perquimans County with the knowledge, tools and accessibility to fully participate in the digital society through accessible, affordable and sustainable connections to broadband.
18- Randolph County	In Randolph County, every household and business will have the opportunity to earn, learn, and be well by accessing needed digital resources.
19- Rockingham County	Our vision is that all Rockingham County residents will have full access to quality broadband and the knowledge and skills needed to participate fully in our society, democracy, and economy regardless of socio-economic status.









20- Robeson County	To provide current and future residents and businesses in Robeson County with the knowledge, tools and accessibility to fully participate in the digital society through accessible, affordable and sustainable connections to broadband.
21- Scotland County	To provide current and future residents and businesses in Scotland County with the knowledge, tools and accessibility to fully participate in the digital society through accessible, affordable and sustainable connections to broadband.
22- Stanly County	Broadband internet is vital to an increasingly broad spectrum of activities, services and resources required for citizens to fully engage in life and for communities to support sustainable, competitive economies. Stanly County holds as an organizing principle a collective vision where all residents and businesses in Stanly County have access to robust and affordable high-speed broadband as well as the skills and knowledge needed to utilize it to improve their economic prospects and quality of life.
23- High Country COG	 Eliminate the digital divide for all residents in Ashe, Alleghany, Avery, Mitchell, Watauga, Wilkes, and Yancey Counties by ensuring: Access to affordable high-performance, long-lasting, and easily upgradeable broadband internet service at home. At least one unrestricted low or no-cost device per household that accommodates the person's needs. Opportunities for those without homes, in transitional housing, or in facilities to have access to digital devices and internet services that meet their needs. Necessary digital skills, training, and quality technical support for each person's particular goals (communication, education, health care access, economic participation, democratic participation, and beyond).
24- Land of Sky COG	Ensure all residents in Buncombe, Henderson, Madison, and Transylvania counties needing or wanting to participate in the online world have: 1. Access to affordable, robust broadband internet service at home 2. A low or no cost digital device that meets their needs 3. Basic computer skills, training, and support to unlock the opportunities digital access offers.
25- Polk/Rutherford	Ensure all residents and businesses in Polk and Rutherford Counties needing and wanting to participate online have the knowledge and tools to do so.
26- Southwestern Commission	All citizens in Region A should have the ability to use the internet effectively with access to broadband infrastructure. Promoting affordable internet service and a digital device, along with basic computer skills, training and support will ensure individuals, businesses and communities participate fully and positively in the region's economy and society.









 All residents and businesses in the Upper Coastal Plain region have the knowledge and tools to fully participate in the digital economy and society.

Frequently Used Terms: Mission Statements	
Digital (36)	Community (14)
County (23)	Stakeholders (12)
All (22)	Providers (12)
Access (19)	Local (12)
Organizations (15)	Government (12)
Information (15)	Challenges (12)
Inclusion (15)	Additional frequently used terms: Needed, Solve, Seeking, Reach, Network, Leaders, Goals,
Tools (14)	Empower, Affordable, Accessibility, Residents, Internet

Mission Statements	
1- Alamance County	Our mission is to guide and promote the effort to provide the people of Alamance County, especially those in underserved communities, with equitable, affordable, reliable, and sustainable home access to online digital resources with the knowledge and ability to use that access beneficially for learning, business, entertainment, healthcare, and civic engagement.
2- Alexander County	This plan's mission is to help create a pathway that will result in expanded access to reliable, affordable high-speed internet access for all county residents and businesses.
3- Bladen County	To empower all providers, community leaders, local governments, organizations, and other stakeholders seeking to solve digital accessibility and inclusion challenges across Bladen County with the network, tools, and information needed to reach their goals.
4- Caldwell County	This plan's mission is to help create a pathway that will result in expanded access to reliable, affordable high-speed internet access for all county residents and businesses.
5- Carteret County	Digital inclusion is achieved when affordable, robust Internet services, digital literacy skills, quality technical support, access to hardware and









	software, and opportunities to access resources and services are made available to all residents, organizations and businesses. Carteret County will provide direction and support to efforts that enhance digital access and information literacy and enable the use of resources, tools and services available through broadband Internet.
6- Chatham County	Our mission is to ensure that all residents have access to digital technology and the necessary skills to participate fully in the digital world. Our goal is to close the digital divide and promote equitable access to broadband by working to increase availability, affordability, and reliability of high-speed internet. We believe that digital technology is essential for individuals and communities to thrive in today's interconnected world, and we are committed to ensuring that all residents can benefit from it. We are likewise committed to creating an inclusive and equitable digital future for all residents of Chatham County.
7- Chowan County	To empower all providers, community leaders, local governments, organizations, and other stakeholders seeking to solve digital accessibility and inclusion challenges across Chowan County with the network, tools, and information needed to reach their goals.
8- Columbus County	To empower all providers, community leaders, local governments, organizations, and other stakeholders seeking to solve digital accessibility and inclusion challenges across Columbus County with the network, tools, and information needed to reach their goals.
9- Duplin County	To empower all providers, community leaders, local governments, organizations, and other stakeholders seeking to solve digital accessibility and inclusion challenges across Duplin County with the network, tools, and information needed to reach their goals.
10- Durham County	Bridge the digital divide for all people in the city and county of Durham, NC.
11- Forsyth County	The Forsyth County Digital Equity Planning and Steering Committees exist to increase awareness of digital inequity in the County, and enact and change through community collaboration to ensure that information technology is accessible, affordable, and relevant for all County residents, especially those in underserved communities.
12- Hoke County	To empower all providers, community leaders, local governments, organizations, and other stakeholders seeking to solve digital accessibility and inclusion challenges across Hoke County with the network, tools, and information needed to reach their goals.
13- Mecklenburg County	To create and sustain a resident, public, and private sector partnership that co-creates strategies and tactics focused on making a more digital equitable community.









14- McDowell County	To improve digital literacy and expand access to reliable, affordable, high-speed broadband in McDowell County through advocacy, collaboration, and education.
15- Onslow County	To empower all providers, community leaders, local governments, organizations, and other stakeholders seeking to solve digital accessibility and inclusion challenges across Onslow County with the network, tools, and information needed to reach their goals.
16- Pender County	To empower all providers, community leaders, local governments, organizations, and other stakeholders seeking to solve digital accessibility and inclusion challenges across Pender County with the network, tools, and information needed to reach their goals.
17- Perquimans County	To empower all providers, community leaders, local governments, organizations, and other stakeholders seeking to solve digital accessibility and inclusion challenges across Perquimans County with the network, tools, and information needed to reach their goals.
18- Randolph County	The Randolph County Digital Alliance will work with organizations to eliminate the digital divide by helping improve access, adoption, and utilization of digital resources.
19- Rockingham County	Our mission is to create a strategic plan that will expand reliable, affordable high speed internet access to all residents in Rockingham County and provide the hardware, tools, and skills needed to use that access to improve their lives and livelihoods.
20- Robeson County	To empower all providers, community leaders, local governments, organizations, and other stakeholders seeking to solve digital accessibility and inclusion challenges across Robeson County with the network, tools, and information needed to reach their goals.
21- Scotland County	To empower all providers, community leaders, local governments, organizations, and other stakeholders seeking to solve digital accessibility and inclusion challenges across Scotland County with the network, tools, and information needed to reach their goals.
22- Stanly County	The vision of digital inclusion will be achieved when affordable, robust internet services, digital literacy skills, quality technical support, access to hardware and software, and opportunities to access resources and services are made available to all residents, organizations and businesses. Stanly County will provide direction and support efforts to enhance equitable digital access and information literacy and enable the use of resources, tools and services through affordable broadband internet.
23- High Country COG	To facilitate conversations, begin partnerships, and gather comprehensive assets and needs information to support community members, local









	governments, organizations, Internet Service Providers (ISPs), and other stakeholders to eliminate the digital divide within the High Country region.
24- Land of Sky COG	A Digital Inclusion plan to bring affordable internet service, accessible digital devices and tech skills training to the Land of Sky region
25- Polk/Rutherford	Our mission is to improve digital literacy and expand access to reliable, affordable, high-speed broadband in Polk and Rutherford Counties through advocacy, collaboration, and education.
26- Southwestern Commission	The mission of Digital Inclusion in Region A is to overcome ALL the digital inclusion challenges faced in Region A- not just one. As the digital world continues to move forward, we plan to ensure our citizens will participate fully, thereby increasing their quality of life and improving the economic prosperity of the region.
27- Upper Coastal Plain COG	To empower all providers, community leaders, local governments, organizations, and other stakeholders seeking to solve digital inclusion challenges across the Upper Coastal Plain region with the network, tools, and information needed to reach their goals.

Values

Many plans also include values that direct their digital inclusion work by answering questions like, "What beliefs should guide the goals and the subsequent activities that result from the plan?" ("Digital Inclusion Template & Guide | ncbroadband.gov"). While speaking to the foundational tenets of digital inclusion, the values outlined in the plans reflect the need for holistic community support from the planning to implementation stages. The values are further analyzed through interview answers in the "BAND-NC Recommendations" section.

Digital Inclusion Plan Values				
Accessibility	15	Connectivity	1	
Affordability	14	Consistency	1	
Community (Based, Alliance)	12	Empowerment	1	
Adoption	10	Impact	1	
Equity	8	Integrity	1	
Inclusivity/Inclusion	4	Reliability	1	
Dependability	4	Transparency	1	
Collaboration	2	Trust	1	
Innovation	2	Essential	1	









Definitions

A definition section, a feature of most of the 27 plans, range in length but commonly use definitions from NDIA, NTIA, NCDIT, and BAND-NC.

Digital Inclusion Plan Definitions							
Digital Inclusion	33	Internet Access	8	Hotspots	7	Broadband over Powerline	3
Broadband Adoption	17	Knowledge	8	Public Wi-Fi Areas	7	Modem	3
Digital Divide	17	Motivation	8	Broadband Connectivity	6	Broadband Speed	1
Broadband Internet	16	Support	8	Internet Speed	6	Broadband Technologies	1
Digital Literacy	16	Digital Equity	8	DSL	5	Digital Technology	1
Digital Navigators	13	Affordability Connectivity Program (ACP)	7	Cable Modem Service	4	Mobile and Cellular	1
Access	8	Dark Fiber	7	Fiber	4	Useful Internet Speeds	1
Affordability	8	Dark Fiber Leasing	7	Fixed Wireless	4		
Confidence	8	Device Access	7	High-Speed Internet	4		
Devices	8	Download/Uploa d Speeds	7	Satellite	4		

Identified Needs & Barriers

Finalized Digital Inclusion Plans

Access to high-speed broadband is not guaranteed in North Carolina; however, incredible progress has been made through historic actions like the 2019 launch of the Growing Rural Economies with Access to Technology (GREAT) Program (*GREAT Grant (Federal)* | *Ncbroadband.gov*, n.d.) and the creation of America's first Office for Digital Equity and Literacy (*Governor Cooper Establishes Nation's First Office of Digital Equity and Literacy*, 2021) in 2021.









Getting affordable, adequate broadband access to North Carolina homes is almost universally the top priority for each of the 27 plans. Even with all of the progress in building out broadband infrastructure, most plans address gaps in service, usually in a region's most rural and/or poorest communities. While ISPs can apply for and receive additional state and federal grant funding to increase service, due to legislative restrictions, regional and county government leadership can only do so much to incentivise ISPs to expand adequate and affordable access quickly. Many plans noted that having ongoing relationships with ISPs has increased momentum in connecting residents in part due to data sharing, grant applications, and priority zones.

Under the guidance of digital inclusion plan templates, all plans include broadband access data and maps of their respective regions; however, 79% of counties noted that the available data is outdated, too broad, and/or inaccurate for in-depth analysis. Along with data shortcomings, plans list out barriers to broadband access and adoption in their region. Included below are the most repeated barriers and needs mentioned in plans counted by county and then by Western, Central, and Eastern plans.

Тор	Top 10 Barriers or Needs Identified Out of 48 Counties/Territories				
#	Barriers/Needs	Number of Counties/ Territories	Counties/Territories		
1	Lack of broadband access	47 (98%)	Alexander, Bladen, Caldwell, Carteret, Chatham, Chowan, Columbus, Duplin, Durham, Forsyth, Hoke, McDowell, Onslow, Pender, Randolph, Perquimans, Rockingham, Robeson, Scotland, Stanly, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey, Buncombe, Henderson, Madison, Transylvania, Polk, Rutherford, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Edgecombe, Halifax, Nash, Northampton, Wilson, Alamance		
2	Access is too expensive	39 (81%)	Alexander, Bladen, Carteret, Chatham, Durham, Forsyth, McDowell, Randolph, Rockingham, Stanly, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey, Buncombe, Henderson, Madison, Transylvania, Polk, Rutherford, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Edgecombe, Halifax, Nash, Northampton, Wilson, Hoke, Robeson, Scotland		
3	Lack of clear and accurate availability maps & data	38 (79%)	Alamance, Alexander, Caldwell, Chowan, Columbus, Onslow, Pender, Rockingham, Robeson, Scotland, Stanly, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey, Polk, Rutherford, Clay, Graham, Cherokee, Haywood, Jackson, Macon, Swain, Qualla, Edgecombe, Halifax, Nash, Northampton, Wilson,		









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			Bladen, Duplin, Hoke, Perquimans, Randolph
4	Lack of adequate broadband access to meet user needs (e.g. too slow)	36 (75%)	Alexander, Bladen, Caldwell, Carteret, Chatham, Chowan, Columbus, Duplin, Hoke, McDowell, Onslow, Pender, Perquimans, Rockingham, Robeson, Scotland, Stanly, Buncombe, Henderson, Madison, Transylvania, Polk, Rutherford, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Edgecombe, Halifax, Nash, Northampton, Wilson
5	Lack of devices/devices too expensive	35 (73%)	Alexander, Carteret, Chatham, Chowan, Columbus, Durham, Forsyth, McDowell, Onslow, Pender, Randolph, Perquimans, Rockingham, Robeson, Scotland, Stanly, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey, Henderson, Madison, Transylvania, Polk, Rutherford, Cherokee, Edgecombe, Halifax, Nash, Northampton, Wilson, Buncombe
6	Large population of disconnected rural* residents that need services and access	35 (73%)	Alamance, Bladen, Chowan, Duplin, Onslow, Perquimans, Rockingham, Robeson, Scotland, Stanly, Buncombe, Henderson, Madison, Transylvania, Polk, Rutherford, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Nash, Chatham, Forsyth, McDowell, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey
7	Lack of digital navigators	31 (65%)	Alamance, Caldwell, Carteret, Chowan, Columbus, Duplin, McDowell, Pender, Perquimans, Robeson, Scotland, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Bladen, Hoke, Onslow, Polk, Rutherford, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey
8	Large population of disconnected English as a second language	29 (60%)	Alamance, Bladen, Durham, Forsyth, McDowell, Rockingham, Stanly, Henderson, Polk, Rutherford, Edgecombe, Nash, Chowan, Columbus, Duplin, Hoke, Onslow, Pender, Perquimans, Robeson, Scotland, Chatham, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey
9	Cellular dead zones	28 (58%)	Bladen, Chatham, Chowan, Columbus, Duplin, Pender, Randolph, Perquimans, Robeson, Scotland, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey, Polk, Rutherford, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Stanly









information and communication about Grahan Bladen, Pender	n, Forsyth, Polk, Rutherford, Cherokee, Clay, n, Haywood, Jackson, Macon, Swain, Qualla, Chowan, Columbus, Duplin, Hoke, Onslow, Perquimans, Robeson, Scotland, McDowell, Alamance, Randolph, Rockingham
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^{*}Bolded items indicate covered populations throughout the review

Top 5 Western NC Barriers or Needs Identified Out of 24 Counties/Territories

- **Southwestern Commission Finalized Plans** (Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla Boundary)
- Land of Sky COG Finalized Plans (Buncombe, Henderson, Madison, Transylvania)
- Foothills Regional Commission Finalized Plans (McDowell, Polk, Rutherford)
- High Country COG Finalized Plans (Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey)
- Western Piedmont COG Finalized Plans (Alexander, Caldwell)

#	Barriers/Needs	Number of Counties/Territories
1	Lack of broadband access	24 (100%)
2	Access is too expensive	23 (96%)
3	Lack of clear and accurate availability maps & data	19 (79%)
4	Lack of adequate broadband access to meet user needs (e.g. too slow)	17 (71%)
5	Lack of devices/devices too expensive	17 (71%)

Top 5 Central NC Barriers or Needs Identified Out of 12 Counties

- Centralina COG Finalized Plans (Mecklenburg, Stanly)
- Piedmont Triad COG Finalized Plans (Alamance, Randolph, Rockingham, Forsyth)
- Triangle J COG Finalized Plans (Chatham, Durham)
- Lumber River COG Finalized Plans (Bladen, Hoke, Robeson, Scotland)

#	Barriers/Needs	Number of
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		Counties
1	Lack of broadband access	11 (92%)
2	Access is too expensive	10 (83%)
3	Large population of disconnected English as a second language residents that need services and access	10 (83%)
4	Lack of information and communication about options/resources/broadband issues/grassroots efforts	9 (75%)
5	Lack of clear and accurate availability maps & data	8 (67%)

Also with 8 counties/territories (67%): "Lack of devices/devices too expensive", "Large population of disconnected rural residents that need services and access"

Top 5 Eastern NC Barriers or Needs Identified Out of 12 Counties

- Upper Coastal Plain COG Finalized Plans (Edgecombe, Halifax, Nash, Northampton, Wilson)
- Cape Fear COG Finalized Plans (Columbus, Pender)
- Eastern COG Finalized Plans (Carteret, Duplin, Onslow,)
- Albemarle Commission Finalized Plans (Chowan, Perquimans)

#	Barriers/Needs	Number of Counties
1	Lack of adequate broadband access to meet user needs (e.g. too slow)	12 (100%)
2	Lack of broadband access	12 (100%)
3	Lack of clear and accurate availability maps & data	11 (92%)
4	Lack of devices/devices too expensive	11 (92%)
5	Large population of disconnected English as a second language residents that need services and access	8 (67%)

While the <u>complete list</u> is available, below includes a broad summary of repeated and unique barriers and needs that complete a picture of North Carolina's most common and pressing digital inclusion needs.









- Access: Lacking broadband infrastructure (including fiber, satellite, fixed wireless, etc.) is
 the most common need among counties. Areas with service do not necessarily have
 adequate speeds, which is a frequent complaint of broadband customers trying to
 conduct daily life online. Forty percent of counties shared that access gaps were due in
 part to a lack of competition with ISP providers.
- Affordability: Unaffordable service due to costly service plan prices (especially for rural and underserved areas) combined with impoverished populations is the biggest barrier to broadband adoption for those with access in North Carolina.
 While there are some subsidy programs, more information, outreach, and funding support are needed to make broadband affordable for residents.
- Aging Residents: Digital inclusion plans urgently address the gaps aging populations face when it comes to digital inclusion. Much like other covered populations, getting access is the first challenge. Many seniors can't afford broadband, let alone appropriate devices to use it. Many groups dedicate time and funding to train seniors on digital and device skills, and expanding and creating even more services is imperative for "graying" counties.
- Awareness & Outreach: Most plans shared the need for increased outreach and awareness of existing digital inclusion resources. Helpful tools, like the North Carolina Broadband Survey, have frustratingly low response rates in some communities. For digital inclusion champions with little funding or capacity, in-person outreach and education is the best option though is the costliest and most time-consuming.
 Disconnected folks need different types of support, for example, one region needs to engage Black community leaders to help share information with the region's large Black community. Many plans also shared the difficulty of explaining broadband adoption since adoption is often considered second in importance to access, and marred in political turmoil in many counties for its focus on inclusion, equity, and addressing historic barriers to many covered populations.
- Data & Mapping: As mentioned, most plans request more accurate and more timely data and mapping. While using sources like <u>NC OneMap</u> and <u>FCC's 477 map</u>, it is widely known that the data is not granular or accurate enough for most planning purposes. It should be noted many of the data sources used in digital inclusion plans have been updated since their creation.
- Devices: A core tenet of digital inclusion is having appropriate devices that meet the
 needs of the user. Over 70% of plans mention a lack of devices or affordable devices for
 residents to access work, education, health, and more. Some communities lack device
 lending programs to address short-term needs, specifically for seniors. Even if devices
 are available, more outreach is needed to inform residents about how to access them.









- Digital Navigators: Half of the counties do not have trained digital navigators to help address access, device, and digital skills barriers.
- Digital Skills/Literacy Training: Counties explained they need help training their residents
 on digital literacy/skills. There is a need to increase the number of local organizations to
 host classes as well as to increase capacity for promotion and outreach, to teach
 residents how to register for the ACP, and to teach specialized digital skills and
 literacy for rural, impoverished, and older residents.
- Disability: With large disabled populations noted in some regions, plans describe needing adaptive devices and services to achieve digital equity.
- Discrimination: A number of plans focus on historic and current discrimination many of their residents face which explains low broadband adoption rates. Many racial and ethnic populations in North Carolina, especially Black residents and Spanish-as-first-language speakers, face housing, transportation, employment, health, and education challenges that compound and are compounded by broadband disconnection.
- Education: Plans indicate populations with low educational attainment, which research
 shows translates into populations with lower digital skills, tend to have lower wages in
 North Carolina (Bergson et al., 2023). For those in school, barriers include students and
 families without access as well as a lack of devices and hotspots (or cellular dead zones
 preventing their use) or digital skills to successfully engage with school administrations
 or educational opportunities.
- Employment: High unemployment rates plus a lack of digital skills are counties' most identified workforce challenges.
- Government & Policy: Legislative barriers prevent local and regional governments from
 addressing critical broadband infrastructure needs. There is often inadequate funding
 and staffing for digital inclusion. In North Carolina, many broadband access and
 adoption grants are prioritized for Tier 1 counties, considered to be the most
 economically distressed counties in the state. But counties ranked as Tier 2 or 3
 also have impoverished populations and need support as well. Another example of
 a municipal challenge that prevents progress for digital equity is a lack of public
 transportation to available resources.
- Hotspots: Hotspots help solve some access issues when infrastructure isn't available, adequate, or affordable, but they have their own challenges. Counties mention cellular dead zones rendering devices useless, lack of hotspot lending programs, and decreased or unsustainable funding as key barriers.









- Language Barriers: One of the most frequently cited barriers is providing services
 equitably to large non-English speaking populations or English learners,
 specifically Spanish speakers. Many digital inclusion resources are only translated into
 English and leave a lot of folks digitally stranded, and helping non-English speakers get
 broadband access and appropriately translated materials is a priority for many counties.
- Mobile Service: When access is limited, absent, or unattainable/unaffordable, many residents rely on cellular devices and service. Unfortunately, cellular dead zones prevent consistent service.
- Public Device Access: While many libraries, senior centers, municipal buildings, schools, and community colleges have computers and tablets for public access, many communities either don't have these vital locations closeby or don't have enough in strategic areas, with volunteers or staff to open them for the extended hours needed to be useful.
- Public Wi-Fi: Almost 40% of counties want more reliable public Wi-Fi spots in places like faith communities, parks, downtown areas, and indoor locations for year-round use.
- Relevancy: Reflected throughout the plans is the need to listen to residents and respond helpful examples when they share that the internet isn't relevant. Certainly true for some, but establishing adequate and affordable access and adoption is essential to the well-being of most North Carolinians. Aging in place, advancing in your career or education, and connecting with faith, family, and news are just some of the reasons residents might want to engage with digital resources. Spreading awareness about the importance of digital equity is vital to keep momentum going and connect more residents every day.
- Rural Residents: One of the top prerogatives for over half of the plans is to address
 funding and capacity barriers for areas with large rural populations. ISPs are not
 incentivized to provide "last mile" service to low-density populations, which leads to
 fewer or no service options for rural areas. Counties also noted the lack of community
 resources in rural areas from public Wi-Fi to digital literacy services.
- Telehealth: One of the many ways digital inclusion could help North Carolinians, specifically aging populations, is telehealth, meaning access to private and safe healthcare where they are (especially in light of closing health facilities across the state (Study: NC Is No. 3 in US With the Most Rural Hospital Closures Since 2005, 2021). There are not enough telehealth spaces, staffing, or programs currently set up to meet needs.
- Topography: Tree cover, mountains, public land mass, and snow are some of the factors that make expanding broadband infrastructure logistically challenging (and financially imprudent for many ISPs).









- Transportation: Plans mention scarce transportation limitations as a frustrating barrier.
 When it's too expensive to bring broadband to each resident, public Wi-Fi and device
 access can reduce equity challenges. Lack of free, cheap, reliable, and adequate
 transportation, especially in rural communities, does not allow a large number of
 residents to use these services.
- Tribal Land: The Eastern Band of Cherokee own their own tribal nation on the
 Qualla Boundary. Importantly, they receive their own funding and support separately
 and in addition to North Carolina's federal and state support, but being their own nation
 in a rural mountainous location requires additional communication and planning to sync
 up regional goals. Tribal needs should be prioritized in local, regional, state, and federal
 efforts to address digital disparities.

Future Digital Inclusion Plans

Even though many counties are just getting started with the planning processes, they know their own digital inclusion challenges. In interviews with BAND-NC, COG leaders at the beginning of the process repeated common themes from finalized plans. Below is a summary of reflections that will be guiding future digital inclusion planning processes (italics indicate alignment with finalized plans):

- Lack of *Access and Reliable Access* were the top named barriers in counties creating plans in the future.
- Affordability is a top priority to address while improving infrastructure since low-income
 populations can't afford services without substantial help (e.g., subsidies).
- Disconnected Aging Residents need services including device training and digital literacy/skills opportunities.
- Counties are thinking of ways to increase Awareness & Outreach of digital inclusion materials and resources, including in-person strategies, trust-building actions, and creating central hubs for information.
- Regions also need Data & Mapping support, especially if they don't have in-house capacity to analyze regional and local data.
- The lack of Affordable Devices is a significant barrier but having extended hours to access devices and knowledge about what's available is also important to tackle.
- There is a need for *Digital Navigators* and funding to sustain these roles. Digital navigators and other organizations are needed to train people on *Digital literacy/skills* and device usage.
- In preparation for digital inclusion planning and implementation, local and regional *Governments* need funding for broadband projects, buy-in from ISPs, and assistance holistically mapping out planning and what progress looks like in their community.
- Large populations of Rural Residents lack digital literacy/skills and access in their areas.









 Communities need Telehealth locations and programs to host services to serve their residents.

Identified Assets & Opportunities

Finalized Digital Inclusion Plans

There are hundreds of existing organizations, strategies, and people already working to make their communities more digitally equitable across North Carolina. By inventorying and highlighting assets—important resources—at the local and statewide level, digital equity planning groups are able to have a stronger understanding of their digital inclusion ecosystem and potential implementation strategies.

Plans also identified a lack of awareness of existing digital inclusion resources. By making a comprehensive list of existing resources for device access, digital literacy/skills,, and public Wi-Fi locations, partners are in a better position to accurately promote assets to residents who could use them most.

Almost every plan mentioned varied resources available at anchor institutions: libraries, community colleges, and public schools. You'll also see examples of grassroots efforts, digital inclusion nonprofits, and innovative amenities listed as resources to provide or improve adoption efforts.

Top 10 Assets or Opportunities Identified Out of 48 Counties/Territories			
#	Assets/Opportunities	Number of Counties/ Territories	Counties/Territories
1	Libraries: Public Wi-Fi	34 (71%)	Alamance, Alexander, Caldwell, Bladen, Carteret, Chatham, Chowan, Columbus, Onslow, Randolph, Rockingham, Robeson, Scotland, Stanly, Alleghany, Avery, Ashe, Mitchell, Watauga, Wilkes, Buncombe, Henderson, Madison, Transylvania, Polk, Rutherford, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla
2	Libraries: Public Device Access	34 (71%)	Alexander, Bladen, Caldwell, Carteret, Chatham, Chowan, Columbus, Duplin, Hoke, Randolph, Perquimans, Robeson, Scotland, Stanly, Avery, Mitchell, Watauga, Wilkes, Buncombe, Henderson, Madison, Transylvania, Polk, Rutherford, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain,









			Qualla, Northampton, Yancey
3	Community Colleges: Digital skills/literacy training and classes	33 (69%)	Alexander, Bladen, Caldwell, Carteret, Chatham, Chowan, Columbus, Durham, Hoke, McDowell, Onslow, Pender, Randolph, Perquimans, Rockingham, Robeson, Scotland, Wilkes, Polk, Cherokee, Clay, Graham, Jackson, Macon, Swain, Qualla, Northampton, Wilson, Alleghany, Ashe, Avery, Mitchell, Yancey
4	Libraries: Digital skills/literacy training and classes	32 (67%)	Bladen, Caldwell, Carteret, Chatham, Columbus, Forsyth, Hoke, Onslow, Randolph, Rockingham, Scotland, Alleghany, Ashe, Polk, Rutherford, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Northampton, Stanly, Avery, Mitchell, Watauga, Wilkes, Yancey
5	Public School Systems: Device and/or hotspot lending	32 (67%)	Alexander, Bladen, Caldwell, Carteret, Chatham, Duplin, McDowell, Onslow, Pender, Randolph, Rockingham, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey, Buncombe, Henderson, Madison, Transylvania, Polk, Rutherford, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Scotland
6	Public Wi-Fi Locations	24 (50%)	Alexander, Bladen, Caldwell, Carteret, Chatham, Columbus, Duplin, McDowell, Randolph, Perquimans, Rockingham, Robeson, Stanly, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey, Buncombe, Henderson, Madison, Transylvania
7	Libraries: Technical Assistance	21 (44%)	Carteret, Chowan, Columbus, Randolph, Rockingham, Scotland, Stanly, Wilkes, Ashe, Watauga, Wilkes, Yancey, Buncombe, Henderson, Madison, Transylvania, Polk, Rutherford, Alleghany, Avery, Mitchell
8	Public School Systems: Public Wi-Fi	19 (40%)	Carteret, Caldwell, Columbus, McDowell, Pender, Randolph, Buncombe, Henderson, Madison, Transylvania, Polk, Rutherford, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla
9	Libraries: Device and/or hotspot lending	18 (38%)	Caldwell, Carteret, Columbus, McDowell, Onslow, Randolph, Alleghany, Avery, Mitchell, Watauga, Wilkes, Henderson, Madison, Transylvania, Polk, Rutherford, Ashe, Yancey









10	Public School Systems: Digital skills/literacy training and classes	18 (38%)	Caldwell, Chatham, Columbus, Onslow, Scotland, Buncombe, Henderson, Madison, Transylvania, Rutherford, Northampton, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla
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Top 5 Western NC Assets or Opportunities Identified Out of 24 Counties/Territories

- **Southwestern Commission Finalized Plans** (Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla Boundary)
- Land of Sky COG Finalized Plans (Buncombe, Henderson, Madison, Transylvania)
- Foothills Regional Commission Finalized Plans (McDowell, Polk, Rutherford)
- **High Country COG Finalized Plans Finalized Plans** (Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey)
- Western Piedmont COG Finalized Plans (Alexander, Caldwell)

#	Assets/Opportunities	Number of Counties/Territorie s
1	Public School Systems: Device and/or hotspot lending	24 (100%)
2	Libraries: Public Wi-Fi	22 (92%)
3	Libraries: Public Device Access	21 (88%)
4	Libraries: Digital skills/literacy training and classes	18 (75%)
5	Community Colleges: Digital skills/literacy training and classes	17 (71%)

Top 5 Central NC Assets or Opportunities Identified Out of 12 Counties

- **Centralina COG Finalized Plans** (Mecklenburg, Stanly)
- **Piedmont Triad COG Finalized Plans** (Alamance, Randolph, Rockingham, Forsyth)
- Triangle J COG Finalized Plans (Chatham, Durham)
- Lumber River COG Finalized Plans (Bladen, Hoke, Robeson, Scotland)

#	Assets/Opportunities	Number of Counties
1	Libraries: Public Wi-Fi	8 (67%)
2	Community Colleges: Digital skills/literacy training and classes	8 (67%)









3	Libraries: Public Device Access	7 (58%)	
4	Libraries: Digital skills/literacy training and classes 7 (58%)		
5	5 Digital Inclusion Committee/Coalition 6 (50%)		
Also with 6 or 50% of counties: "Public Wi-Fi Locations", "Kramden Institute"			

Top 5 Eastern NC Assets or Opportunities Identified Out of 12 Counties

- Upper Coastal Plain COG Finalized Plans (Edgecombe, Halifax, Nash, Northampton, Wilson)
- Cape Fear COG Finalized Plans (Columbus, Pender)
- Eastern COG Finalized Plans (Carteret, Duplin, Onslow,)
- Albemarle Commission Finalized Plans (Chowan, Perquimans)

#	Assets/Opportunities	Number of Counties
1	Community Colleges: Digital skills/literacy training and classes	8 (67%)
2	Libraries: Public Device Access	6 (50%)
3	Digital Inclusion Committees/Coalitions	5 (42%)
4	Kramden Institute	5 (42%)
5	Senior Centers/Councils on Aging: Public Device Access	5 (42%)

Also with 5 or 42% of counties: "Career Centers: Technical Assistance", Local/Regional Government: Investigating a digital literacy platform"

While the <u>complete list</u> is available, below includes repeated and unique assets and opportunities that will provide foundational support for all future digital inclusion progress in North Carolina.

- Businesses: Commonly cited assets include small businesses that provide digital inclusion services (computer classes, device refurbishment/repair, etc.) and organizations that help businesses, employers, and employees deepen their digital skills and digital business needs.
- Career Centers: Along that vein, NCWorks (sometimes housed at community colleges or libraries) and career centers in about 20% of counties provide workforce and employment digital skills, as well as public Wi-Fi and device access for workforce needs such as applying to jobs or taking professional development courses.









- Community Colleges: Over half of the counties identified their local community college
 as a trove of assistance, including offering digital literacy/skills training, computer
 classes, workforce training, public device access and lending, low-cost or free devices,
 and technical assistance. One county's community college even provided training to
 local librarians on how to offer technical assistance to library patrons.
- Community Locations: Nonprofits, churches, radio stations, golf courses, computer clubs, and more provide Public Wi-Fi, device access, and are potential sites for expanding digital inclusion services.
- Digital Inclusion Coalition/Committees: A huge strength seen in well-formulated and innovative plans are the digital inclusion coalitions and committees behind many efforts across the state. Some formed years ago, others just to write the plan, but all represent important sectors, changemakers, and essential partners to accomplish a community's objectives. These coalitions grow partnerships, direct specific digital inclusion work streams, and have even turned into official organizations to scale up progress.
- Digital Navigators: Six counties, at the time of their plans being written, had digital navigators helping with various goals, such as increasing NC Broadband Survey responses and leading partner or resident digital literacy/skill and device training.
- E2D: Serving Western counties, E2D provides low-cost refurbished donated devices (laptops and tablets) to low-income families. Some regions want to increase their partnership with E2D and others are working with the organization to replicate the model at the local level.
- Early Childhood Organizations: Smart Starts and Partnerships for Children across the state are invested in connecting parents and families in order to communicate information and opportunities for their young children more seamlessly.
- Extension: NC State Extension has officers in each county, some of which are hiring digital navigators. In some areas, Extension also hosts public Wi-Fi, supports device access, offers computer clubs and programs, and shares the NC Farms app.
- Health/Medical Organizations: Health centers and hospitals provide telehealth and other digital health options for residents to help overcome health disparities.
- Kramden Institute: Serving North Carolina, the Kramden Institute provides free or low-cost refurbished donated devices to students, low-income families, and nonprofits. They also teach digital literacy/skills and device use workshops.









- Language Resources: Various nonprofits support Hispanic/Latino and Spanish-speaking families by facilitating device lending and language-appropriate digital literacy/skills training.
- Libraries: The most cited asset in North Carolina, libraries are the go-to place for digital inclusion access and support. Library-organized public device access, Wi-Fi inside buildings and in parking lots, device and hotspot lending, and digital literacy/skills classes show up in every region in North Carolina. Some libraries also have hotspots on mobile bookmobiles to provide access in rural areas. An innovative program in 2018-2020, the "Homework Gap Project", involved seven library systems and provided students with mobile hotspots, devices, and digital literacy/skills for families.
- Local/Regional Government: Municipal governments have various assets they use or have built for digital inclusion goals like regional websites sharing broadband progress.
 Other government buildings offer public Wi-Fi and public device access, especially to register for county, state, and federal programs. Housing authorities have also taken the lead in some counties for connection.
- Public Device Access: Some nonprofits and digital inclusion organizations have computer labs for residents to use computers as they need.
- Public School Systems: Public school resources were again one of the most referenced
 assets in plans. Two-thirds of counties have one-to-one devices (often Chromebooks)
 and/or hotspot lending programs for students. Their families, and often the staff that
 serve them, also benefit from investment in school-led digital literacy/skills and device
 training, public Wi-Fi, and technical assistance. Some schools also have mobile
 school buses or vans with hot spots for rural families.
- Public Wi-Fi: Communities often have public Wi-Fi spots (at parks, downtown areas, businesses, etc.) with the potential to keep expanding strategic locations using public funding.
- Recreation/Community Centers: Recreation and community centers were also mentioned frequently for providing public Wi-Fi, digital literacy/skills training, and public device access.
- Senior Centers/Departments on Aging: Senior centers (and also Departments of Aging and Area Agencies on Aging) are locations for older residents to use devices, get trained on digital literacy/skills and devices, and access Wi-Fi.
- Telehealth: Ten counties included that there was telehealth access and assistance in their communities as well as digital tools like MyChart to keep track of health records.









- Tribal Communities: The Lumbee tribe and Eastern Band of Cherokee both have their own digital inclusion efforts and successes connecting their communities and are mentioned in their regional plans as having unique strategies to connect their historically disconnected and disenfranchised residents. Additional attention and resources should be allocated to boost best practices for tribal communities.
- Other Assets: Plans mentioned a number of other assets, from digital inclusion programming and assistance like Cyber Senior to existing literacy councils that also include digital literacy in their goals. Physical assets like museums and nonprofits help connect folks as well as online resources like NC Kids Digital Library.

Future Digital Inclusion Plans

Even though many counties are just getting started, they know their own digital inclusion assets and potential assets. In interviews with BAND-NC, COG leaders at the beginning of the process repeated common assets from finalized plans. Below is a summary of reflections that will be guiding digital inclusion planning processes (italics indicate alignment with finalized plans):

- Mirroring the finalized plans, the most common assets shared in regions were Community Colleges, Libraries, and Senior Centers.
- Community Locations like churches already serve as locations for public Wi-Fi and other digital inclusion activities like device access.
- Communities are preparing for upcoming grants to hire staff, but some counties are already hiring *Digital Navigators* alongside their plan creation.
- Groups are turning to the *Kramden Institute* as a partner from the beginning to help with device distribution and guidance on digital literacy/skill training.
- There is already strong Local/Regional Government support in many regions, including ISP relationships, COG mapping capabilities, survey distribution, and more. One Housing Authority has worked to provide free internet service to public housing residents in their county. Many COGs are ready to start, and more than capable of leading, the intricate digital inclusion planning process.
- Public School Systems provide public Wi-Fi and device access to their students and families.
- Listing out *Public Wi-Fi* locations at businesses, schools, Extension, etc. allows planners to see where service should be expanded.
- Some health organizations have *Telehealth* options for residents.
- Tribal Communities are an asset to their tribe members and to surrounding communities.









Objectives & Priorities

Finalized Digital Inclusion Plans

Most plans identify overarching objectives and priorities to help guide digital inclusion work and measure progress. Though plans use different language interchangeably (like objective, priority, goal, strategy, etc.), this section analyzes the high-level goals mentioned in plans while the Implementation Strategies section will expand on the "how to". Nevertheless, one plan's goal is another one's strategy, but we tried to honor the plan's language while also grouping common language/intent with overall objectives and priorities.

Since a number of objectives are universally highlighted in plans, it is expected that these will also be priorities of the statewide digital inclusion plan. Along with the Implementation Strategies section, plans' Objectives & Priorities have many unique entries and we encourage changemakers to look at the full lists to see the many robust proposals, ideas, and innovative answers to digital inequity.









Top 10 Objectives or Priorities Identified Out of 48 Counties/Territories				
#	Objectives/Priorities	Number of Counties/ Territories	Counties/Territories	
1	Increase connectivity	47 (98%)	Alamance, Alexander, Bladen, Caldwell, Carteret, Chatham, Chowan, Columbus, Duplin, Durham, Hoke, McDowell, Onslow, Pender, Randolph, Perquimans, Rockingham, Robeson, Scotland, Stanly, Buncombe, Henderson, Madison, Transylvania, Polk, Rutherford, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Edgecombe, Halifax, Nash, Northampton, Wilson, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey	
2	Improve connectivity (broadband speed and reliable service)	35 (73%)	Alamance, Alexander, Bladen, Caldwell, Carteret, Chowan, Columbus, Duplin, McDowell, Onslow, Pender, Randolph, Perquimans, Rockingham, Robeson, Scotland, Stanly, Buncombe, Henderson, Madison, Transylvania, Polk, Rutherford, Edgecombe, Halifax, Nash, Northampton, Wilson, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey	
3	Improve digital literacy skills	31 (65%)	Bladen, Chatham, Chowan, Columbus, Durham, Hoke, Onslow, Pender, Perquimans, Robeson, Buncombe, Henderson, Madison, Transylvania, Polk, Rutherford, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey	
4	Increase access to devices through refurbishment and donation programs	27 (56%)	Alamance, Alexander, Caldwell, Chatham, Durham, McDowell, Rockingham, Stanly, Buncombe, Henderson, Madison, Transylvania, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey	









5	Integrate digital inclusion strategies in local/regional community and economic plans	17 (35%)	Bladen, Carteret, Chowan, Columbus, Duplin, Hoke, Onslow, Pender, Perquimans, Scotland, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey
6	Improve adoption by actively promoting existing and new digital skills/literacy/computer trainings and classes offered by partners	16 (33%)	Alexander, Forsyth, Randolph, Stanly, Edgecombe, Halifax, Nash, Northampton, Wilson, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey
7	Improve maps and timely data collection and sharing	16 (33%)	Alamance, Alexander, Bladen, Caldwell, Carteret, Chatham, McDowell, Rockingham, Stanly, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey
8	Build structure and organization to support long-term digital inclusion success	16 (33%)	Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Mecklenburg, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey
9	Provide ongoing support for digital learning	15 (31%)	Durham, McDowell, Randolph, Rockingham, Buncombe, Henderson, Madison, Transylvania, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey
10	Create/support a digital inclusion coalition	7 (15%)	Chatham, Hoke, Edgecombe, Halifax, Nash, Northampton, Wilson

Also with 7 (15%) counties: "Reduction of cost and affordability of home internet access" and "Implement operational, evaluative, and funding for digital inclusion plan"

<u>Top 5 Western NC Objectives or Priorities Identified</u> Out of 24 Counties/Territories

- Southwestern Commission Finalized Plans (Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla Boundary)
- Land of Sky COG Finalized Plans (Buncombe, Henderson, Madison, Transylvania)
- Foothills Regional Commission Finalized Plans (McDowell, Polk, Rutherford)
- High Country COG Finalized Plans (Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey)
- Western Piedmont COG Finalized Plans (Alexander, Caldwell)









#	Objectives/Priorities	Number of Counties/ Territories
1	Increase connectivity	24 (100%)
2	Increase access to devices through refurbishment and donation programs	21 (88%)
3	Improve digital literacy skills	21 (88%)
4	Improve connectivity (broadband speed and reliable service)	16 (67%)
5	Build structure and organization to support long-term digital inclusion success	15 (63%)

Top 5 Central NC Objectives or Priorities Identified Out of 12 Counties

- Centralina COG Finalized Plans (Mecklenburg, Stanly)
- Piedmont Triad COG Finalized Plans (Alamance, Randolph, Rockingham, Forsyth)
- Triangle J COG Finalized Plans (Chatham, Durham)
- Lumber River COG Finalized Plans (Bladen, Hoke, Robeson, Scotland)

#	Objectives/Priorities	Number of Counties
1	Increase connectivity	10 (83%)
2	Improve connectivity (broadband speed and reliable service)	7 (58%)
3	Increase access to devices through refurbishment and donation programs	5 (42%)
4	Improve digital literacy skills	5 (42%)
5	Improve maps and timely data collection and sharing	5 (42%)

Top 5 Eastern NC Objectives or Priorities Identified Out of 12 Counties

- Upper Coastal Plain COG Finalized Plans (Edgecombe, Halifax, Nash, Northampton, Wilson)
- Cape Fear COG Finalized Plans (Columbus, Pender)
- Eastern COG Finalized Plans (Carteret, Duplin, Onslow,)
- Albemarle Commission Finalized Plans (Chowan, Perquimans)

#	Objectives/Priorities	Number of Counties
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1	Increase connectivity	12 (100%)	
2	Improve connectivity (broadband speed and reliable service)	12 (100%)	
3	Integrate digital inclusion strategies in local/regional community and economic plans	7 (58%)	
4	Improve digital literacy skills	5 (42%)	
5	Improve adoption by actively promoting existing and new digital skills/literacy/computer trainings and classes offered by partners	5 (42%)	
Also with 5 (42%) counties: "Create/support a digital inclusion coalition"			

While the <u>complete list</u> is available, below includes repeated and unique objectives and priorities that will help guide and measure digital inclusion progress in North Carolina.

- Access & Availability: The two most repeated objectives, 79% and 73% of counties respectively, aim to increase and improve broadband speed and reliability. When addressing digital adoption, it's imperative broadband absence or challenges are not pushed aside.
- Affordability: Counties want to reduce home internet subscription costs and also increase enrollments for internet subsidies to make the internet as attainable as possible in the short term.
- Awareness & Outreach: It's an urgent priority for existing plans to ramp up their promotion of existing digital inclusion resources. Whether distributing printed educational materials, endorsing the North Carolina Broadband Survey, or creating a central hub for information for easy access, counties need to invest more in communication and outreach. Plans also note distinct strategies to share stories from Hispanic/Latino, Black, rural, and other covered populations.
- Businesses: Local businesses need help understanding opportunities in the digital space, including digital literacy/skills and technical assistance.
- Data & Mapping: Nine counties note improving maps and timely data collection and sharing as well as collecting more granular data on broadband service as vital.
- Devices: Not only is it important to provide broadband-enabled devices to North Carolinians, but plans explicitly request low-cost or free devices with the availability of consistent free or low-cost repair services.









- Digital Inclusion Coalition/Committee: For some regions forming a digital inclusion coalition or committee is the first priority of the plan to carry out subsequent goals. For others that have a team in place, strengthening through sustainable planning, operational support, leveraging new partnerships, and championing workstream collaboration is crucial.
- Digital Navigators: Counties plan on hiring and training digital navigators to join the network of informal digital support (family, friends, neighbors, etc.) that help people every day navigate technical challenges, broadband access issues, and digital opportunities.
- Digital Literacy/Skills: Half of the finalized plans identify providing ongoing support for digital learning as critical, including prioritizing diverse and/or underserved communities, technical assistance, and informal networks that already provide support through relationships.
- Education: Emphasizing adoption (devices, access, skills, etc.) for families is a prerogative for some plans.
- Employment: Communities want to become remote-work friendly, including increasing ongoing digital learning for employees.
- Hotspots: Providing hotspots is important, as well as sustainability planning (for broken and missing hotspots and funding for the devices and subscription services).
- Local/Regional Government: Plans can integrate digital inclusion into existing economic and community plans, advocate for digital access and adoption, and broaden funding and strategic scopes to increase digital inclusion.
- Partnerships: Essential stakeholders provide locations, services, collaborations, and innovative projects like equipping mobile library vehicles with digital navigators or developing user-friendly community centers.
- Policy & Advocacy: Expounded further upon in the "State Collaboration" section, some
 plans encourage residents to contact their legislators to improve mapping, mandate ISP
 subsidy expansion, and investing in new broadband technologies at the state level.
 Some plans state that "internet should be a public utility," which would change the
 access, affordability, and adoption of the internet (though by no means is a universal
 statement made by all plans).
- Public Device Access: While many different community locations provide device access, providing additional devices, services, extended hours, and technical access is indispensable.









- Public Wi-Fi: It is essential to promote existing Wi-Fi locations through local maps and lists as well as expand public Wi-Fi in more locations that are within close proximity of all regions' residents.
- Relevancy: Investing in changing minds when it comes to the perceived irrelevance of broadband is crucial. Providing more specific promotions and training could help remove these barriers.
- Telehealth: It's important to expand telemedicine education, assistance, and access.

Implementation Strategies

Finalized Digital Inclusion Plans

The digital inclusion plans contain over 250 unique implementation strategies to carry out their community's objectives. These creative and specific solutions emerge from the carefully researched barriers, assets, and objectives presented previously. Many plans involve precise strategies to expand access and adoption to covered populations and are bolded below and in the complete list to emphasize their importance.

Тор	Top 10 Implementation Strategies Identified Out of 48 Counties/Territories			
#	Implementation Strategy	Number of Counties/ Territories	Counties/Territories	
1	Expand and enhance public Wi-Fi at strategic public places like municipal buildings, parks, and parking lots, prioritizing unserved or underserved populations	42 (86%)	Alexander, Caldwell, Carteret, Chatham, Chowan, Columbus, Duplin, Hoke, Onslow, Pender, Perquimans, Rockingham, Robeson, Scotland, Stanly, Buncombe, Henderson, Madison, Transylvania, Polk, Rutherford, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Edgecombe, Halifax, Nash, Northampton, Wilson, Mecklenburg, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey	
2	Provide education about subsidy programs to low-income residents, senior	41 (85%)	Alamance, Alexander, Bladen, Caldwell, Chatham, Chowan, Columbus, Duplin, Hoke, Onslow, Pender, Perquimans, Rockingham, Robeson, Scotland, Stanly, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey, Buncombe, Henderson, Madison, Transylvania, Polk, Rutherford,	









	citizens, and families		Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Edgecombe, Halifax, Nash, Northampton
3	Create, promote, and expand computer refurbishment and/or donation program	30 (44%)	Alexander, Alamance, Caldwell, Carteret, Chatham, Chowan, Columbus, Duplin, Forsyth, Hoke, Onslow, Pender, Perquimans, Rockingham, Robeson, Scotland, Stanly, Buncombe, Henderson, Madison, Transylvania, Mecklenburg, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey, Edgecombe
4	Gather relevant data to assess and analyze current broadband infrastructure and gaps	30 (63%)	Chowan, Columbus, Duplin, Hoke, Onslow, Pender, Perquimans, Rockingham, Robeson, Scotland, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Edgecombe, Halifax, Nash, Northampton, Wilson, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey
5	Provide support to existing businesses on digital skills and assistance, their online presence, and competitiveness.	27 (56%)	Alamance, Bladen, Chowan, Columbus, Duplin, Hoke, Onslow, Pender, Perquimans, Rockingham, Scotland, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla, Halifax, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey,
5	Invest and train digital navigators/digital navigator corps (including cybersecurity)	25 (50%)	Carteret, Chatham, Forsyth, Stanly, Alamance, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey, Buncombe, Henderson, Madison, Transylvania, Rutherford, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla
6	Promote existing digital inclusion trainings, surveys, and resources held in regions through public information outlets for populations that need it the most in print, radio, social media, TV, and local media	23 (48%)	Alexander, Bladen, Caldwell, Carteret, Chatham, Chowan, Columbus, Duplin, Forsyth, Onslow, Pender, Perquimans, Robeson, Scotland, Stanly, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey, Edgecombe









7	Set a mandate or set up scholarships for ISPs and local organizations to provide/promote a low-cost service plan to low income residents	21 (44%)	Alexander, Bladen, Caldwell, Carteret, Chatham, Columbus, Duplin, Onslow, Pender, Perquimans, Rockingham, Robeson, Scotland, Stanly, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey
9	Expand digital	19 (40%)	Bladen, Carteret, Chowan, Columbus, Duplin,
	literacy training for senior citizens (like Digital Skills Ready)		Hoke, Onslow, Pender, Perquimans, Robeson, Scotland, Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey, Mecklenburg

Top 5 Western NC Implementation Strategies Identified Out of 24 Counties/Territories

- **Southwestern Commission Finalized Plans** (Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, Qualla Boundary)
- Land of Sky COG Finalized Plans (Buncombe, Henderson, Madison, Transylvania)
- Foothills Regional Commission Finalized Plans (McDowell, Polk, Rutherford)
- **High Country COG Finalized Plans** (Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey)
- Western Piedmont COG Finalized Plans (Alexander, Caldwell)

#	Implementation Strategy	Number of Counties/Territories
1	Provide education about subsidy programs to low-income residents, senior citizens, and families	23 (96%)
2	Expand and enhance public Wi-Fi at strategic public places like municipal buildings, parks, and parking lots, prioritizing unserved or underserved populations	23 (96%)
3	Invest and train digital navigators/digital navigator corps (including cybersecurity)	20 (83%)
4	Gather relevant data to assess and analyze current broadband infrastructure and gaps	15 (31%)









Тор	Top 5 Western NC Implementation Strategies Identified Out of 24 Counties/Territories			
5	Provide support to existing businesses on digital skills and assistance, their online presence, and competitiveness.	15 (31%)		

Top 5 Central NC Implementation Strategies Identified Out of 12 Counties

- Centralina COG Finalized Plans (Mecklenburg, Stanly)
- **Piedmont Triad COG Finalized Plans** (Alamance, Randolph, Rockingham, Forsyth)
- Triangle J COG Finalized Plans (Chatham, Durham)
- Lumber River COG Finalized Plans (Bladen, Hoke, Robeson, Scotland)

#	Implementation Strategy	Number of Counties
1	Provide education about subsidy programs to low-income residents, senior citizens, and families	8 (67%)
2	Create, promote, and expand computer refurbishment and/or donation program	8 (67%)
3	Expand and enhance public Wi-Fi at strategic public places like municipal buildings, parks, and parking lots, prioritizing unserved or underserved populations	7 (58%)
4	Increase the number of grant applications to connect eligible areas of the county, including cities and towns.	7 (58%)
5	Promote existing digital inclusion trainings, surveys, and resources held in the region through public information outlets for populations that need it the most in print, radio, social media, TV, and local media.	6 (50%)

Also with 6 (50%) counties:

- "Set a mandate or set up scholarships for ISPs and local orgs to provide/promote a low-cost service plan to low-income residents"
- "Centralize digital resources on county website and update regularly"
- "Create and maintain a central list of community-based locations with public Wi-Fi, devices, and digital inclusion resources"
- "Use partnerships (including educational ones) to focus workforce development on creating ICT professionals with basic digital skills as well as broadband and digital careers opportunities"

Top 5 Eastern NC Implementation Strategies Identified Out of 12 Counties









- **Upper Coastal Plain COG Finalized Plans** (Edgecombe, Halifax, Nash, Northampton, Wilson)
- Cape Fear COG Finalized Plans (Columbus, Pender)
- Eastern COG Finalized Plans (Carteret, Duplin, Onslow,)
- Albemarle Commission Finalized Plans (Chowan, Perquimans)

#	Implementation Strategy	Number of Counties
1	Expand and enhance public Wi-Fi at strategic public places like municipal buildings, parks, and parking lots, prioritizing unserved or underserved populations	12 (100%)
2	Gather relevant data to assess and analyze current broadband infrastructure and gaps	11 (92%)
3	Study and address the "homework gap"	11 (92%)
4	Provide education about subsidy programs to low-income residents, senior citizens, and families	10 (83%)
5	Promote existing digital inclusion trainings, surveys, and resources held in region through public information outlets for populations that need it the most in print, radio, social media, TV, and local media	8 (67%)

While the <u>complete list</u> is available (including alternate tags), below includes repeated and unique implementation strategy topics to carry out digital inclusion plan objectives and priorities in North Carolina.

• Affordability: It is incredibly urgent for communities to address broadband affordability for their residents. Counties want to promote subsidy programs and enroll more low-income residents and/or covered populations into these programs, including individuals without citizenship status who might not qualify for most programs. Trying to remove barriers that add to broadband affordability and access came up multiple times throughout the plans with different roles for different sectors. Government programs can work on bundling services and enrolling residents in programs like ACP when they are registering for other government programs. Digital inclusion champions can coordinate organizational financial assistance to supplement broadband costs for residents and prevent families from losing service due to cost. ISPs are called to create or promote their own low-cost plans to low-income residents, as well as develop similar plans for community anchor institutions to affordably connect to broadband.









Awareness & Outreach: At the intersection of affordability and awareness are efforts to
increase enrollment in the federal ACP program. While some ISPs have their own
low-cost program, ACP can provide capped affordable service through most ISPs,
making it the signature program communities promote. Strategies include providing
enrollment assistance, training organizations on the tedious process of enrolling their
members, and hosting ACP events.

Coordinating survey promotion and mapping responses is a key next step for many plans. This includes promoting local surveys and the NCDIT's Broadband Survey as well as using other survey data to determine funding priorities. In order to get information out (surveys or about broadband resources in general), plans identified the need to invest in face-to-face communication (e.g. hosting events, public meetings, and door-knocking).

There are a number of strategies involving county Extension offices such as scaling their resources to reach agricultural and elderly communities and folding in business and government support.

Plans drill down on promotion, going beyond sharing information to changing minds about the importance of accessible and affordable broadband. It takes an enormous amount of energy, staffing, and funding to get broadband to people, which can be hampered if residents and policymakers don't understand the urgency or relevance of connection and/or are reluctant to support investment. Tactics include increasing storytelling and openly sharing successes, developing outreach materials, and working on officially addressing the internet as a utility (like water or electricity - not free but expected for every resident regardless of barriers).

- Businesses: The most prevalent strategy shared to engage businesses is to support them with broadband access and online commerce ventures. There is also statewide interest in providing specific digital resources to farmers and the agriculture industry.
- Data & Mapping: Counties need more timely and accurate data. With more robust data, they plan on having residents submit FCC map comments and work on visualizing data to share resources and broadband gaps.
- Devices: Providing free or low-cost devices is a top priority when it comes to achieving
 digital equity. Counties are partnering with or emulating programs like E2D and Kramden
 Institute to provide devices and additional training. These programs prioritize owning
 devices as opposed to renting or lending devices which vary in success according to
 some partners.









Knowing the fallibility of devices and the need for frequent updating, consistent device repair is needed as well. Strategies include hosting device repair events, training partners on repair, and partnering with local tech businesses to provide services. Lastly, providing support for device training and digital literacy should accompany any new or existing device program.

 Digital Inclusion Coalition & Committee: This category includes formal digital inclusion coalitions, committees, teams, and broadband task forces as well as activities that would fall to digital inclusion champions or local leaders, even if informally convened.

The first action step for some plans is to form a local group to carry out the mission and objectives of the digital inclusion plan and convene stakeholders. From there, committees are tasked with a variety of goals: adding members, bringing on new partners, hiring staff, and creating protocols for community-wide activities. Along with external guidance, there is frequent mention of evaluation strategies of the plan and committees themselves to stay on track.

Acting as a hub, these coalitions are charged with getting all sectors (government, business, nonprofit, education, faith, etc.) involved with outcomes. This includes promotion, training, regular convening, and mapping efforts. This also includes creating physical hubs in some places where services are aggregated not only for partners' digital inclusion efforts but for the residents they serve as well.

Some policy advocacy and creation efforts are shared between digital inclusion coalitions and their local governments. This can include strengthening partnerships with ISPs to achieve mutually beneficial access and adoption goals.

Some coalitions elevate perspectives and strategies that center covered populations (communities of color, rural residents, low-income residents, etc.). These don't just address digital inclusion efforts themselves, but other factors that impact residents like lack of services, housing, food, and transportation. Some coalitions task themselves with educating stakeholders on discrimination and barriers experienced by covered populations, focusing on root-cause solutions as well as digital inclusion efforts.

Digital Literacy/Skills, Device Courses, Technical Assistance: A key component of a
digitally equitably community is one with consistent, iterative, accessible, affordable, and
culturally appropriate digital training for residents. As plans mention, people need
different things based on their identities, locations, incomes, languages, ages, and
abilities. To honor that reality, the plans proposed various strategies:









In order to get more people to participate, plans suggest everything from giving incentives to residents to utilizing mobile units to meet people where they live and work. **Special training is necessary for aging, disabled, underemployed, and undereducated residents.** The organizations running these services (like churches, community centers, community colleges, and libraries) can increase support by creating toolkits to solve common digital problems and working together to address gaps.

Even if existing resources are available, there is extra attention paid to increasing staffing, training more volunteers, expanding locations, expanding hours open, and providing specially designed services based on residents' needs. While improving services, the approaches and processes organizations take are important. Earning trust through involving different trusted leaders, listening to locals, and practicing cultural humility is a central tenet to many plans' digital literacy/skills and technical strategies.

While the term digital literacy is used often, some digital inclusion champions share that this phrase can create barriers by bringing up confusing notions of traditional literacy and shame for some people. For this reason, we use the terms digital literacy AND skills to bridge what plans share and where best practices are headed. Technical assistance is sometimes lumped in with digital literacy/skill training (like how digital navigators can help with a variety of issues) and other times separated to talk about specific software, device, and troubleshooting support some organizations provide (like IT support).

- Digital Navigators & Staff: With additional funding, multiple communities plan on hiring digital navigators to improve digital equity. Potential tasks include supporting residents in getting devices, assisting with ACP registration, and identifying additional needs. Some counties plan on hiring digital navigators but specify that they first require an overall digital inclusion coordinator, which they see as a different role. For some plans, digital navigators and digital inclusion coordinators are similar positions. Regardless, a key function of a digital navigator and/or digital coordinator role would be to lead training for partners and stakeholders to increase digital inclusion support.
- Education: Actions for K-12 schools consist of studying the "homework gap", expanding device and hotspot access and funding (and alternatives for students without cellular service), and addressing Chromebook gaps and insurance costs. Chromebooks are not unrestricted devices- they are most suited for a students' homework, for instance. For community colleges and universities, it is also important to give or lend devices and hotspots and provide assistance for students to subscribe to broadband. Creative strategies include training high school and college students to provide technical support, refurbish devices, and provide digital navigation skills in their communities.









- Employment: Increasing broadband access and adoption is essential in this increasingly
 digital economy. Workers need consistent broadband access to work remotely, and
 employers need employees with more specialized digital skills to fill job requirements. By
 teaching digital skills to everyone from students to formerly incarcerated residents,
 incomes rise which benefits all communities in North Carolina.
- Government: Since many local and regional governments led their digital inclusion planning and implementation efforts, it makes sense that there are over 30 implementation strategies for municipalities to execute. Starting with advocacy, government organizations want to campaign for federal resources, better digital inclusion data (like FCC maps), less bureaucracy and local government limitations, and to even change legislation. To help streamline efforts, government officials want to create databases of infrastructure projects, gaps, and resources. They also plan on centralizing digital inclusion programs on government communication channels such as county websites and public signage advertising services and access centers.

Government partners are leading expansion projects with ISPs. In order to do this, some local and regional governments need laws to change to increase competition and incentives for ISPs to provide appropriate and affordable access to all residents. Creating more public-private partnerships in the meantime can reduce the cost of "last-mile" and rural service, increase non-traditional broadband access, and improve chances of receiving grant funding by collaborating on applications.

- Grants: Grant funding is central to enacting most implementation strategies in the digital
 inclusion plans. Planners want to work with local and regional government, ISPs, and
 digital inclusion champions to streamline data to increase the quantity and quality of
 grant applications. This requires precise teamwork between stakeholders to define gaps,
 replicate success stories, and anticipate future sustainability needs.
- Hotspots: Sustaining hotspot funding (devices and subscriptions) is essential for partners like libraries and schools as an alternative to access in areas without affordable or accessible high-speed broadband.
- ISPs: Plans encourage ISPs to invest in mesh networks, wired, fixed-wireless, and satellite options for residents without access, especially in rural areas. Partnering with ISPs can also increase ACP participation, improve mapping, and expand public device and Wi-Fi access around communities.
- Language Resources: English language learners and populations that don't speak
 English as a first language need increased access to digital inclusion resources,
 including affordability information, technical assistance, digital literacy/skills
 training, and educational materials. These resources should be translated into
 Spanish and other languages spoken in the community.









- Libraries: Libraries are often the first place people go for digital inclusion resources in their counties. Implementation strategies to expand their impact include promoting ACP and affordability information, hosting digital literacy/skills trainings and classes, and providing technical assistance for digital activities and devices. Librarians and/or digital navigators could provide this support. Expanding digital literacy/skills curriculums, device lending programs, and bookmobiles equipped with Wi-Fi and computers are additional tactics for libraries.
- Mobile: To determine infrastructure priorities, maps can be created to show broadband and mobile/cellular availability and gaps.
- Public Device Access: Multiplying public access centers (including indoor, accessible, and safe locations) in strategic areas is important to half of North Carolina's counties. These centers should be located in low-access and low-adoption areas or within organizations that can support their clientele, not only with access but assistance as well.
- Public Wi-Fi: Similarly, three-quarters of counties want to expand Public Wi-Fi in strategic areas like municipal buildings, parks, churches, housing authorities, and downtowns. This would include weather-protected options for year-round use. In order for these locations to be accessible and well-used, it is also important to install or improve sidewalks, bike lanes, and public transportation.
- Telehealth: Some of the most needed and promising technology includes creating more telehealth options. Partnering with hospitals and health centers, plans call for increasing digital skills and creating secure rooms with proper equipment in order for individuals to confidently use telehealth (especially older residents).
- Transportation: From giving out bus or rideshare passes to residents to bringing digital
 inclusion services directly to them, transportation challenges often are a huge barrier for
 unconnected or under-connected communities. When providing services, offering
 transportation options is a best practice to ensure the most number of participants can
 access digital inclusion resources.

State Collaboration & Support

Digital inclusion planning teams shared specific ways they want to partner with statewide agencies like NCDIT. An overall theme is that in order to move to implementation phases, there is significant support needed at the state level since local and regional capacity is often limited and underfunded.









Finalized Digital Inclusion Plans

Plans include current or potential relationships with NCDIT, including the Office of Digital Equity and Literacy. Municipalities need support in changing laws that are currently preventing meaningful broadband access and adoption progress.

Legislation and policies identified include:

- Changing laws to create more broadband competition
- Minimizing up-front last mile construction costs for homes and businesses, like French Broad EMC's partnership as an example
- Allowing the use of existing dark fiber and government fiber infrastructure in locations ISPs are incentivized to connect due to high lost and low-density populations
- Changing laws that would improve broadband data collection and mapping and mandate ISPs provide availability data by address
- Allowing a "dig once" approach
- Optimizing laws, regulations, and permits to provide ISPs access to vertical assets
- Allowing ISPs to provide lower cost subscriptions over publicly funded infrastructure

Potential advocacy partnerships identified include:

- Working with NCDIT to demand more detailed maps from the FCC
- Categorizing internet as a public utility
- Clarifying the future of ACP and making the application process less confusing and difficult
- Increasing broadband infrastructure, access, and adoption

Implementation projects include:

- Working with philanthropic organizations to supplement subsidy programs, reducing current bureaucratic challenges with federal subsidy registrations
- Replicating SpaceX partnership with NCDIT in western counties

Future Digital Inclusion Plans

Counties in the process of forming their plans echoed the need for a strong partnership with NCDIT in order to better understand funding opportunities, navigate ACP updates, and advocate for better mapping from the FCC.

Digital Inclusion Plan Recommendations









BAND-NC has helped fund and/or provided technical assistance to a majority of North Carolina's digital inclusion plans and will be guiding the remaining counties in creating their plans. Through our collaborations with stakeholders since 2020, we've collected best practices, helpful reframes, and vital insight into what works (and doesn't work) during the planning and implementation process.

With careful consideration that these lessons learned are not universal, and sometimes not even regional, we want to provide additional analysis on plan components and provide feedback from plan creators on their next steps and their successes and challenges when collecting community data. BAND-NC will use this crucial information to determine how best to support all North Carolina digital inclusion plans moving forward. Because these insights were gathered or corroborated during interviews, the <u>complete list</u> is organized by COG or county rather than by "finalized" or "future" designations.

Digital Inclusion Plans' Community Input Strategies

Digital inclusion plan creators and local leaders provided thoughtful responses to the question "What successes and challenges do you typically face when gathering community feedback for projects [like forming a digital inclusion plan]?". Returning to these observations, struggles, and best practices should be protocol when NCDIT and organizations like BAND-NC advise on future digital inclusion planning. The replies we received were varied and are listed here as individual strategies while grouped into similar categories:

- Observations & Opportunities

- Libraries could add digital inclusion resources, like the NCDIT Broadband or Digital Equity Surveys, to the homepages on their public access computers to increase participation
- For communities with high retiree populations, digitally skilled aging residents could assist other senior citizens in getting connected
- Residents need to hear information from their own community since it's very hard to trust outsiders
- More educational events hosted by COGs and local governments will be crucial to gather more support for future digital inclusion work
- Having partners fill out a Google Form with digital inclusion services they offer was useful, but putting that data to work takes a lot of capacity
- Trust is one of the hardest and most important parts of the planning process and people won't give you personal details without it
- Recreation centers have been a useful primary contact
- Local data helps justify your plans and projects with skeptical folks
- There's more work to be done with public schools, not just stopping at 1:1 devices

Struggles









- There are existing unused or underutilized programs that could really help residents get connected, but there is not enough awareness that they exist
- Resources need to be included for communications and public information campaigns when requesting funding for digital inclusion programs
- Stakeholders are excited to be a part of the process at first, but participation dwindles. It's important to note when partnership fatigue is occurring
- It's very hard to get attendance at meetings, but once they're there, they offer great insight
- Collecting good data—including door-to-door knocking or mailing materials—is considered a best practice but extremely expensive and time-consuming
- Getting updated data on covered populations is challenging
- Reaching all ages and generations is difficult. Many relevant partners don't have the staff capacity to adapt marketing, outreach, and community engagement to various audiences
- Traditional media channels aren't as effective anymore to get the word out
- Tried advertising to host focus groups with Hispanic/Latino residents to attend meetings for their digital inclusion experience and input but attendance was low

- Best Practices

- Using "Access" instead of "Inclusion" to mitigate charged political barriers around equity and inclusion language in some regions
- Cross-marketing resources on government and Extension websites and church newsletters have helped get the word out
- Outreach needs to be diverse. People want their own culture represented in how they are reached out to and what services are provided
- People wanted to attend meetings and share their thoughts
- Host a town hall type event with a wide window (ex. 6 hours) so information can be shared, questions collected, and surveys distributed
- Having a data person in-house helped a lot with the plan
- Mailing postcards through USPS Direct Mail, boosting on social media, and talking at community meetings helped increase NCDIT survey responses
- Kramden Institute and E2D have great data at how device distribution is working
- COGs have strong relationships from recent strategic and economic plans they leaned on for digital inclusion planning
- Having strong county manager supports strengthens planning process
- Having paper flyers (like on ACP registration) and surveys on hand for events is useful as well as pairing with existing programs like meal distribution and school backpack handouts
- Have a call in or Zoom option for community meetings to allow rural participation
- Small community discussions of 8 to 15 people with storytelling and listening as priorities of time together is useful
- Small groups should be varied-rural, urban, non-English speakers, etc.









Next Steps for Digital Inclusion Plans

In BAND-NC's interviews with digital inclusion partners, it was important to ask what the next steps are for regional leaders, especially after the digital inclusion planning process is/will be complete. The implementation stage is daunting for a lot of planning groups. The two biggest pain points were the lack of immediate funding to carry out plan objectives and the lack of capacity of the digital inclusion planning team or municipal staff to continue or grow the momentum formed in the planning process.

While an enormous project, creating a digital inclusion plan has a clear objective, ample templates, and many North Carolina examples for guidance. The next phase for counties is often nebulous and it is unclear who will own the work going forward. Questions around sustainability—like the future of ACP and hotspot funding—make it difficult for groups to plan time-consuming and expensive projects that might not be reliable solutions for digital equity in the near future.

With that, there is also significant excitement in the state about the next steps for digital inclusion implementation. With priorities in place, many regions have already made great progress on their goals and eagerly await upcoming funding which will allow even more projects to start.

The following is a summary of some of the next steps planners shared about their upcoming digital inclusion planning process or projects they have in the implementation phase. The complete list can be accessed and is sorted by overall topic.

Struggles

- Concerns with how ACP funding will last and the effort it takes to get people to sign up for a program that might not exist
- While it's urgent to register low-income residents into ACP, it's a difficult signup process with little local capacity to assist
- Many residents can't get to community colleges for support. We need to bring their services into underserved communities
- There is a need for device lending programs in many regions, though there is no framework in place to create one
- Lack of digital navigators and coordinators to own next steps
- Regional COGs need to build more trust with cities and towns so they aren't sweeping in and out and taking over planning process without local input

- Support Needed

- Additional events hosted by COGs and community organizations to explain digital inclusion and the planning and project processes
- Help distributing statewide broadband and digital equity surveys









- Assistance needed to help collect community input, write press releases, and other pertinent information required for a digital inclusion plan
- BAND-NC should share updated implementation strategies that are working for other counties consistently
- BAND-NC should send out information, check in with planners, and provide support consistently
- Devices break over time and there is a need to create ongoing device support mechanisms
- Need to reconnect, rengage, and realign digital inclusion coalitions as considerable time has passed since the initial planning process
- Need to hire digital inclusion coordinators and navigators as well as train more volunteers in order to carry out plan goals
- Need to get input and support from military in the area
- We need to build digital skills for workforce development
- Need updates on funding and grant opportunities
- Need more support from ISPs when making digital inclusion plans
- Libraries should be more involved in the process
- Starting a digital inclusion resources portal would be useful
- Regions without in-house data support need mapping support for digital inclusion plans

BAND-NC Recommendations

Wrapping up reflections on the 27 finalized digital inclusion plans created so far, as well as those about to start, below are some overall best practices gleaned from this review.

Digital Inclusion Plan Structure

North Carolina is extremely lucky to have a dedicated statewide office in the Office of Digital Literacy & Equity and their template for the planning process is referenced by many finalized plans. For any group mapping out their plan, BAND-NC would recommend checking with NDIA, NCDIT Office of Digital Literacy & Equity, and BAND-NC. Each organization has beneficial templates, guides, and examples that make the planning process less overwhelming.

Following the aforementioned sources, BAND-NC recommends that each plan at least contain:

- Who is part of the planning team and process of collecting community input and data
- An overview of digital inclusion
- Visualized data of the broadband ecosystem of the region
- Existing assets and barriers to digital inclusion
- Objectives and implementation strategies
- Proposed plan of who is going to continue the work as well as potential funding sources

Digital Inclusion Planning Teams









Planning teams, coalitions, and committees look different in almost every single existing North Carolina plan. While there are pros and cons to every type of planning leadership, there are some common denominators that produce holistic, cohesive, and thorough plans.

BAND-NC recommends that digital inclusion plans include feedback, input, or direct involvement from **at least** these groups:

- Community colleges and universities
- County cooperative extension
- Faith organizations
- Internet service providers
- Local businesses
- Local chambers of commerce
- Local government officials and organizations
- Nonprofits
- Public libraries

Some planning teams included additional community organizations or members that BAND-NC recommends for a robust planning team:

- Organizations that specifically work with covered populations
- Career centers like NCWorks
- Hospitals and health centers
- Grassroots and/or community organizing groups

Digital Inclusion Planning Process

Some of the best approaches to carrying out the planning process itself include:

- Referencing previous reports, organizations, and efforts around digital inclusion and broadband in the community
- Creating a timeline between two to five months to reduce stakeholder fatigue
- Planning a series of kickoff meetings, focus groups, online surveys and meeting, and outreach events to collect diverse input on plan objectives
- Hiring a consultant or using municipal staff to help construct the plan based on feedback gathered during the process and have multiple vital stakeholders review and edit
- Keeping local and regional government abreast of the timeline for an uncomplicated approval process when the plan is ready to be adopted
- Connecting with digital inclusion champions in the state for regular guidance (e.g. NCDIT, BAND-NC, the Kramden Institute, E2D, and the Center for Digital Equity)
- Creating evaluation mechanisms for consistent feedback and adaptation
- Determining an outreach plan to distribute plan findings and next steps after completion

Digital Inclusion Planning Gaps









It is understandable that plans, especially created in the context of the pandemic, are not able to cover every important digital equity issue. Reflected in interviews, there are a number of additional components planners would include in their plans now or in future updates.

- Strengthening data and objectives around reaching specific covered populations. While
 aging, rural, low-income, and non-English speakers are referenced in most plans, there
 could be additional priorities specific to North Carolina's incarcerated individuals,
 veterans, persons with disabilities, and members of a racial or ethnic minority groups.
 Additional planning processes should be dedicated to tribal nations and communities
 with best practices learned from other tribal nations around the U.S. and considered in
 North Carolina
- Creating plans that are easy to read and access to keep in mind the lower digital and general literacy rates for many North Carolinians
- Including evaluation and reflection processes in order to measure success, navigate challenges, and build momentum

North Carolina is leading the nation with digital inclusion progress and innovation. The thoughtfully created plans represent thousands of residents' ideas, feedback, and dreams when it comes to making their community more digitally equitable. As plans are created and updated, this review is expected to also be periodically revised to include new insights.

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