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EXECUTIVE SUMMARY

In response to the once-in-a-lifetime opportunity presented by the Digital Equity Act (DEA), the N.C. Department of Information Technology's (NCDIT) Division of Broadband and Digital Equity (the division) developed the North Carolina Digital Equity Plan. This plan is a comprehensive strategy that aims to ensure all individuals and communities have access to the digital tools, resources, and skills they need to fully participate in the digital environment.

This plan would not be possible without the individuals and communities most affected by the digital divide who contributed their time and input during the planning process. Their feedback is critical to ensuring that this plan is responsive to their needs and addresses the unique challenges they face.

This plan specifically responds to the digital inclusion and equity needs of a defined set of covered populations identified by the U.S. Department of Commerce's National Telecommunications and Information Administration (NTIA):

- Aging individuals,
- Incarcerated individuals,
- Individuals who are members of a racial or ethnic minority group,
- Individuals who live in low-income households,
- Individuals who primarily reside in a rural area,
- Individuals with a language barrier, including individuals who are English learners and those with low levels of literacy,
- Individuals with disabilities, and
- Veterans

This plan reviews, synthesizes, and combines data, resources, and dreams yet unrealized into a comprehensive strategy to connect all North Carolinians to each other, the world, education,

healthcare, and economic opportunities. The division will submit it to NTIA in January 2024, after the solicitation and incorporation of public input.

Once the plan is approved, the division will apply for the NTIA's Digital Equity Capacity Building Grant funding and initiate a five-year implementation period. The division will continually document and evaluate the implementation of this plan and report periodically to the public on the impact, learnings, and refinement of the strategies.

VISION AND MISSION

The work of achieving digital equity is collaborative, and the division continues to learn together with partners. Informed by listening sessions in communities across the state, the division crafted a vision and mission for digital equity in North Carolina.

Vision: We envision a future where all North Carolinians have access to reliable, affordable high-speed internet and the digital tools, resources, and skills to fully and equitably participate in our society, democracy and economy.

Mission: The NCDIT Office of Digital Equity and Literacy will partner and collaborate with communities, partners and advocates across the state to ensure all North Carolinians have:

- Access to affordable and reliable high-speed internet,
- Computers and digital devices that meet their evolving needs, as well as access to quality and affordable technical support,
- Opportunities for developing digital skills,
- Tools and information to protect themselves online, and
- Online resources that are inclusive for all.

PLANNING PROCESS

The division assembled a strong team of digital equity partners across the state to ensure the plan is data-informed and incorporates the voices of covered populations. The list below provides a snapshot of the planning, data collection, and outreach activities the division completed to create a plan that reflects and responds to the needs of residents.

Phase 1: Identifying Key Partners and Developing an Outreach Plan

Leveraging North Carolina's strong, established network of digital equity partners as well as engaging key organizations serving covered populations was the first priority for the planning process. This network of partners served in an advisory capacity throughout all elements of the planning process.

Phase 2: Community Outreach and Data Collection

To ensure the digital equity plan included all N.C. communities and populations' needs, the division engaged in key activities related to outreach and data collection, including:

- Engaging local digital inclusion planning teams and coalitions
- Hosting eight public regional convenings in each economic prosperity zone culminating in an in-person summit and a virtual convening.
- Engaging state agencies to align priorities.
- Developing an asset inventory of more than 1,300 resources, programs, and initiatives meeting digital needs across the state.
- Deploying a first of its kind Digital Equity Survey, which received more than 6,600 survey responses between May and October of 2023.
- Hosting 23 listening sessions focused on the needs and experiences of covered populations.
- Engaging with Tribal communities to solicit their input and seek ways to collaborate.
- Partnering with the N.C. Telehealth Network Association's Healthcare Broadband Coalition to conduct conversations with telehealth partners around the state.
- Partnering with Student Freedom Initiative to host two town halls and supplemental surveys

to identify the digital needs of staff, students and the surrounding community at three Historically Black Colleges and Universities (HBCUs).

Phase 3: Plan Development and Public Comment

The significant outreach and data collection efforts outlined in Phase 2 culminated in the development of this plan. It represents the first steps to digital equity and the division commits to further development through continued outreach and public engagement.

CURRENT STATE OF DIGITAL EQUITY

Assets

Central to understanding the needs of covered populations in North Carolina is identifying the programs, initiatives, and resources available-assets- in the state. The division worked to develop a strong network of organizations that serve the digital needs of the state. Organizations, local governments, anchor institutions, churches, and businesses across the state address digital needs in their community; however, no formal efforts to catalog each entity and its services existed until now.

The division identified 1,480 existing digital inclusion assets in North Carolina and 965 organizations, government, or faith-based institutions providing digital inclusion resources and support, representing assets in all 100 counties. Public devices (such as public computer labs) and public internet access were the most common resources (539) available followed by digital skills training and technical support (395). Access to devices (193) and digital navigation support (159) are also available in the state.

Organizations exist focused on meeting digital needs for all covered populations. The division found most services are available for aging individuals, and fewer services are available for individuals who are incarcerated or in re-entry. While many organizations served individuals with disabilities, the division only identified a handful that focused solely on the needs of people with disabilities. More resources for these covered populations are needed.

A digital inclusion plan is an important asset and often the first formal step for a community to "reduce the digital divide and prioritize digital equity for their residents." North Carolina is home to a number of local and regional coalitions that have developed robust plans. Through a partnership with the Institute for Emerging Issues at NC State University, the division identified and analyzed key themes, barriers, and recommendations from the 27 draft and adopted digital inclusion plans and interviewed representatives from each planning team and coalition. These plans represent 48 counties and the Qualla Boundary, home of the Eastern Band of Cherokee Indians.

While this initial asset inventory identified most of the digital inclusion efforts in the state, a sustained effort to identify additional organizations will continue through an ongoing outreach and engagement effort.

Digital Equity Barriers and Needs

North Carolina's covered populations are not monolithic and their identities are often intertwined. The division's community-driven planning process confirmed that many individuals identify with more than one covered population, and the barriers to digital equity may be multiple, overlapping, and perpetuating.

There were several barriers to digital equity raised by multiple covered populations across the state. These barriers, when removed, would close most of the gaps for all covered populations.

Common needs include:

- Access to and affordability of high-speed internet. North Carolina defines access to highspeed internet as 100/20 Mbps (100 Megabits per second download/20 Mbps upload).
- 2. Accessibility and inclusivity of online public resources. Web accessibility and inclusivity means that websites, tools, and technologies are designed and developed so that people with disabilities and people who speak languages other than English (language access) can use them.
- Digital literacy. Digital literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and

technical skills.

- 4. Cybersecurity and privacy. Ensuring that people know how to keep their data and identity safe and secure online is key to protecting people online and making sure individuals feel safe connecting to the internet and using a device.
- 5. Availability and affordability of devices and technical support. Fully participating in a digital society requires access to reliable devices that meet the needs of users, as well as repair and technical assistance services to address issues with those devices.

STRATEGIES AND IMPLEMENTATION PLAN

To address the barriers and needs of the covered populations outlined above, the division plans to implement strategies to advance digital equity and increase internet access, affordability, devices, repair services, digital literacy, cybersecurity and privacy, and the inclusivity of online services.

The division will implement the following strategies to meet these needs:

- Strategy 1: Ensure all North Carolinians have access to affordable, reliable high-speed internet.
 - Implementation Activity 1.1: Support the state's Broadband, Equity, Access, and Deployment (BEAD) program plan objectives and implementation to ensure alignment with North Carolina Digital Equity Plan goals.
 - Implementation Activity 1.2: Support Community Anchor Institutions (CAIs) to improve and expand free, public Wi-Fi locations.
 - Implementation Activity 1.3: Increase awareness of and enrollment in low-cost and subsidized broadband internet programs like the Affordable Connectivity program (ACP).
- Strategy 2: Promote practices that support online accessibility and inclusivity of public resources and services.
 - Implementation Activity 2.1: Leverage partnerships within state government, local

- government and organizations serving covered populations to adhere to standards for online accessibility and inclusivity.
- Implementation Activity 2.2: Leverage partnerships to train staff in all cabinet-level agencies on online accessibility standards to improve the accessibility and inclusivity of state government websites and expand training and capacity to local governments and beyond.
- Strategy 3: Ensure that North Carolinians can acquire the digital and information-gathering skills to meet their personal needs and the workforce needs of the state.
 - Implementation Activity 3.1: Partner with workforce and education agencies at the state and local levels to identify and adopt high quality digital skills standards, including digital privacy and cybersecurity standards and digital health literacy.
 - Implementation Activity 3.2: Build on lessons learned from existing <u>digital navigator</u> programs to expand services across the state.
 - Implementation Activity 3.3: Leverage digital navigator and digital literacy programs to expand partnerships with organizations serving covered populations to meet their specific digital literacy needs.
 - Implementation Activity 3.4: Leverage existing partnerships with state education agencies to engage students and families in digital literacy programs.
- **Strategy 4:** Promote practices and leverage tools to ensure online privacy and security.
 - Implementation Activity 4.1: Partner with workforce and education agencies at the state and local levels to identify and adopt digital skills standards, including digital privacy and cybersecurity standards. (Crossover from Implementation Activity 3.1)
 - Implementation Activity 4.2: Integrate cybersecurity and privacy training into curricula implemented by digital navigators and other digital literacy efforts across the state.
- Strategy 5: Ensure that North Carolinians have

access to digital devices that meet their needs.

- Implementation Activity 5.1: Increase public access to devices at community anchor institutions.
- Implementation Activity 5.2: Increase the supply of no-cost and low-cost devices in North Carolina's device distribution system.
- Implementation Activity 5.3: Develop and sustain a high-volume preparation and logistics system (of new and refurbished devices) that supports the efficient movement of devices throughout the state and matches computing devices with the unique needs of the intended Covered Populations.
- Implementation Activity 5.4: Utilize trained and qualified partners for device deployment and technical support.

SUSTAINABILITY

The strategies and activities outlined above should work together to build and strengthen a strong digital equity network (an ecosystem), to meet the digital needs of all covered populations. This network will be the backbone of the work, ensuring digital needs are met and that programs are sustainable long after DEA funding has been spent. The division commits to sustaining a healthy, robust digital equity network that includes 1) a diverse, inclusive community of digital equity practitioners, and 2) building capacity across the state to identify and meet local needs.

ALIGNMENT WITH STATE PLANS AND GOALS

This digital equity plan was not created in a vacuum, and it will not be implemented in one. The division's community-driven planning process confirmed the interconnectedness of both the challenges covered populations face and the solutions that will close the digital divide. Alignment with state strategic priorities, including economic and workforce development goals, plans, and outcomes, educational outcomes, health outcomes, civic and social engagement, and delivery of other essential services, is paramount to the division's success in implementing the strategies outlined in this plan.





OVERVIEW

In June 2021, Governor Roy Cooper established the Division of Broadband and Digital Equity within the N.C. Department of Information Technology. The division houses two offices – the Broadband Infrastructure Office and the Office of Digital Equity and Literacy, the first office of its kind in the nation. The division works to close the digital divide so all North Carolinians can live bettereducated, healthier, wealthier lives filled with purpose and abundance. Doing so means not only providing access to affordable, high-speed internet throughout the state but also ensuring that residents can adopt these services and have the tools and skills to participate in the digital economy.

In November 2021, Governor Cooper and the North Carolina General Assembly dedicated more than \$1 billion in federal American Rescue Plan Act funds to achieve the following goals:

- Investing \$971 million to build critical infrastructure to deliver internet speeds of 100/20 Mbps to 98% of unserved households with the ability to handle future speeds of 100/100 Mbps.
- Investing \$50 million to create awareness and support digital literacy and skills training to participate in the digital economy.
- Promoting enrollment in the Affordable Connectivity Program (ACP) - currently 889,269 households (as of Jan. 8).

Even before the creation of the NCDIT Division of Broadband and Digital Equity, North Carolina had a long history of supporting digital equity and convening and learning from practitioners in the field for many years. The division is proud to have strong partnerships with state and local government, the university and community college systems, local libraries, senior centers, anchor institutions, and nonprofits. The work outlined below resulted from these partnerships over many years.

Current Division Programs and Initiatives

The division's existing and legacy programs focused on digital equity include:

1. Digital Equity and Inclusion Collaborative

Founded in 2017 by the Broadband Infrastructure Office, the N.C. Digital Equity and Inclusion Collaborative (NCDEIC) is a group of digital equity leaders and digital inclusion-focused organizations and efforts. NCDEIC members include state and local government agencies, nonprofits, coalitions and individuals working to close the digital divide across the state.

The NCDEIC strives to foster collaboration among digital equity and inclusion leaders to create a state where all residents have access to the technologies, digital skills, and opportunities necessary to thrive in today's society. To support programs across the state, the collaborative shares best practices and supports partners' digital inclusion efforts. The NCDEIC provides feedback to local, state and federal policymakers, designs strategies to promote digital equity in the state and to educate all North Carolinians on the digital divide and the importance of digital equity and inclusion efforts.

2. Digital Health Equity Project

In 2019, the division received an Appalachian Regional Commission POWER grant to create a program to improve digital and health literacy, computer ownership, and broadband adoption among residents in western North Carolina.

3. Digital Equity Data

In 2019, and in collaboration with Roberto Gallardo, Ph.D., a broadband researcher from Purdue University, the division created and published the North Carolina Broadband Indices. Because broadband access and adoption are both important but distinct from each other, two indices, which can be applied at the county- and census-tract levels, were designed:

- Broadband Availability and Quality Index
- Broadband Adoption Potential Index

The division published an update to the indices in 2023. Additionally, the division partnered with Dr. Gallardo and published state, regional, and county-level digital equity profiles available on the <u>division's website</u>.

4. Digital Inclusion Plan Template and Guide

Created in 2020, the <u>Digital Inclusion Plan Template and Guide</u> helps communities create digital inclusion plans to reduce the digital divide and prioritize digital equity for their residents.

5. Digital Equity Grant Program¹

A first of its kind grant program in the state that aims to develop or expand digital inclusion efforts. The program has two tracks:

- Interagency Grants and
- Digital Champion Grants.

<u>Interagency Grants</u>: \$9.9 million program for state agencies and UNC System universities to develop or expand large-scale statewide or regional digital inclusion programs. The program launched in September 2022 and announced eight grantees in January 2023. A list of grantees is available in the <u>Asset Inventory</u> section, page 35.

Digital Champion Grants: \$14 million, three-year grant program launched in November 2023. Applicants

¹ This grant program was developed using state American Rescue Plan Act (ARPA) funds.

can apply for up to \$400,000 per county served with a maximum application request of \$1.5 million. Eligible entities include:

- Local governments (county and municipal), local libraries, and K-12 school systems,
- Nonprofit organizations,
- · Higher education institutions, and
- Regional entities (ex., councils of governments).

6. Digital Navigator Initiative²

The state's first statewide digital navigator initiative helps connect North Carolinians to services that aid with home connectivity issues, digital device use, digital skills acquisition, and Affordable Connectivity Program (ACP) enrollment. In May 2023, the office awarded funding to three anchor institutions: the State Library of North Carolina, the N.C. Community College System, and N.C. Cooperative Extension.

7. Affordable Connectivity Program (ACP) Outreach and Hotline

The Affordable Connectivity program is a federal program administered by the Federal Communications Commission (FCC) that reduces the cost of internet service for eligible households by \$30 per month and \$75 per month on tribal lands. The division provides assistance, guidance, and promotional materials for families and community leaders https://www.ncbroadband.gov/ACP. The division seeks to increase public awareness of the program and increase the number of eligible households enrolled. The Office of Digital Equity and Literacy was one of four grantees in North Carolina to receive an ACP Outreach Grant from the FCC. The grant enables the office to partner with the N.C. Department of Health and Human Services and the NC Counts Coalition to train staff on ACP enrollment and host enrollment events.

ACP Cohort

In partnership with Education Superhighway, North Carolina implemented a cohort strategy further supporting digital equity and internet affordability. The cohort united trusted stakeholders that have existing relationships with ACP-eligible households – such as libraries, schools, housing authorities, faith-based, tribal, and community-based organizations – and equipped them with tools and resources to overcome barriers to ACP adoption. Moreover, this cohort convenes organizations that have the greatest trust and relationships with those they serve, many which represent the identified covered populations. The cohort, which includes all the state's FCC ACP Outreach grantees, joined a series of workshops intended to promote ways in which leveraging the ACP contributes to achieving digital equity across the state. They provided a collective framework to ensure the creation and sustainability of a network of stakeholders working on digital equity initiatives, with a particular focus on the ACP. This group creates a collaborative space where organizations learn from and inform one another's work. It also promotes coordination between the state and other stakeholders, alleviating the unintentional creation of silos, gaps, and/or redundancies in programming.

NC 211 ACP hotline³

The division partners with NC 211 to support an ACP enrollment hotline. The hotline launched in pilot counties in November 2023 and expects to launch statewide in 2024. The division intends for the hotline to ultimately provide other digital navigation services as well.

8. Broadband Infrastructure Projects

The division's Broadband Infrastructure Office developed some of the most robust broadband infrastructure grants and maps in the nation, including: a legacy state grant program connecting

² The Digital Navigator Initiative was developed using state American Rescue Plan Act (ARPA) funds.

³ The ACP 211 hotline was developed using state American Rescue Plan Act (ARPA) funds.

33,250 locations with wireline or fixed wireless infrastructure, a federally funded version of that program and the Completing Access to Broadband infrastructure program to expand access to high-speed connectivity; and NC OneMap, which is an open-source, interactive GIS mapping tool. As of December 2023, the division had awarded \$372 million of American Rescue Plan Act State and Local Fiscal Recovery Funds for infrastructure projects. The division plans to award more than \$560 million in American Rescue Plan Act State and Local Fiscal Recovery Funds and Capital Projects Funds for infrastructure projects in calendar vear 2024. These funds must be expended by December 2026.

The division's <u>Broadband</u>, <u>Equity</u>, <u>Access</u>, <u>and Deployment</u> (<u>BEAD</u>) <u>Five-Year Plan</u>, which includes feedback received during the public comment period, outlines how NCDIT will invest BEAD funding across North Carolina to deploy broadband infrastructure moving forward. This plan was approved by the National Telecommunications and Information Administration (NTIA) and National Institute of Standards and Technology (NIST) in 2023.

A VISION FOR DIGITAL EQUITY IN NORTH CAROLINA

The work of achieving digital equity is a collaborative one, and the division continues to learn with and from its partners. Through programs like the Digital Equity Grant program, the Digital Navigator Initiative, and the NCDEIC, the division laid the foundation for a network of digital equity champions, programs, and resources across the state. Together with partners, and informed by listening sessions in communities across the state, the division crafted a vision for digital equity in North Carolina that:

- Accounts for the diverse needs and assets of each community and invests in locally driven solutions to build capacity and sustainability, and
- Ensures solutions are transformational and address how digital equity intersects with all aspects of North Carolina life, including increasing economic and social well-being, health, and education.





Vision: We envision a future where all North Carolinians have access to reliable, affordable high-speed internet and the digital tools, resources, and skills to fully and equitably participate in our society, democracy and economy.

Mission: The NCDIT Office of Digital Equity and Literacy will partner and collaborate with communities across the state and ensure all North Carolinians have:

- Access to affordable and reliable high-speed internet,
- Computers and digital devices that meet their evolving needs, as well as access to quality and affordable technical support,
- Opportunities for developing digital skills,
- Tools and information to protect themselves online, and
- Online resources that are inclusive for all.

PLANNING AND COMMUNITY OUTREACH PROCESS

The division assembled a strong team of digital equity partners across the state to ensure the plan is data-driven and incorporates the voices of covered populations. The list below provides a snapshot of the planning, data collection, and outreach activities the division pursued to create a plan that reflects and responds to the needs of residents.

Phase 1: Identifying Key Partners and Developing an Outreach Plan

Leveraging North Carolina's strong, established network of digital equity partners as well as engaging key organizations serving covered populations was the first priority for the planning process. This network of partners served in an advisory capacity throughout all elements of the planning process.

- Core Planning Team: This team includes nine individuals representing anchor institutions, state government, local government, and community-based organizations supporting digital inclusion and/ or serving covered populations across the state. This group began meeting bi-weekly in October 2022. (A full list of members is available in Appendix B.)
- Working Groups: These volunteers advise staff and consultants on key elements of the Digital Equity Plan. The working groups include a Data and Barriers group, Assets and Promising Practices group, and Device Working group. A more informal group of philanthropic leaders also met regularly. (A full list of members is available in <u>Appendix B</u>.)

In addition to engaging key partners to support plan development, Phase 1 also consisted of an outreach plan - a living document to outline a comprehensive approach to community outreach and public engagement.

• Outreach Plan: BEAD and Digital Equity Plan data gathering began in March 2023. The outreach plan and kickoff webinar are available at ncbroadband.gov/BEAD.

Phase 2: Community Outreach and Data Collection

To ensure the digital equity plan was inclusive of all N.C. communities and populations' needs, the division engaged in key activities related to outreach and data collection.

- Engaged Local Digital Inclusion Planning Teams and Coalitions: North Carolina is a leader when it comes to the quantity and quality of localized digital inclusion planning and implementation. Through partnership with the Institute for Emerging Issues at NC State University, the division interviewed representatives from each planning team and coalition in the state and analyzed key themes from 27 drafts and adopted plans representing 48 counties and the Qualla Boundary, home of the Eastern Band of Cherokee Indians. Full analysis can be found in the County and Regional Digital Inclusion Plans section on page 36.
- Hosted Regional Convenings: In collaboration with the Broadband Equity Access and Deployment (BEAD) planning process, the division hosted eight in-person regional sessions in each of the state's Economic Prosperity Zones, and one virtual session, culminating in a May summit in Raleigh, and a virtual session in June. Attendees included community members as representatives from government, education, resource providers, nonprofits, business, agriculture, and internet service providers. Sessions were interactive and engaged participants to identify challenges to internet access in their community and how they recommended the state uses federal funding to meet community needs.
- Engaged State Agencies: The division strengthened meaningful partnerships with key state agencies. In
 April and May 2023, the division held interviews with six state government agencies, including the N.C.
 Departments of Adult Corrections, Commerce (which includes workforce programs), Health & Human
 Services, Natural & Cultural Resources, Public Instruction, and Transportation to discuss how the BEAD
 and State Digital Equity plans should align with the strategic plans of those agencies.
- <u>Developed an Asset Inventory</u>: Central to understanding the needs of covered populations in North Carolina is identifying the programs, initiatives, and resources available (assets) in the state. The division developed a comprehensive asset inventory, which will ultimately be a searchable, regularly updated database for the public of resources available to help North Carolinians get online and use online resources safely. This asset inventory combines assets identified through surveys, listening sessions, regional convenings, and interviews with targeted organizations. The inventory identified more than 1,400 assets as of the publication of this plan. A comprehensive overview of the Asset Inventory methodology is available in <u>Appendix E</u>.
- <u>Digital Equity Survey</u>: The division deployed a digital equity survey developed using guidance from the National Digital Inclusion Alliance and vetted among the working groups and core planning team. The survey identified the needs of covered populations for each of the key barriers to digital access. The survey was translated into the six most common languages used in North Carolina to accommodate residents who do not speak English well. The survey was available online, as well as via paper and telephone. By partnering with a wide variety of community groups and larger advocacy organizations, the division received more than 7,447 survey responses between April and November of 2023. (The Digital Equity Survey methodology is available in <u>Appendix D</u>.) Comparing the Digital Equity Survey sample to North Carolina data (American Community Survey 5-Year Estimates, 2017-2021), most covered populations were oversampled on the survey with aging populations being the largest oversample (+31.5%). The only covered populations underrepresented in the survey data, include individuals with low literacy (-.52%), Black/African Americans (-3,58%), and Hispanic and Latino (-2.78%) populations.

It is important to note that covered population identities are often intertwined, and individuals often belong to more than one group. For example, the 2,476 rural residents who participated in the survey

provide a very diverse sample: 73.34% white; 13.68% Black/African American; 3.64% Hispanic/Latino; 2.55% Native American, American Indian, or Alaska Native; 1.07% Asian/Asian American; 0.33% Pacific Islander or Native Hawaiian, and 1.30% identified as some other race/ethnicity.

The survey was distributed using a snowball sampling approach where the division first shared the online survey and access to printable copies with partner organizations across the state involved in digital inclusion efforts (e.g., libraries, health and human services departments, senior centers, community organizations, churches, etc.) and asked that they share the survey broadly within their communities. Sample outreach language, PDFs, and links to the online survey were provided to make sharing the survey easier for partners. The division also provided printed paper copies with self-addressed stamped envelopes, when requested, for these organizations to share printed surveys directly with the public. The survey opened April 20, 2023, and data were collected through the end of November. The division plans to deploy the survey at two additional timepoints during the implementation phase to measure progress towards the state's digital equity goals. (Survey analysis is in the Needs and Barriers section below).

<u>Listening Sessions</u>: In partnership with the Friday Institute for Educational Innovation, the division conducted 23 listening sessions across the state to capture a representative sample of the needs of North Carolinians. The division partnered with MDC Rural Forward to help identify listening session host organizations that had significant community trust with covered populations. The listening sessions took place between May and September of 2023. (All organizations involved in hosting listening sessions and a comprehensive list of the 23 listening sessions is available in <u>Appendix F</u>).

Multiple covered populations participated during each session, which helped identify the best ways to overcome barriers to digital equity faced by covered populations and assess the availability and affordability of fixed and wireless broadband technology, digital literacy online security support, and the availability and affordability of technology devices and support in the community. Additionally, the division examined how these barriers affect covered populations' economic and workforce development goals, plans, and outcomes; educational outcomes; health outcomes; civic and social engagement; and delivery of other essential services. The listening sessions largely focused on how best to overcome the identified barriers to replicate and scale best practices.

	Digital Equity Survey (7,447 Responses*)	Asset Inventory (965 Organizations)	Listening Sessions Participants (23 Sessions)
General Population	7,447	149	255
Aging Populations (60+)	3,836	140	37
Incarcerated/Formerly Incarcerated	121	49	28
Individuals with Disabilities	2,398	96	69
Language Barrier/English Language Learners	461	116	71
LGBTQIA+	245	70	9
Low Income	1,384	171	87
Low Literacy	73	114	20
Racial/Ethnic Minorities	1,549	123	169
Rural Areas	4,980	140	131
Veterans	715	89	21

- <u>N.C. Telehealth Network Association</u>: The division partnered with the N.C. Telehealth Network Association's Healthcare Broadband Coalition to conduct conversations with telehealth partners around the state. (A list of healthcare providers involved in these conversations is in Appendix B).
- <u>Tribal Engagement</u>: The division held a tribal consultation on May 18, 2023, with the Eastern Band of Cherokee Indians. Based on this engagement, the state gained a better idea of how the tribe plans to provide improved access on tribal lands. The division committed to work with the tribe to find opportunities to use BEAD funding for deployment where needed. Additional discussions followed to coordinate broadband and digital equity strategies.

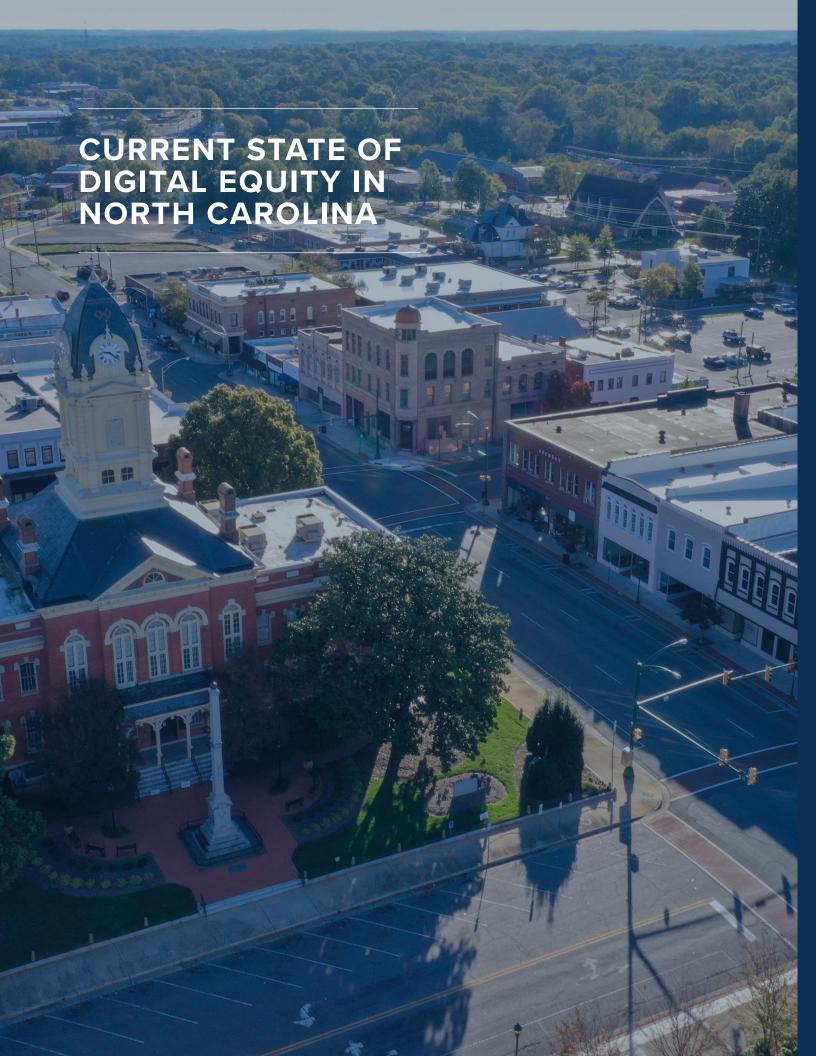
In addition, the division presented information about the planning process to the N.C. Commission of Indian Affairs in March 2023 to solicit their input and seek ways to collaborate with the eight state-recognized tribes and four urban Indian organizations represented on the commission. State-recognized tribes include: Coharie, Eastern Band of Cherokee Indians, Haliwa-Saponi, Lumbee, Meherrin, Occaneechi Band of the Saponi Nation, Sappony and Waccamaw Siouan. Members of state-recognized tribes participated in both the regional sessions and the listening sessions in June and July and shared valuable input about the needs and assets of their communities. The division also partnered with the Waccamaw Siouan tribe and American Indian Mothers Inc. to host a listening session.

 HBCU Engagement: The division partnered with Student Freedom Initiative to host two town halls and supplemental surveys to better understand the needs of staff, students and the surrounding community at three Historically Black Colleges and Universities (HBCUs). A comprehensive report of their data collection and the digital needs of HBCUs in North Carolina is located in <u>Appendix I</u>.

Phase 3: Plan Development and Public Comment

The significant outreach and data collection efforts outlined in Phase 2, culminated in the development of this plan. The division commits to continued outreach and partnership including through:

- Public comment: The North Carolina Digital Equity plan was available for public comment from Dec. 1, 2023, to Jan. 2, 2024. To solicit public comment, the division engaged members of all covered and prioritized populations through targeted outreach with planning partners, listening session hosts and participants, and organizations identified in the asset inventory. The division also hosted four public comment events. In total, the Digital Equity Plan received 180 comments from 54 individuals and organizations. A summary of the comments and the division's response can be found in Appendix J.
- <u>Continued engagement of working groups</u>: While many working groups will complete their responsibilities, the division anticipates some will continue in various capacities.
- <u>Continued public engagement</u>: The division plans to release a report annually to update implementation progress. The division will continue to partner with listening session host sites, tribes and other partners engaged throughout the process to listen, learn and remain accountable.



DEFINING COVERED POPULATIONS

The planning and outreach process focused on "covered populations," specific groups defined by NTIA as having specific digital equity needs and barriers.



Aging individuals⁴

Individuals aged 60 and older.

Incarcerated individuals

Inmates confined in a prison or jail, other than those in a Federal correctional facility. Most of the data cited in this plan comes from individuals in re-entry about their experience when incarcerated as well as their experience as a returning citizen. This plan honors both experiences.





Individuals who are members of a racial or ethnic minority group

Individuals whose race or ethnicity is non-dominant in North Carolina.

Individuals who live in low-income households

Individuals who live in households with income no greater than 150% of federal poverty threshold.





Individuals who primarily reside in a rural area

Residents of any town with less than 50,000 residents and not in an urbanized area next to a town with 50,000 or more residents.

Individuals with a language barrier

Individuals who are English learners⁵ and those who have low levels of literacy.⁶



⁴ Some of the data cited in this plan refers to individuals aged 65 or older based on data availability.

⁵ A key subgroup of English Language Learners includes immigrants and new Americans. Much of the data cited in this plan comes from immigrant and new American groups sharing their experience as English Language Learners.

⁶ Most of the data cited in this plan uses "less than a high school education" as a proxy for low-literacy levels. In Appendix H, the division provides demographic maps of covered populations including a Literacy Score developed by the Institute of Education Sciences' (IES) National Center for Education Statistics (NCES).





Individuals with disabilities

Individuals with a physical or mental impairment that substantially limits one or more major life activities.

Veterans

Individuals who served in the active military, naval, or air service, and who were honorably discharged or released.



The division also identified LGBTQIA+ residents as a priority population to align with the BEAD program covered populations defined as:



Individuals who identify as LGBTQIA+

Individuals who identify as lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual and more.

Individuals who identify as LGBTQIA+ are considered a subgroup under the eight "covered populations" defined above.

Demographic profiles and maps for each covered population are available in Appendix H.



ASSET INVENTORY

Central to understanding the needs of covered populations in North Carolina is identifying the programs, initiatives, and resources available (assets) in the state. Organizations, local governments, anchor institutions, churches, and businesses across the state have been addressing digital needs in their community; however, no formal efforts to catalog each entity and its services existed previously.

A comprehensive inventory of available resources allowed the division to take an asset-based approach to planning. Additionally, the asset inventory will be used to develop an interactive, searchable database where residents can identify digital resources and services in their area. The development of this searchable resource is being guided by feedback from several organizations to ensure it is accessible, easy to navigate, and meets the needs of all N.C. residents, including covered populations.

It should be noted that while significant efforts were made to identify all the organizations meeting digital needs in the state, the division continues to learn about more programs every day. The division views this inventory as a living document that will continue to be added to, refined, and utilized for years to come.

Overview and Development of the Asset Inventory

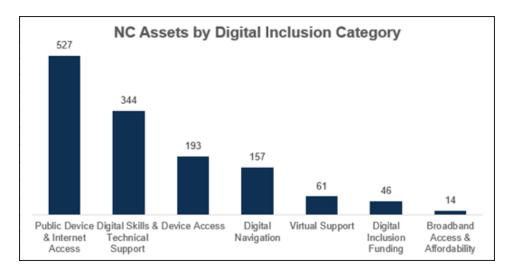
To develop the <u>Asset Inventory</u>, the division combined the following strategies:

- Developed and deployed an Asset Inventory Survey,
- Analyzed the organizations and resources identified in the 27 adopted or drafted digital inclusion plans covering 48 of the 100 counties in North Carolina and the Qualla Boundary, home of the Eastern Band of Cherokee Indians.
- Analyzed survey results from the N.C. Department of Health and Human Services (NCDHHS) Division on Aging and Adult Services Broadband Survey,
- Identified assets through listening sessions and regional sessions, and
- Identified assets through content analysis of organizational websites.

The division identified an existing 1,480 digital inclusion assets⁷ in North Carolina and 965 organizations, government, or faith-based institutions providing digital inclusion resources and support, representing assets

⁷ Analysis as of January 2024. More assets are added on a continuous basis.

in all 100 counties. Organizations, on average, provided one to two services or resources. Public devices and internet access were the most common resources (527) available followed by digital skills training and technical support (344). Access to devices (193) and digital navigation support (157) were also available in the state. Virtual support (61), digital inclusion funding (46), and access to broadband access and affordability (14) were also identified as being important resources.



Below is a summary of the number of entities the division identified through various data collection processes:

- 290 entities filled out the Asset Inventory Survey,
- 571 entities were identified from an initial scan of 27 county and regional digital inclusion plans representing 48 North Carolina counties and the Qualla Boundary,
- 122 entities from the Division of Aging and Adult Services Broadband Survey, and
- 23 entities from a scan of counties not represented after completing the above activities.

Spotlight on model programs and initiatives

As demonstrated above, North Carolina organizations are meeting significant needs across the state. Many statewide and regional organizations are providing digital services available to multiple populations. The table below provides a non-exhaustive list of large-scale organizations available across the state of North Carolina.

Table: Examples of Digital Inclusion Assets Serving the General Population

Asset	Description
<u>Kramden Institute</u>	Kramden Institute's mission is to provide technology tools and training to bridge the digital divide. Since 2003, Kramden has awarded more than 48,000 computers to families across North Carolina. The Kramden Institute is based out of Durham and primarily serves central and eastern North Carolina.

Asset	Description
E2D	E2D's goal is to ensure that all North Carolina families have affordable access to essential at-home technology and the digital skills required to support academic success to prepare students for college, careers and beyond as well as job creation and retention for adult members of the household. E2D collects used laptops, refurbishes them in student-led technology labs, and distributes them to student families who don't have a computer at home. Since 2013, E2D distributed 38,500 laptops, serving approximately 123,200 people.
Digital Equity and Inclusion Collaboratives and Planning Teams	 North Carolina is home to 27 digital inclusion coalitions or planning teams committed to meeting the digital inclusion needs of their communities. Descriptions of their digital inclusion planning efforts are outlined in the County and Regional Digital Inclusion Plans section on page 36. Many of these plans were driven by regional council of governments (COGs) who played a leadership role in digital equity planning at the regional level and are key assets in implementation. Below are examples of some of the more established coalitions: Digital Durham: Digital Durham promotes digital inclusion throughout Durham, North Carolina by advocating for reliable, affordable internet access and computing devices, along with digital literacy training. Land of Sky Regional Council: Through the WestNGN Broadband initiative, Land of Sky Regional Council has been leading the way to bring affordable internet service, accessible digital devices and tech skills training to Buncombe, Henderson, Madison, and Transylvania counties. Digital Bridges Forsyth: Led by WinstonNet Inc. a nonprofit community technology organization, Digital Bridges Forsyth developed the county's digital equity plan and is striving to be a prototype for the nation. Partnering with many of the area's major academic, public, community, and private institutions, they are coordinating resources that strengthen community technology centers services and educational quality to help prepare the workforce for the next generation of network-based computer technologies.
Center for Digital Equity	The Center for Digital Equity (CDE) is the backbone organization for a collective impact strategy bringing together residents, public, and private sector partners to co-create solutions allowing every resident the opportunity to thrive in our modern culture. CDE developed the innovative Digital Navigator service designed to ensure that everyone in Mecklenburg County can find and connect with available digital inclusion resources by calling the local 311 government services hotline.
NC Counts Coalition	NC Counts Coalition is a nonpartisan, nonprofit 501(c)(3) organization committed to building a healthy, just, and equitable North Carolina through cross-sector partnerships that advance systemic solutions for communities facing systemic barriers, including BIPOC communities, LGBTQ+, low wealth, immigrant, and other communities. NC Counts is currently supporting Digital Equity through its Count Me NC program which aims to increase digital access to ensure a fair and accurate census.

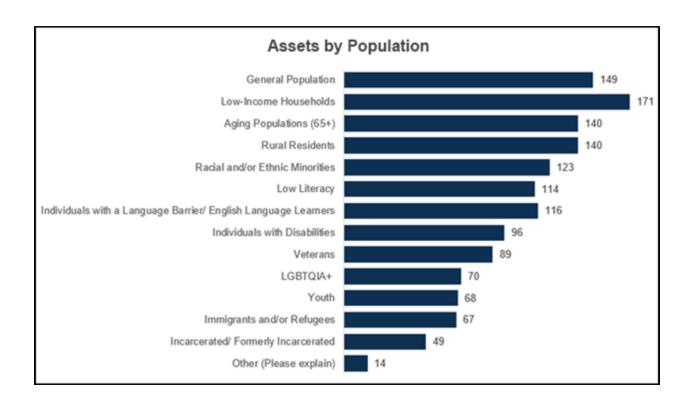
Asset	Description
<u>Digital Navigator Initiative</u>	The state's first statewide digital navigator initiative helps connect North Carolinians to services that aid with home connectivity issues, digital device use, digital skills acquisition, and Affordable Connectivity Program (ACP) enrollment. Announced in May 2023, the division partnered with three anchor institutions:
	 State Library of North Carolina: Train library staff and provide digital navigation services at libraries by hiring regional digital inclusion facilitators and a digital inclusion coordinator to assist participating public and tribal libraries statewide.
	 N.C. Community College System: Create a Digital Navigator Certificate program in English and Spanish, deploy trained digital navigators at 20 community colleges serving Tier 1 and 2 counties, and recruit adults from communities most impacted by the digital divide to serve as digital navigators.
	 N.C. Cooperative Extension: To hire digital literacy and skills extension agents in participating counties and train existing extension agents to host digital literacy and skills educational opportunities in their communities.
N.C. Business Committee for Education	The N.C. Business Committee for Education (NCBCE) trains school districts to develop technology teams (<u>Tech Teams</u>) to provide free training and paid experience to high school students who can provide technical training for adults and peers and help desk support to their schools and communities.
NC Central University's School of Library and Information Science	NC Central University offers versatile, accredited graduate degrees for students with interests in information systems, data science, information management, network management, school media and digital youth, digital humanities, health informatics, and leading and managing libraries. They have been leaders in digital equity including partnerships with the Durham Housing Authority and Digital Durham. They were also a key partner in development of the Asset Inventory.
North Carolina Telehealth Network Association	The North Carolina Telehealth Network Association (NCTNA) is a dynamic nonprofit that works to connect and empower North Carolina's public and nonprofit healthcare providers. As a telehealth consortium led by industry experts, they specialize in two areas that can be challenging to navigate alone: broadband connectivity and federally funded discounts on broadband for eligible providers.
Digital Equity Funders	North Carolina has a strong group of funders committed to investing in digital equity. The Z. Smith Reynolds Foundation has been convening a group of philanthropic leaders around digital equity issues. Other funders have been instrumental in funding digital inclusion plans and investing in digital divide issues including: Dogwood Health Trust , the John M. Belk Endowment, and the Reidsville Area Foundation.

Programs and Initiatives for Covered Populations

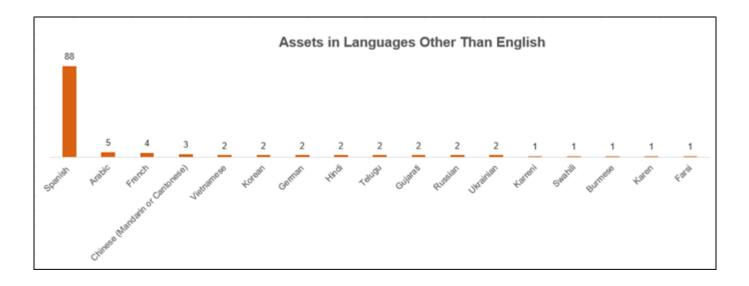
The division identified organizations meeting digital needs for all covered populations. The division cataloged the assets primarily serving specific covered populations for entities that completed the asset inventory survey. The division found that the greatest number of assets—serve aging individuals, and the fewest number of assets are available for individuals who are incarcerated or in re-entry, underscoring the need for more programs to support both. While many organizations serve individuals with disabilities, the division

only identified a handful that focused solely on the needs of people with disabilities and provided digital inclusion services. Similarly, while 89 organizations serve veterans, most were community anchor institutions like libraries and community colleges and may be more focused on general needs versus specific needs of these groups.

- 140 entities serve aging individuals
- 114 entities serve individuals with low literacy
- 116 entities serve individuals with a language barrier including immigrants and new Americans
- 140 entities serve rural residents
- 96 entities serve individuals with disabilities
- 171 entities serve low-income households
- 123 entities serve individuals who are members of a racial or ethnic minority group
- 89 entities serve veterans
- 49 entities serve incarcerated individuals or individuals in re-entry



The division also identified assets that were available in languages other than English. Seventy-two percent of these assets were available in Spanish, which highlights the need for assets and resources in other languages.



The Asset Inventory survey and additional data collection efforts also attempted to gather information about specific digital inclusion services offered by the organizations as well as the covered populations served by the organization, where available.

Most services were targeted at low-income (277 services), aging adults (225 services), and rural residents (217 services). Digital skills and technical support were the most frequently cited services provided across all covered populations. Device access and public devices/internet were also identified as common supports for covered populations. Services specifically targeted at supporting incarcerated individuals were least represented (65). During program implementation, we will work to gather more information about services offered to support this population.

Broadband access and affordability and virtual support were not categories included in the Asset Inventory survey but were identified through other data collection efforts. They do not reflect the total services offered across the state, and the division will evaluate whether these categories should be added to future iterations of the Digital Equity Survey.

Digital inclusion funding was offered at a lower rate than any of the other categories. Often, organizations offering funding will be nonprofit or philanthropic organizations rather than libraries, senior centers, prisons, etc., which were more represented in the initial asset inventory scan. During program implementation, the division will focus more specifically on identifying organizations that provide funding.

Table: Asset Inventory: Digital Inclusion Services by Covered Population and Priority Population

	Device Access	Digital Skills & Technical Support	Digital Navigation	Public Devices and Internet	Digital Inclusion Funding	Broadband Access & Affordability	Virtual Support	Other	Total Services
Aging Individuals	56	87	19	43	6	5	1	10	225
Incarcerated Persons	17	28	1	13	2	3	0	3	65
Racial/ Ethnic Minority Group	45	80	10	37	10	7	0	8	195

	Device Access	Digital Skills & Technical Support	Digital Navigation	Public Devices and Internet	Digital Inclusion Funding	Broadband Access & Affordability	Virtual Support	Other	Total Services
Low Income	76	101	16	53	12	9	0	12	277
Rural	59	78	13	43	8	7	0	11	217
Immigrants and Refugees	35	52	5	27	5	4	0	5	131
Low Literacy	46	73	5	35	7	9	0	6	179
Language Barrier/ English Language Learners	49	72	7	35	8	4	0	5	178
Disabilities	42	61	7	31	8	8	0	9	164
Veterans	29	50	4	23	4	3	0	6	117
LGBTQIA+	25	44	4	21	5	2	0	4	103
Youth	34	51	5	26	5	3	0	5	127

Note: Individual organizations may be counted multiple times if they serve multiple counties.

Outlined below are organizations providing needed digital inclusion resources to each covered population. The division chose to highlight a diverse group of organizations - large anchor institutions, senior centers, device refurbishers, re-entry councils, libraries, nonprofits, and others to showcase the broad scope of services offered throughout the state. However, because covered populations are not monolithic, most of these organizations provide services to more than one covered population.



Aging Individuals

The state offers aging individuals many resources and services to lead a safe and healthy life, including services to help adults remain at home, to find long-term care housing, to access adult protective services, and to utilize wellness and fitness resources.

Some current digital assets uniquely designed to serve the aging population in North Carolina state are listed in the table below:

Table: Examples of Digital Inclusion Assets for Aging Individuals

Asset	Description
Power Up USA's Digital Seniors Program	Power Up USA's Digital Seniors program provides classes and guidance specifically designed for older adults to help maneuver in the fast-paced digital world. Power Up USA works to close the digital divide in Charlotte and the surrounding areas. In addition to their Digital Seniors program, they also offer programs to support and train disadvantaged youth in robotics, coding, and other technologies.
Randolph Senior Adults Association	Randolph Senior Adults Association (RSAA) is a private, nonprofit organization that has served Randolph County since 1975. It is an organization of individuals who are interested in improving the quality of life for Randolph County residents who are 50 years of age and older and in serving as advocates on their behalf. RSAA provides access information about the information technology services department.
Onslow County Senior Center	Onslow County Senior Services commits to serving older adults through programs designed to enhance their ability to remain independent, preserve their right to self-determination and maintain their social, emotional and physical well-being. The senior center provides access to a computer room as well as computer classes for seniors five days a week.
Watauga County Project on Aging	The Project on Aging serves as the focal point for aging services in Watauga County. The agency encourages independence and promotes educational opportunities by providing supportive services to the county's older adults. The center provides ongoing digital literacy classes focused on teaching seniors how to use digital devices (e.g., smartphones).



Incarcerated Individuals

The state has a handful of strong resources serving individuals who are in re-entry or currently incarcerated. However, many of these services are in urban areas and most counties do not have a re-entry council. Some of the digital inclusion services available to incarcerated individuals and those in re-entry are highlighted below.

Table: Examples of Digital Inclusion Assets for Incarcerated Individuals & Individuals in Re-entry

Asset	Description
Department of Adult Corrections (DAC)	DAC's Education Services is upfitting classrooms in prison facilities with computer labs and devices to increase digital literacy among incarcerated individuals enrolled in education services, and their telehealth services are ensuring offenders have access to specialty care.
OurJourney	Our Journey is a nonprofit organization created by a group of former North Carolina prisoners who met behind the razor wire. From reentry kits to computer skills services, Our Journey is a new approach to freedom, where being released from prison isn't just an occasion to anticipate, but also a journey to join.

Asset	Description
City Startup Labs	The ReEntry Entrepreneurship Program (REEP) utilizes the LEARN/BUILD/DEPLOY Model, which marries core competencies, digital-tech service skills, and entrepreneurial training to prepare REEP participants to create business. The program issues digital technology certifications that show participants are keeping pace with today's digital roles and requirements.
	Alamance Community College's College and Career Readiness partners with Sustainable Alamance to offer digital literacy training to individuals in re-entry.
Durham Local Re-Entry Council	It is an organized network of individuals and agencies that provide support and the coordination of services for justice involved individuals. The council is a great help for individuals to access online resources as it provides them with a comprehensive list of where to get the digital services they need.



Low-Income Households

Access to affordable, reliable high-speed internet may assist low-income individuals and households connecting to community resources, job opportunities, educational opportunities, and financial assistance programs. Some current digital assets that are uniquely meant to serve low-income individuals in North Carolina include:

Table: Examples of Digital Inclusion Assets for Low-Income Households

Asset	Description
June10 Inc (Roots)	Roots provides a long-term residential community with peer support for women who are homeless, women with children, and pregnant women in Onslow County. They focus on the steps to successfully rebuild lives shattered by abuse, addiction, or poverty, including education, job training, and life skills. Roots offer digital skills classes for women as part of their Employment Preparation & Support services.
Innovate Chatham	The digital inclusion initiative aims at helping lower-income families gain access to the internet and all the opportunities it provides.
HUBZone Technology Initiative	HTI helps people by providing free technology for educational and employment opportunities. HTI acquires laptops donated by individuals, organizations, and businesses and converts them to Google Chromebooks for those in need. HTI provides an essential service to underserved communities and aims to reduce the digital divide.
Youth Navigating Toward Opportunity	Youth Navigating Toward Opportunity is a homegrown community organization in Pamlico County that mentors and caters to the needs of young people who are often below or at poverty level and frequently classified at-risk to provide vital aid and resources, such as school supplies, tutoring, public education, and technology training, in an attempt to inspire and provide a safe, productive outlet for the youth within the community.

Asset	Description
Peletah Ministries and Institute for Building Resilient Communities	Peletah Ministries convenes an Eastern North Carolina Collaborative that provides resources for families across the region. They have been leaders in promoting the Affordable Connectivity Program and hosting enrollment events. During the pandemic and beyond, they provided access to devices for students engaged in remote learning, operated a 24/7 drive-in Wi-Fi service for those who didn't have internet at home and provided digital literacy classes for parents to better integrate and engage in remote learning.



Individuals with Language Barriers

People with language barriers may encounter further challenges in digital inclusion due to limited English proficiency and linguistic resources. Online resources and information may not be easily available in languages other than English; people with limited English proficiency may face challenges maneuvering and utilizing digital platforms, applications, and online services; and online customer support, helplines, or instructional materials may not be available in languages other than English. Current

digital assets that are serving people with language barriers, including immigrants and new Americans in North Carolina state are as follows:

Table: Examples of Digital Inclusion Assets for People with Language Barriers (Immigrants and New Americans)

Asset	Description
AMEXCAN	The Mexican Association in North Carolina was created to promote the active participation of Mexicans and Latinos in their new communities and encourage the appreciation, understanding, and prosperity of the Mexican and Latino community through culture, education, leadership, health, and advocacy. The association provides digital literacy workshops among other educational services.
<u>WinstonNet</u>	WinstonNet's Multilingual Digital Skills Training courses which offers classes in Chinese, Swahili, Arabic, Spanish, and Karenni, and was developed to help immigrants and newcomers navigate community resources using technology.
<u>CityGate Dream Center</u>	CityGate Dream Center partners with community groups, schools, churches, and individuals to provide opportunities and resources. They offer ACC computer classes for students from the Spanish speaking community (among others) to learn more about Microsoft Word, Internet, Email, and much more!
Hispanic Federation, Inc.	Hispanic Federation (HF) is the nation's premier Latino nonprofit membership organization. Founded in 1990, HF seeks to empower and advance the Hispanic community, support Hispanic families, and strengthen Latino institutions through work in many areas. HF provides digital literacy curriculum and support across its network of membership organizations and just launched a mobile lab, which will be operated in partnership with Salud Sin Fronteras. The lab will support outreach by providing services such as digital education workshops, computer literacy training, access to telehealth, and other programs essential to the farmworker community in Eastern North Carolina.

Low Literacy Individuals

Some of the main challenges observed in North Carolina involve individuals who do not have their high school diploma or are not functionally literate and have limited or no access to direct support for employment and accessing supportive services. Digital inclusion is another significant concern for low literacy individuals since access to technology and the internet is crucial for normalcy, education, social connection, and access to resources. Some current digital assets that are uniquely meant to serve low-literacy individuals in North Carolina are as follows:

Table: Examples of digital inclusion Assets for Low Literacy Individuals

Asset	Description
Fill My Cup!	Fill My Cup! serves adults who are residents of Mecklenburg County, age 16 and over, that do not have their high school diploma or are not functionally literate. Those who want to learn to read, improve their reading and obtain needed skills. Fill My Cup also offers training for people to learn new digital skills.
Orange Literacy	Orange Literacy is an independent, community-based, volunteer-driven organization dedicated to making literacy available to all. They provide free, individualized literacy instruction to adults who would like to improve their skills. The organization offers computer classes that teach the basics of using computers and the Internet.
<u>Durham Literacy Center</u>	The adult literacy program serves adults ages 19 and older. Adult learners are matched with trained volunteer tutors or placed in small-group classes taught by program staff. Students receive research-based instruction tailored to their individual needs. They also work toward a wide range of personal goals such as applying for jobs, registering to vote, and managing their finances. Durham literacy center provides computer access and digital skills assistance to their students.



Individuals with Disabilities

People with disabilities may have exceptional challenges in accessing digital resources and participating fully in digital society. Some prevailing challenges include inaccessible websites, lack of assistive technology, limited digital skills, and affordability of internet services and devices. These challenges can then generate barriers to education, employment, healthcare, and social connections. Some current digital assets that are uniquely meant to serve people with disabilities in North Carolina are as follows:

Table: Examples of Digital Inclusion Assets for Persons with Disabilities

Asset	Description
<u>Disability Rights</u>	Disability Rights North Carolina (DRNC) is a legal advocacy agency that fights for the rights of people with disabilities in North Carolina. They handle cases involving discrimination, abuse and other rights violations. All services are at no cost to North Carolinians with disabilities. DRNC provides information to people with disabilities (or their families and advocates) to access digital services offered by organizations to people with disabilities.

Asset	Description
North Carolina Assistive Technology Program	The North Carolina Assistive Technology Program (NCATP) is a state and federally funded program that provides assistive technology services statewide to people of all ages and abilities. NCATP leads North Carolina's efforts to carry out the federal Assistive Technology Act of 2004 by providing device demonstration, short-term device loans, and reutilization of assistive technology. They promote independence for people with disabilities through access to technology.
Regional Centers for the Deaf and the Hard of Hearing	The Division of Services for the Deaf and the Hard of Hearing provides services through its seven North Carolina regional centers. These services are open to Deaf, Hard of Hearing and Deaf-Blind individuals. Family members, professionals, agencies and individuals seeking information or assistance also have access to these services. The centers provide technical assistance, training, and consultation to community and government organizations on communication access. The technology and equipment provided is based on income and specific to accommodation for hearing loss.
N.C. DHHS Division of Services for the Blind	The Division of Services for the Blind provides services to people who are visually impaired, blind and deaf-blind to help them reach their goals of independence and employment. They run several programs including Independent Living Services which provides assistive technologies and Vocational Rehabilitation which provides job readiness courses including digital skills and access to assistive technologies.



Racial and Ethnic Minorities

Digital inclusion challenges are especially significant for racial and ethnic minorities, as they often encounter disparities in accessing internet services and technology. The digital divide can further aggravate existing inequalities and limit opportunities for racial and ethnic minority groups. In North Carolina, various programs and resources are available to help address these challenges. Some current digital assets designed to serve racial and ethnic minorities in North Carolina are as follows:

Table: Examples of Digital Inclusion Assets for Racial and Ethnic Minorities

Asset	Description
American Indian Mothers Inc	American Indian Mothers Inc. (AIMI) is a nonprofit organization committed to serving the diverse needs of the Indigenous communities. AIMI's computer lab is a resource for the community to access devices and the internet.
El Centro Hispano	El Centro Hispano (ECH) is the largest Latino-led/Latino-serving organization in the State and has been working with and on behalf of the Hispanic/Latino community in Durham, Wake, Orange, and neighboring counties since 1992. El Centro Hispano helps adults learn the basics of how to use a computer. They also teach skills such as creating and managing emails, use of documents and spreadsheets, Google Suite, internet, and Zoom.

Asset	Description
Waccamaw Siouan Tribe	The Waccamaw Siouan Tribe, Inc is a nonprofit organization empowered to act on behalf of the Waccamaw Siouan Indian Tribe of North Carolina. The Tribe's long-range goals are to identify and seek solutions to problems affecting the social, economic, educational, health, housing and general welfare of their people. They offer a public computer lab and STEAM classes for youth.
Carraway Foundation	The Caraway Foundation provides resources that benefit students with their educational needs and supports those who have experienced and are going through a chronic illness by providing health related resources. They have a public computer lab to provide access to computers for the community.



Rural Inhabitants

Digital inclusion, particularly access to high-speed internet, is a substantial challenge in many rural communities. Some current digital assets that are uniquely meant to serve rural inhabitants in North Carolina are as follows:

Table: Examples of Digital Inclusion Assets for Rural Inhabitants

Asset	Description
Appalachian Regional Library	Appalachian Regional Library is a network of libraries across rural northwestern North Carolina, encompassing Ashe, Watauga, and Wilkes counties. The Appalachian Regional Library nurtures individual and community growth through free and equal access to resources such as computer devices and internet access.
Right Here, Right Now Project	Right Here, Right Now Project, is helping to address digital literacy skills in Alamance County, Rockingham County and Chatham County, North Carolina.
Tyrrell County CDC	The Tyrrell County CDC provides needed support and one-on-one digital literacy training to county residents.
NC Tech Paths	NC Tech Paths is a nonprofit operating at the intersection of technology, economic mobility, and rural revitalization. They provide rural neighbors with tech skills training and job placement and companies with an untapped tech talent pool. They have also opened the newest co-working space in Northwest North Carolina. Their mission is LIVE. TRAIN. REMAIN.
Through The Trees	Through the Trees, located in Brevard provides funding to cover expansion fees to bring service lines to new areas, subsidizes monthly internet fees for low/no income households, and provide devices for those who need them.



Veterans

Based on the division's analysis, digital inclusion resources focused on the needs of the Veterans are limited. Digital connectivity efforts for veterans must be a priority for North Carolina. Some current digital assets uniquely meant to serve veterans in North Carolina are as follows:

Table: Examples of Digital Inclusion Assets for Veterans

Asset	Description
TJR Life Center	Bridging the Gap Veterans Services are intended to reconnect the veterans that have transitioned from military service to the civilian sector, with life changing entitlements. The center assists veterans by offering access to computer devices and teaching them the digital skills they need to succeed in transitioning.
North Carolina Department of Commerce Division of Workforce Solutions	N.C. Department of Commerce Division of Workforce Solutions' mission is to assist Veterans and their families by identifying needs and connecting them to community partners across North Carolina. Veterans Services of the Carolinas division provides digital assistance for veterans looking for educational and job opportunities.



LGBTQIA+

Based on the division's analysis, digital inclusion resources focused on the needs of the LGBTQIA+ community are limited. While many Community Anchor Institutions (libraries, community colleges, non-profits) provide digital inclusion services that are open to LGBTQIA+ community individuals, they are intended for a broad audience and may not create a safe space for these individuals. We identified only a handful of resources that focus on the digital inclusion needs of LGBTQIA+, marking a need for more programming

to support this community.

Table: Examples of Digital Inclusion Assets for LGBTQIA+

Asset	Description
Code the Dream	Code the Dream (CTD) offers free intensive training in software development to people from diverse backgrounds. In CTD Labs, coders work with experienced mentors to hone those skills by building apps and technology platforms for a range of startups, nonprofits and government clients.
WISE Project	Initiated by Gray Rodgers in 2020, addresses ageism and fosters intergenerational connections within North Carolina's LGBTQ community. Rodgers emphasizes the importance of learning from and supporting older LGBTQ individuals. Furthermore, aims to strengthen the LGBTQ community by bridging generational gaps and fostering mutual learning.

Assets: Other Key Programs and Partnerships

In addition to the assets listed above, there are several key programs across the state that are meeting needs on a large scale, including the Connecting Minority Communities program, and the Digital Equity Grant projects.

Connecting Minority Communities

NTIA created a \$268 million grant program for Historically Black Colleges and Universities (HBCUs), Tribal Colleges and Universities (TCUs), and Minority-Serving Institutions (MSIs) for the purchase of broadband service access and eligible equipment or to hire and train information technology personnel. Eight North Carolina HBCU's received grants. A summary of their projects is provided below.

- **Bennett College:** Expanding broadband access and learning opportunities in entrepreneurship, coding and artificial intelligence for Bennett students and women and girls of color in the community and ensure Bennett College has adequate broadband and Wi-Fi capabilities on its campus.
- Elizabeth City State University: Bridging the digital divide and amplifying educational opportunities
 and workforce development to ensure that university students and residents of the surrounding anchor
 communities have access to the opportunity to compete in today's workforce.
- Fayetteville State University: Piloting activities designed to improve broadband utilization, remote learning, learning outcomes in STEM disciplines, entrepreneurship and cybersecurity capabilities for an expanded set of students and small businesses in surrounding underserved, under-resourced anchor communities.
- Johnson C. Smith University: Creating a vibrant and connected community that leverages broadband
 to support economic growth and prosperity within the anchor communities. Through a committed crosssector consortium of industry, academia, economic development, nonprofit, and minority business
 organizations, and to increase broadband connectivity, minority business enterprises, access to remote
 learning and work, digital and technical workforce, and economic mobility.
- N.C. A&T State University: This project has two goals. The first is to update the Wi-Fi network and other
 equipment within the residence halls on campus, which are unable to meet student's bandwidth and
 security needs. The second goal is to create staff positions to support faculty development to further
 integrate technology into the teaching and learning process.
- N.C. Central University: This project will address the lack of broadband access, connectivity, adoption, and equity at the University and surrounding anchor communities. It also helps residents in the anchor communities who may lack the digital literacy skills needed to seek, obtain, and retain employment, as well as to perform other tasks in daily life.
- Saint Augustine's University (SAU): Increasing internet bandwidth capacity and connectivity at SAU and building digital literacy skills and promoting digital equity within the SAU campus and anchor communities.
- Shaw University: Improving the learning capacity and capabilities of students who are currently enrolled at the university. It also aims to enable students to engage in supplemental learning with a hybrid learning model, and low-income students will be able to unlock the potential of digital learning with its own Digital Resources.

Interagency Digital Equity Grant Recipients

The division is partnering with eight state government agencies and universities through the **Digital Equity Interagency Grant Program**. This \$9.9 million program launched in September 2023 provides funding for state agencies and UNC System universities to develop or expand large-scale, statewide or regional digital inclusion programs.

Grantees include:

- East Carolina University: Train community health workers across 18 counties in the eastern N.C. subregion to provide digital literacy and skills training sessions and partner with libraries to deploy computing devices, hotspots, and internet hubs.
- N.C. Department of Health and Human Services, Division of Aging and Adult Services: Train and support digital navigators to serve the digital needs of older adults in all 100 counties.
- N.C. Department of Adult Corrections Education Services: Upfit classrooms in prison facilities with computer labs and devices and increase digital literacy among incarcerated individuals enrolled in education services.
- N.C. State University Institute for Emerging Issues: Develop and help implement digital inclusion plans across the state. All counties will be covered by a digital inclusion plan, either at the county or the regional level, by the end of 2024.
- N.C. Department of Health and Human Services, Office of Rural Health: Implement a train-the-trainer digital skills and health language program for rural communities across the state, provide technical and capacity building support for organizations, and increase access to affordable internet in migrant housing.
- N.C. Business Committee for Education, Inc.: Expand technology teams to provide free training and paid experience to high school students who can provide technical training for adults and peers and help desk support to their schools and communities. Partner with Hometown Strong to create digital equity ambassadors to provide digital literacy training and coordinate local digital inclusion initiatives.
- N.C. Department of Transportation, Office of Civil Rights: Provide job-specific digital skills training and devices for individuals enrolled in N.C. Department of Transportation workforce training.
- N.C. Division of Historic Sites and Properties: Increase the availability and accessibility of online content, develop online offerings that feature various assistive technologies and fund broadband subscription costs for visitors at historic sites and properties.



COUNTY AND REGIONAL DIGITAL INCLUSION PLANS

North Carolina is a leader when it comes to 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." This section outlines key themes from 27 draft and adopted plans representing 48 counties and the Qualla Boundary (home of the Eastern Band of Cherokee Indians). in North Carolina that completed a thorough analysis of their digital inclusion barriers and opportunities.

Several strategic statewide partners helped formulate, fund, and facilitate the digital inclusion planning process at the local and regional levels. NC State University's Institute for Emerging Issues (IEI) started the Building a New Digital Economy in North Carolina (BAND-NC) program in spring 2020 focusing on developing local digital inclusion plans. IEI 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. A regularly updated map of all the county digital inclusion plans completed or in progress and other information about these plans can be accessed at iei.ncsu.edu/band-nc/resources.



Common Barriers and Assets in Local Digital Inclusion Plans

Many of the finalized local digital inclusion plans identified the same top barriers to digital equity: availability of high-speed internet; the cost-of-service subscriptions; lack of detailed information on what areas are not served or are not served well, lack of affordable devices, skills mismatch, and a lack of information among community members about how and where to get assistance with digital needs.

Rural issues were paramount for several plans because of the demographics of the rural area and the lack of high-speed internet service in many rural areas. Plans in counties with sizable immigrant and English-learner populations emphasized the disconnect of groups that need translation services and culturally appropriate services.

Local plans commonly identified public-school systems, community colleges, and public libraries as sources of free Wi-Fi, loaned devices, instruction, and information about other resources. While business and nonprofit resources were also widely cited, the emphasis on government funded and managed institutions in these local plans may reflect the makeup of the groups that developed the plans.

When developing North Carolina's statewide digital inclusion plan, it is important to recognize the hard work of community leaders. Their efforts and partnership are integral to achieving the vision, mission and goals of the state plan.

Other Barriers to Digital Equity in Local Digital Inclusion Plans

While many of the barriers to digital equity highlighted in the local plans mirror those identified through the Digital Equity Survey and listening sessions, several other barriers were also raised.

Discrimination: Several plans discussed the role that historical racial and ethnic discrimination played in creating the unequal circumstances observed today. As the Institute for Emerging Issues so aptly described:

"Many racial and ethnic populations in North Carolina, especially Black residents and Spanish-asfirst-language speakers, face housing, transportation, employment, health, and education challenges that compound and are compounded by broadband disconnection."

Government and Policy: As much as government-provided assets were touted as important digital assets in communities, government barriers were also frequently raised. Specifically, the three-tiered system by which the state of North Carolina characterizes the relative economic health of counties was mentioned as a barrier because it targets funding and programs to the counties in Tier 1 and Tier 2. Tier 3 counties, many of which contain the largest urban centers and resort communities, also have pockets of extreme poverty and distress, but are not able to access some programs designed to alleviate those conditions.

Transportation: Transportation was another barrier that was routinely addressed by local plans. The lack of accessible, reliable transportation, particularly in rural areas, was frequently highlighted as a barrier to residents connecting to the services that are already available, such as library and community college programs.

Common Objectives of Local Digital Equity Plans

Local digital equity plans almost universally identified increasing connectivity as a major objective, with only one out of the 27 plans not emphasizing this objective. The next most common objective was to improve the speed and the reliability of the service. There was considerably less consensus on the following most cited objectives:

- Improving digital literacy skills,
- · Increasing access to affordable, new, or refurbished devices, and
- Incorporating digital inclusion strategies into local and regional community and economic development plans.

Common Strategies of Local Digital Equity Plans

Most of the local plans reviewed propose to expand publicly available Wi-Fi, with special attention placed on ensuring that it is accessible to disconnected or underserved populations. Almost all local plans propose to provide additional information about existing subsidy programs for both services and devices. The next

STATE OF NORTH CAROLINA

three most common implementation strategies are:

- · Provide additional education about subsidy programs,
- Create, promote, and/or expand computer donation and refurbishment programs, and
- Provide support to existing businesses.

Table: Current Local Digital Inclusion Plans in North Carolina as of August 2023

F	Plan County(ies)	Plan Name	Plan Link	Adopted Year
1	Alamance	Alamance County Digital Inclusion Plan: Connecting for Success	Alamance County Digital Inclusion Plan	2022
2	Alexander	Alexander County Digital Access Plan	Alexander-County-Digital-Inclusion- Plan-Gary-H.pdf	2023
3	Bladen	Bladen County Digital Inclusion Plan	Bladen County Digital Inclusion Plan Final .pdf	2021
4	Caldwell	Caldwell County Digital Access Plan	Caldwell DIP.pdf	2023
5	Carteret	Connecting Carteret: A Plan for Digital Inclusion	Carteret County Digital Inclusion Plan	2021
6	Chatham	Chatham Digital Inclusion Plan	Chatham County DRAFT Digital Inclusion Plan (1).pdf	Draft
7	Chowan	Chowan County Digital Inclusion Plan	Chowan County Digital Inclusion Plan Final.pdf	2021
8	Columbus	Columbus County Digital Inclusion	Columbus County Digital Inclusion Plan Final Version.pdf	2021
9	Duplin	Duplin County Digital Inclusion Plan	Duplin County Digital Inclusion Plan Final.pdf	2021
10	Durham	Digital Equity Plan: A Plan for Durham	Durham Digital Inclusion Plan; Durham County Digital Inclusion Plan Durham County Digital Inclusion Plan Part 2	2020
11	Forsyth	Connecting Forsyth County	Forsyth County Digital Inclusion Plan. pdf	2021
12	Hoke	Hoke County Digital Inclusion Plan	Hoke County Digital Inclusion Plan Final.pdf	2021
13	Mecklenburg	Center for Digital Equity 5 Year Plan	Mecklenburg County Updated Plan. pdf	2020
14	McDowell	Connecting McDowell County	McDowell Digital Inclusion Plan Final 3.9.pdf	2022

F	Plan County(ies)	Plan Name	Plan Link	Adopted Year
15	Onslow	Onslow County Digital Inclusion Plan	Onslow County Digital Inclusion Plan. pdf	2021
16	Pender	Pender County Digital Inclusion Plan	Pender County Digital Inclusion - Approved November 15, 2021.pdf	2021
17	Perquimans	Perquimans County Digital Inclusion Plan	Perquimans County Digital Inclusion Plan Final.pdf	2021
18	Randolph	Building Connections, Starting at Home: Randolph County Digital Inclusion Plan	Randolph-County-Digital-Inclusion- Plan.pdf	2020
19	Robeson	Robeson County Digital Inclusion Plan	Robeson County Digital Inclusion Plan Final Version.pdf	2021
20	Rockingham	Connecting Rockingham County: Digital Inclusion Plan	Rockingham County Digital Inclusion Plans.pdf	2021
21	Scotland	Scotland County Digital Inclusion Plan	Scotland County Digital Inclusion Plan Final.pdf	2021
22	Stanly	Digital Inclusion: A Framework for Broadband Availability, Access, Affordability and Adoption in Stanly County	Stanly-County-Digital-Inclusion-Plan. pdf	2022
23	Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey	Digital Inclusion for the High Country: Connection and Engagement for all	High Country COG Digital Inclusion Plan.pdf	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	Land of Sky Digital Inclusion Plan	2020
25	Polk, Rutherford	Polk & Rutherford Counties Digital Inclusion Plan	Polk & Rutherford Digital Inclusion Plan Final(2.13).pdf	2023
26	Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, The Qualla Boundary	Region A Digital Inclusion Plan	Southwestern Commission Digital Inclusion Plan.pdf	Draft
27	Edgecombe, Halifax, Nash, Northampton, Wilson	Upper Coastal Plain Digital Inclusion Plan	Upper Coastal Plain Digital Inclusion Plan.pdf	2021

BARRIERS AND NEEDS

North Carolina's covered populations are not monolithic - their identities are intertwined. The division's community-driven planning process confirmed that many individuals identify with more than one covered population, and their barriers to digital equity may be multiple, overlapping, and reinforcing. It is possible for one North Carolinian to be an aging individual, disabled, low income, a member of a minority group, and live in a rural area. Living in a rural area may affect the availability of services, while cost may be the inhibitor for low-income individuals. For aging populations, there may be resistance to adopting something new, and there are issues of accessibility for individuals with disabilities.

Some of the common needs the division identified from the N.C. Digital Equity Survey, local digital equity plans, and listening sessions and a review of unique barriers to digital equity experienced by covered populations are summarized below. The Digital Equity Survey (N=7,447) responses represented 100% of the counties and 96% of the zip codes in North Carolina. See <u>Appendix E</u> for more information about methodology and a map of survey responses.

Common Digital Equity Barriers and Needs

There were several barriers to digital equity raised by multiple covered populations and across the geography of North Carolina. These barriers, when removed, would resolve most of the gaps for all covered populations.

Common needs as outlined below include:

- 1. Access to and affordability of high-speed internet,
- 2. Accessibility and inclusivity of online public resources,
- 3. Digital literacy,
- 4. Cybersecurity and privacy, and
- 5. Availability and affordability of devices and technical support.

Barrier 1: Internet Access & Affordability

Internet Access

Defining Internet Access

The division defines access to high-speed internet as internet that has a minimum speed of 100/20 Mbps (100 Megabits per second download/20 Mbps upload). This speed ensures North Carolinians have internet service fast enough to meet the needs of their household.

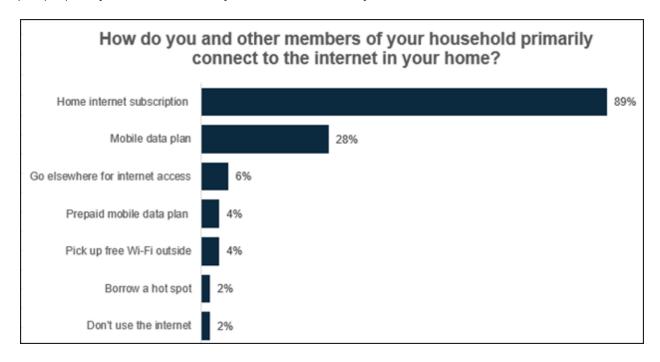
The division analyzed both access and affordability of fixed broadband (home internet) and wireless broadband (mobile internet) technology.

Widely Cited Internet Access Barriers and Needs

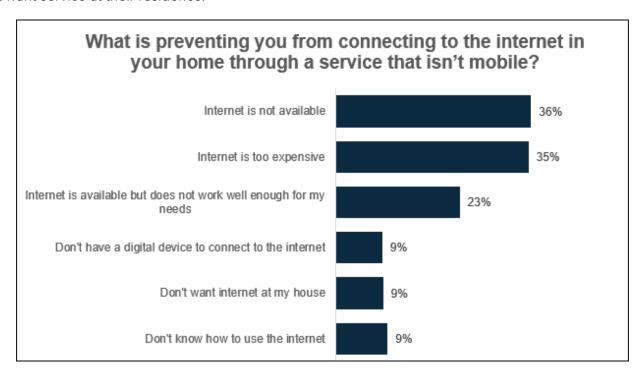
The N.C. Digital Equity Survey respondents were asked how they connect to the internet, and 86% (n=5,794) noted they had a home internet subscription. However, based on FCC data, the division identified 283,403 unserved Broadband Serviceable Locations (BSLs) and 138,903 underserved BSLs representing a total of 316,576 units (homes and businesses) unserved and 156,100 units (homes and businesses) underserved (FCC Broadband Data Collection – June 2023). Unserved households do not have internet access (or have access that's less than 25 Mbps download and 3 Mbps upload) and underserved households do not have

internet service considered "high-speed" (more than 25 Mbps download and 3 Mbps upload but less than 100 Mbps download and 20 Mbps upload).

These unserved and underserved households rely on slow service through telephone lines or on mobile devices (28%); satellite service which is often costly or has poor reliability; or travel to a commercial center or the nearest town where they can use public Wi-Fi at government buildings, public outdoor spaces, or businesses (6%). Others rely on a prepaid mobile phone plan or pick up free Wi-Fi outside (5%) or borrow a hotspot (2%). Only 3% of those surveyed indicated that they do not access the internet at all.



Based on the digital equity survey results of individuals who do not have an internet subscription (n=940), the largest overall barriers for North Carolinians are availability (36%), affordability (35%), and reliability (23%) of internet service. Only 9% (n=72) of respondents who did not have home internet service said that they did not want service at their residence.

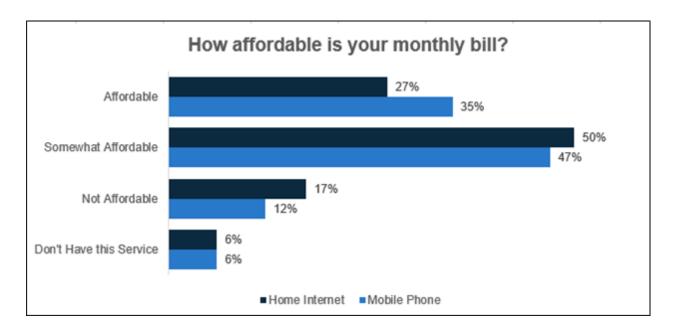


Open-ended survey results of participants indicated that individuals: "Would like to see internet service be more reliable", especially in rural areas. They also noted the need for access to more public Wi-Fi.

"I couldn't work without reliable internet, and my young adult/teen kids would struggle with their work and school. Days when the internet cuts out are really tricky."

Widely Cited Affordability Barriers and Needs

The cost of service was cited as a significant impediment to accessing the internet by several groups. Based on survey results, 27% of those without a home internet subscription cited cost as the main reason. When asked how affordable service plans were, most found the cost somewhat affordable for home internet (50%) and mobile plans (47%). When asked what they considered affordable, \$61/month was the average cost for home internet and \$53 for mobile internet. It is significant that 17% of North Carolinians found their monthly home internet bill to be unaffordable, and 12% found their mobile service unaffordable. These families often must choose between their internet and cellular service and other household expenses (e.g., electric bills, groceries).



"Would like access to affordable and reliable home internet service. My current home internet service frequently buffers at some point while I watch streaming TV apps each evening. I then turn off my television in frustration because I cannot continue viewing my favorite TV entertainment."

Affordable Connectivity Program

The Affordable Connectivity program (ACP) is a federal program run through the Federal Communications Commission (FCC) that reduces the cost on internet for eligible households by \$30 per month and \$75 per month on tribal lands. The program has been transformational in getting households online who would otherwise be unable to pay for the internet (877,255 North Carolina households are enrolled and receiving the benefit as of Jan. 9, 2024).

However, listening sessions and outreach events revealed several challenges that users encountered with the program. Participants cited frustration at the slow and unreliable internet connectivity received through

⁸ Eligibility includes: households at or below 200% of the Federal Poverty Guidelines; households participating in certain government assistance programs such as SNAP, Medicaid, WIC, or other programs; and households who already receive a Lifeline benefit.

the program, issues related to duplicate enrollment, as well as application submission challenges and limited support from the ACP customer service hotline. Additionally, outreach efforts often fall short in educating potential beneficiaries about the full scope of the program's benefits, and listening session participants raised concerns about excluding individuals without a conventional income structure or whose income may be over the eligibility threshold but who still struggle to pay for internet.

Access and Affordability by Covered Populations

The Digital Equity Survey results indicate that most North Carolinians (97%) can access the internet in one or more ways. Most covered populations also subscribe to a home internet service plan (66%-92%). Incarcerated or formerly incarcerated individuals (66%) and those with low literacy levels (60%) were the least likely to have a home internet subscription. Mobile data plans were also frequently used by covered populations to get online (23-33%).

Incarcerated/reentry (18%) were the most likely to utilize a prepaid mobile plan or go elsewhere to access internet service (10% for both). Less than 10% of covered populations utilized a hotspot to get online (1-7%). Of significance, individuals with low levels of literacy were nearly seven times (20%) as likely to indicate that they don't use the internet compared to the general population (3%).

Table: How do you and other members of your household primarily connect to the internet?

	Home Internet Subscription	Mobile Data Plan	Prepaid mobile data plan	Pick up Free Wi-Fi	Borrow a Hotspot	Go Elsewhere for Internet	Don't Use the Internet
Overall	86%	28%	5%	5%	2%	6%	3%
Aging Individuals	88%	25%	4%	5%	1%	4%	3%
Incarcerated/re-entry	66%	31%	18%	9%	7%	10%	5%
Individuals with Disabilities	85%	28%	7%	6%	2%	7%	3%
Language Barriers	86%	33%	7%	6%	3%	8%	1%
LGBTQIA+	92%	32%	10%	6%	1%	10%	1%
Low Income	78%	28%	9%	7%	3%	9%	4%
Low Literacy	60%	22%	8%	10%	3%	3%	20%
Racial/ ethnic minorities	83%	31%	7%	7%	3%	6%	4%
Rural Residents	85%	28%	5%	5%	2%	6%	3%
Veterans	88%	23%	4%	4%	2%	6%	3%

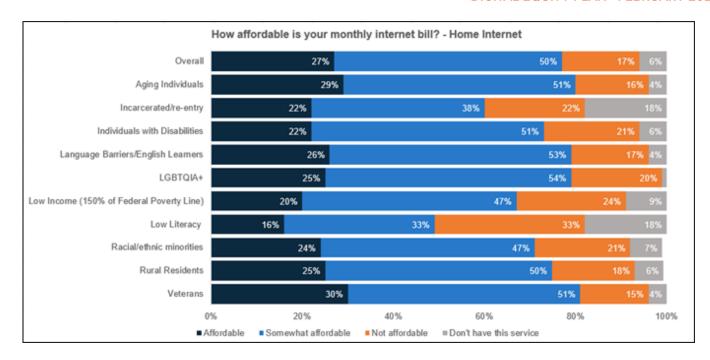
For those North Carolinians without access to a home internet subscription, the majority indicated that internet service for their residence was either too expensive (35%) or not available (36%). Incarcerated individuals or those in re-entry were the most likely to note cost (48%) or lack of available service (39%) as a main barrier to accessing internet service at home. Many also indicated that service was available at their residence, but it did not work well enough to meet their needs (16%-23%). Individuals with low literacy (35%),

language barriers (13%), and low-income families (11%) were the most likely to lack access to a digital device. Individuals with low literacy were far more likely than any other group to indicate they did not want internet service (20%) or that they didn't know how to use the internet (35%).

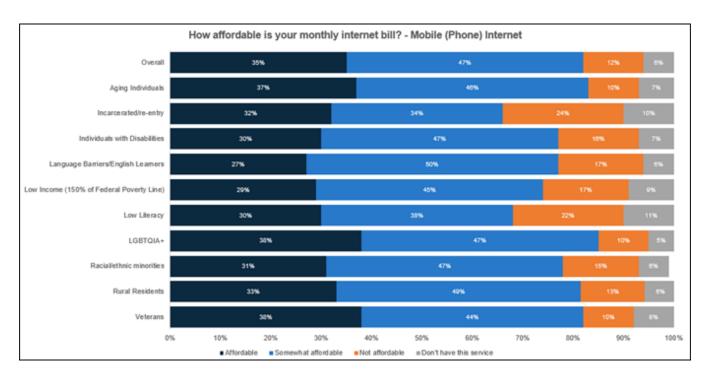
Table: What is preventing you from accessing the internet in the home?

	Internet is too expensive	Internet is not available	Internet is available but does not work well enough for my needs	Don't know how to use the internet	Don't want internet at my house	Don't have a digital device to connect to the internet
Overall (n=956)	35%	36%	23%	9%	9%	9%
Aging Individuals (n=479)	36%	30%	18%	14%	12%	10%
Incarcerated/re-entry (n=42)	47%	38%	25%	13%	6%	0%
Individuals with Disabilities (n=366)	45%	25%	20%	13%	10%	10%
Language Barriers (n=64)	41%	35%	22%	6%	4%	13%
LGBTQIA+ (n=20)	37%	37%	16%	0%	11%	0%
Low Income (n=299)	46%	29%	18%	13%	10%	13%
Low Literacy (n=24)	35%	25%	5%	35%	20%	35%
Racial/ ethnic minorities (n=269)	38%	30%	16%	14%	9%	13%
Rural (n=876)	36%	36%	22%	10%	9%	8%
Veterans (n=87)	29%	38%	15%	9%	9%	8%

Considering affordability across covered populations, aging individuals (29%), veterans (30%), individuals that live in rural areas (26%), and individuals with a language barrier (26%) were more likely than other covered populations to consider the cost of monthly internet service affordable. In contrast, individuals with low levels of literacy (33%) and low-income individuals (24%) were the most likely to consider the cost of home internet services unaffordable.



When looking at affordability of mobile internet service we see similar trends with veterans (38%) and aging individuals (37%) finding the cost of mobile internet services to be affordable while incarcerated/reentry individuals (24%), individuals with low levels of literacy (22%), low income (17%), and individuals with disabilities (17%) finding the service unaffordable. Formerly incarcerated individuals (10%) and individuals with low literacy (11%) were also more likely to indicate that they did not subscribe to a mobile internet plan.



Average Affordability

When looking at what covered populations would consider affordable prices for home and mobile internet, we see that the range is \$50-65/month for home internet and \$46-54/month for mobile internet service. Incarcerated/reentry (\$50), low literacy (\$51), and low income (\$54) individuals required the least expensive home internet services to be able to afford a subscription; low income (\$45), incarcerated/reentry (\$46), and

individuals with a language barrier were most likely to need lower cost cellular internet service.

Table: What is the highest price per month you would consider a subscription for home or mobile internet to be affordable?

	Home Internet	Mobile Internet
Overall	\$61	\$53
Aging	\$60	\$49
Incarcerated	\$50	\$46
Individuals with Disabilities	\$56	\$47
Language Barrier	\$56	\$52
LGBTQIA+	\$61	\$54
Low Income	\$54	\$45
Low Literacy	\$51	\$48
Racial/Ethnic Minority	\$56	\$52
Rural	\$65	\$54
Veterans	\$62	\$52

To access a deeper analysis of internet access and affordability needs by the covered population, click the following link: Internet Access and Affordability.

Barrier 2: Lack of Digital Skills (Digital Literacy)

Defining Digital Literacy

Digital literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills (American Library Association, 2011). Digital skills are specific proficiencies or competencies using digital tools or software applications. Digital skills are task-oriented and relate to the ability to perform specific actions or tasks, including operating software programs, data entry, using spreadsheets, navigating social media platforms, coding, or conducting online research. The National Digital Inclusion Alliance (NDIA) further explains that a person with digital literacy skills:

- Possesses the variety of skills technical and cognitive required to find, understand, evaluate, create, and communicate digital information in a wide variety of formats;
- Can use diverse technologies appropriately and effectively to retrieve information, interpret results, and judge the quality of that information;
- Understands the relationship between technology, life-long learning, personal privacy, and stewardship
 of information;

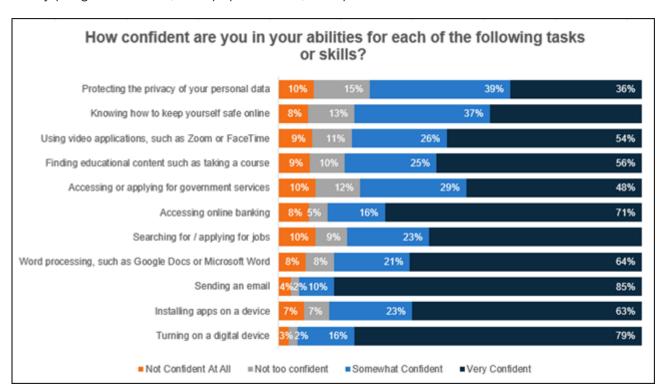
- Uses these skills and the appropriate technology to communicate and collaborate with peers, colleagues, family, and on occasion, the general public; and
- Uses these skills to actively participate in civic society and contribute to a vibrant, informed, and engaged community.

Lack of digital skills to accomplish everyday tasks online and insufficient digital literacy training are the primary barriers outlined below.

While the division uses the term "digital literacy" for this plan, it acknowledges that not all community members agree with the term. NDIA recommends using terms like "digital skills" or "beginner computer training" while conducting community work. They explain that "the word 'literacy' and the implication of 'illiteracy' can be perceived negatively by communities who need digital inclusion most." (NDIA, n.d.). Other suggestions from community stakeholders included replacing the term "digital literacy" with "digital fluency." The division may ultimately adopt another term.

Widely Cited Digital Literacy Barriers and Needs

A lack of digital skills is a barrier to the safe and effective use of the internet by many North Carolinians. Nearly all digital equity survey respondents identified feeling either "very" or "somewhat confident" in their ability to engage in basic technology tasks such as turning on a device (95%), sending emails (94%), and installing apps (86%). They were less confident in completing more complex tasks such as accessing or applying for government resources (77%), using video applications (80%), finding educational content (82%), and searching for/applying for jobs (81%), which could have serious, negative consequences. Across many population groups, parents specifically expressed frustration and concern that their lack of digital skills prevented them from assisting their children in completing homework or accessing resources. "As technology advances and more and more services/resources move online, internet access and the ability to successfully navigate the internet have become essential skills (Fernández-Muñoz et al., 2021; Lai & Widmar, 2021). While the younger generation has been deemed 'digital natives', research indicates that a significant portion of this population lacks the necessary digital literacy/skills to succeed in the digital economy (Bergson-Shilcock, 2020)." (Davis et al., 2023).



Digital Literacy by Covered Population

Most covered populations felt either "very" or "somewhat confident" in their ability to engage in basic technology tasks such as turning on a device, sending emails, and installing apps except for those with lower literacy levels and low-income individuals. Individuals with low levels of literacy were far less likely to feel confident in their basic and advanced digital literacy skills (30-58%) when compared to the general population and all other covered populations When examining other covered populations, incarcerated/reentry individuals (11-46%) individuals within 150% of the federal poverty level (10-37%), those with language barriers (6-32%), and individuals with disabilities (8-38%) were the next most likely to lack confidence overall in their digital skills. Rural residents (76-94%), aging individuals (73-93%), veterans (72-94), and individuals from a racial or ethnic minority group (72-91%) were the most likely to report higher confidence in their overall digital skills. Accessing and applying for government resources continued to be the area where covered populations felt least confident (47-82%), which is important as many of these individuals will likely need to interact with government resources in some capacity.

Table: How confident are you in your abilities for each of the following tasks or skills (Very or somewhat confident)

	Turn on a digital device	Install apps on a device	Send an email	Word processing such as Google Docs or Microsoft Word	Search for / applying for jobs	Access online banking	Access or applying for government services	Find educational content	Use video application such as Zoom or FaceTime
Overall	95%	86%	94%	85%	81%	86%	77%	82%	80%
Aging Individuals	94%	82%	93%	81%	75%	84%	75%	77%	73%
Incarcerated/ re-entry	89%	80%	84%	62%	74%	73%	55%	66%	66%
Individuals with Disabilities	92%	79%	91%	78%	71%	80%	68%	72%	69%
Language Barriers	94%	85%	91%	82%	77%	84%	69%	80%	88%
LGBTQIA+	99%	93%	98%	92%	91%	95%	83%	91%	89%
Low Income	90%	77%	87%	72%	69%	77%	64%	69%	67%
Low Literacy	58%	43%	42%	34%	33%	42%	30%	36%	48%
Racial/ethnic minorities	92%	82%	89%	80%	78%	80%	72%	77%	81%
Rural Residents	94%	86%	94%	84%	81%	86%	77%	81%	79%
Veterans	94%	85%	93%	82%	77%	87%	80%	80%	72%

For a deeper analysis of internet digital literacy needs by covered population, click the following link: <u>Digital</u> <u>Literacy</u>.

Barrier 3: Access to Digital Devices and Technical Support

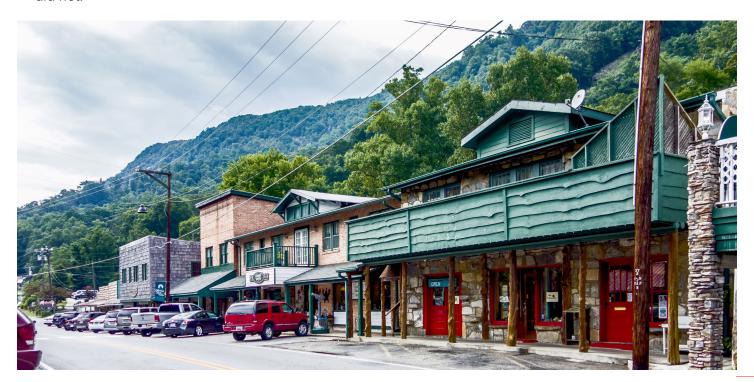
Defining Access to Digital Devices and Technical Support

Several factors fall under the definition of device access, affordability, and technical support.

- **Device ownership:** Personal ownership of a device, distinct from using loaner computers and publicly accessible options such as computer labs. Access to the internet in any form is valuable, but personal device ownership provides additional access and agency over when and how people get online.
- Large screen devices: Internet-enabled devices, such as laptops, desktops, Chromebooks, and tablets.
 Distinct from smartphones and often including a keyboard, large-screen devices are ideal for creating
 content (such as writing a resume), as opposed to smartphones, which are more suited to content
 consumption. Smartphones are indeed useful, but not enough for full and equitable participation online
 for most people.
- **Technical support:** A specialized customer service function that addresses complex technical issues beyond the scope of standard help desk assistance. It plays a crucial role in resolving technical problems, providing hardware repair services, offering warranty support, and troubleshooting intricate hardware-related failures. Technical support professionals are highly skilled individuals with expertise in various technical domains. Their primary responsibility is to assist users in resolving intricate technical challenges and ensuring the smooth operation of their devices.

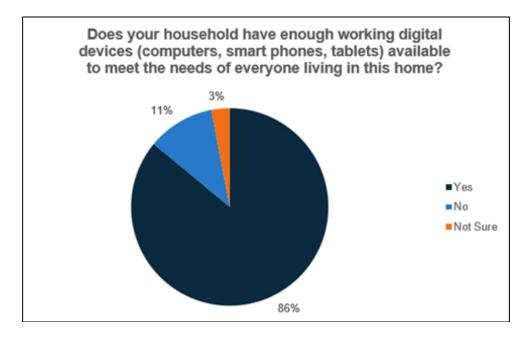
Widely Cited Digital Device Access and Technical Support Barriers and Needs

Fully participating in a digital society requires access to reliable devices that meet the needs of users as well as repair and technical assistance services to address issues with those devices. Most survey respondents indicated that they had enough working devices to meet the needs of their family in the home; however, 11% did not.

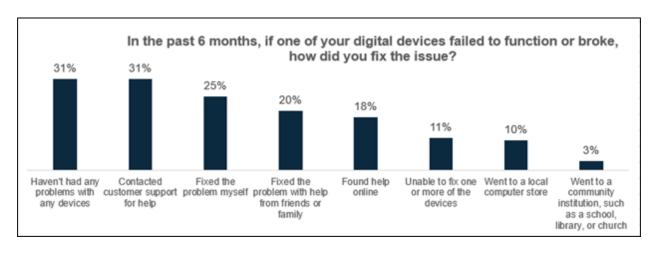


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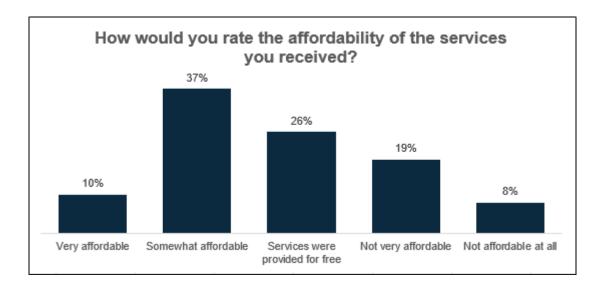
Listening sessions revealed there were several reasons why people did not have access to a device that meets their needs. For many, a new or used device was just too expensive. Others had a device, such as a smartphone; however, they needed access to a tablet or computer to complete tasks for work, school, or personal purposes. Many families indicated that they had access to enough devices for their students during the school year, but over summer break, these devices were returned. Community members, in general, were not aware of the resources and organizations that provided access to free or low-cost devices.



Nearly one third (31%) of survey respondents indicated they had not experienced any issues with their devices in the past six months. Most individuals did experience some sort of device problem, and most (89%) were able to resolve their issue. Many contacted customer support (31%), fixed the problem themselves (25%) or with the assistance of friends and family (20%), or found help online (19%).

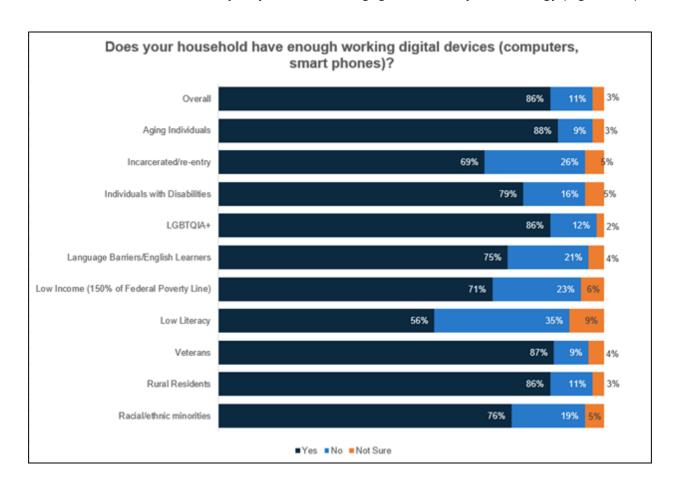


Many survey respondents and meeting participants raised the issue of the inability to have devices repaired or receive technical assistance, either because the services were not available near them, or the available services were prohibitively expensive. Survey results also indicate that over a quarter (27%) of North Carolinians did not find the technical support they received affordable. Another quarter (26%) had services provided for free, and only 10% found technical support very affordable.



Digital Device Access and Technical Support by Covered Population

When looking at covered populations, aging individuals (88%), veterans (87%), and rural residents (86%) were the most likely to have enough working digital devices to meet the needs of their household. Individuals with a low literacy level (35%), incarcerated/individuals in re-entry (26%), low-income households (23%), and those with language barriers (21%) were the most likely to lack access to enough reliable digital devices. Listening sessions revealed that cost was often the largest barrier to owning reliable devices; however, some unique challenges were also raised by specific populations. For example, incarcerated individuals find getting access to a digital device challenging, and for those that have been in a state or federal facility for an extended amount of time, they may never have engaged with today's technology (e.g., Smartphone).



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During listening sessions, residents recently released from incarceration often shared that the lack of a valid ID inhibited them from getting a mobile phone or devices. Lack of official identification is a problem for many incarcerated individuals when they re-enter communities. However, a new partnership was announced in August 2023 between the N.C. Department of Adult Correction and the N.C. Division of Motor Vehicles to provide a state-issued photo identification card to incarcerated individuals due for release will help to reduce this challenge.

When looking at what covered populations consider an affordable price for a device that meets their needs, veterans (\$676) were the only covered population that could afford a device that cost more than \$650. Individuals with low levels of literacy (\$239) and low-income individuals (\$389) required much lower cost devices to afford them.

Table: In thinking about purchasing a computer or tablet that meets your needs, what is the highest price you would consider to be affordable?

Overall	\$626
Aging	\$624
Incarcerated	\$414
Individuals with Disabilities	\$538
Language Barrier	\$606
LGBTQIA+	\$686
Low Income	\$386
Low Literacy	\$239
Racial/Ethnic Minority	\$496
Rural	\$600
Veterans	\$676

Across covered populations,17%-32% indicated that they had not had any issues with their digital devices in the past six months. For those that did have a problem, most contacted customer support (20-38%), fixed the problem themselves (13-34%), fixed the problem with the help of friends or family (18-24%), or found help online (5-36%). Very few relied upon community institutions such as churches or libraries to assist them with device support (2-14%); however incarcerated/re-entry individuals (14%) were the most likely to utilize these resources. Nearly one quarter (24%) of incarcerated/reentry individuals, 19% of low-income individuals, and those with a language barrier (18%) were the least likely to be able to fix one or more devices.

Table: In the past 6 months, if one of your digital devices failed to function or broke, how did you fix the issue?

	Haven't had any problems with any devices	Contact customer support for help	Fix problem myself	Fix problem with help from friends or family	Found help online	Went to local computer store	Went to community institution such as a school library or church	Unable to fix one or more of the devices
Overall	31%	31%	25%	20%	18%	10%	3%	11%
Aging Individuals	32%	33%	22%	21%	17%	11%	2%	9%
Incarcerated/re-entry	17%	28%	19%	21%	20%	16%	14%	24%
Individuals with Disabilities	27%	33%	23%	24%	18%	11%	4%	16%
Language Barriers/ English Learners	26%	29%	25%	17%	16%	11%	6%	18%
LGBTQIA+	23%	38%	34%	23%	36%	12%	8%	12%
Low Income (150% of Federal Poverty Line)	27%	29%	19%	21%	14%	10%	6%	19%
Low Literacy	25%	20%	13%	18%	5%	22%	10%	13%
Racial/ethnic minorities	27%	36%	23%	20%	15%	12%	7%	15%
Rural Residents	32%	31%	24%	20%	17%	10%	3%	11%
Veterans	29%	33%	27%	18%	18%	12%	4%	9%

Similarly, individuals with low literacy (38%), incarcerated/reentry individuals (38%), and low-income individuals (36%) were the most likely to report that the services they received to help fix a device were unaffordable. Aging individuals (28%) and individuals with disabilities (27%) were the most likely to receive services for free. Individuals with a language barrier (52%), rural residents (51%), and veterans (50%) were most likely to find services either "very" or "somewhat" affordable (53%).

Table: How would you rate the affordability of the services you received?

	Very affordable	Somewhat affordable	Services were provided for free	Not very affordable	Not affordable at all
Overall	10%	37%	26%	19%	8%
Aging Individuals	10%	35%	28%	19%	7%
Incarcerated/re-entry	13%	25%	25%	24%	14%
Individuals with Disabilities	9%	33%	27%	22%	9%
Language Barriers/ English Learners	12%	40%	16%	22%	11%
LGBTQIA+	11%	42%	27%	13%	7%
Low Income (150% of Federal Poverty Line)	9%	33%	22%	25%	11%
Low Literacy	19%	19%	24%	22%	16%
Racial/ethnic minorities	12%	39%	18%	22%	10%
Rural Residents	10%	36%	26%	19%	8%
Veterans	11%	39%	25%	20%	6%

For a deeper analysis of internet digital device access and technical assistance needs by the covered population, click the following link: <u>Digital Device Access and Technical Assistance</u>.

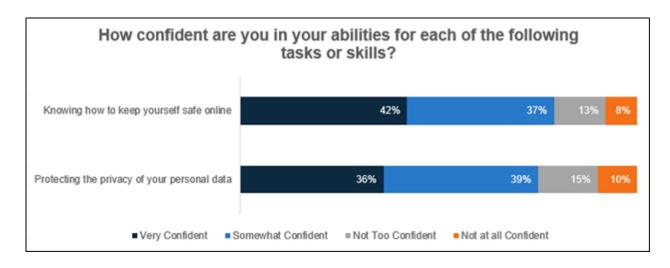
Barrier 4: Cybersecurity and Privacy Training

Defining Online Privacy and Cybersecurity

Ensuring that people know how to keep their online data and identity safe and secure is key to protecting people online and making sure individuals feel safe connecting to the internet and using a device. Online privacy refers to how data are "collected, stored, processed and used" (NIST, 2021). Keeping your data and identity safe (cybersecurity) can involve protecting any form of personal information, such as photos, videos, drawings, or documents. You cannot maintain your online privacy without keeping your information secure.

Widely Cited Online Privacy and Cybersecurity Barriers and Needs

Survey respondents did not feel particularly confident in their ability to protect themselves online, with 21% not feeling confident in their ability to keep themselves safe online and 25% not confident protecting their personal data. This issue was also brought up multiple times during the listening sessions. Many residents were concerned about online scams and expressed a desire for more services and support for cybersecurity and privacy training.



Online Privacy and Cybersecurity by Covered Population

When looking at the confidence of covered populations to keep themselves safe online, individuals with low levels of literacy (36%), low-income households (65%), and incarcerated/reentry individuals (64%) are the most vulnerable and least likely to feel confident in their ability to keep themselves safe online. Veterans (78%) and rural residents (78%) felt more confident, on average, than other covered populations.

When considering protecting the privacy of personal data, individuals with low literacy (34%), incarcerated/reentry individuals (61%), low income (62%), and individuals with a language barrier (66%), were the least likely to feel confident. Veterans (76%) also felt more confident, on average, than other covered populations in protecting the privacy of their personal data online.

Table: How confident are you in your abilities for each of the following tasks or skills? Very or somewhat confident.

	Knowing how to keep yourself safe online	Protecting the privacy of your personal data
Overall	79%	75%
Aging Individuals	74%	71%
Incarcerated/re-entry	64%	61%
Individuals with Disabilities	79%	75%
Language Barriers/English Learners	74%	66%
LGBTQIA+	89%	79%
Low Income (150% of Federal Poverty Line)	65%	62%
Low Literacy	36%	34%
Racial/ethnic minorities	73%	70%

	Knowing how to keep yourself safe online	Protecting the privacy of your personal data
Rural Residents	78%	74%
Veterans	78%	74%

For a deeper analysis of online privacy and cybersecurity needs by covered population, click the following link: Online privacy and Cybersecurity.

Barrier 5: Improved Access to Public Resources

Defining online accessibility and inclusivity of public resources and services

Web accessibility and inclusivity means that websites, tools, and technologies are designed and developed so people with disabilities (Web Accessibility Initiative) and people who speak languages other than English can use them, also known as language access. Accessing content online is necessary for almost all aspects of everyday life. Inclusive and accessible online content is especially important for government agencies to ensure the public has access to key government resources and services. Several federal laws exist requiring government entities to make content inclusive and accessible, such as:

- The Web Accessibility Guidance under the Americans with Disabilities Act: Discusses a range of topics, including the importance of web accessibility, barriers that inaccessible websites create for some people with disabilities, when the ADA requires web content to be accessible, tips on making web content accessible and other information and resources. The guidance offers plain language and user-friendly explanations to ensure that it can be followed by people without a legal or technical background.
- <u>Section 508 of the Rehabilitation Act</u>: provides accessibility requirements for information and communication technology (ICT).
- The <u>Plain Language Act of 2010</u>: requires federal agencies to write "clear government communication that the public can understand and use."
- Executive Order 13166 Improving Access to Services for Persons with Limited English Proficiency, requires the federal government and recipients of federal funds to make their services available to the populations they serve, regardless of what languages those individuals speak.

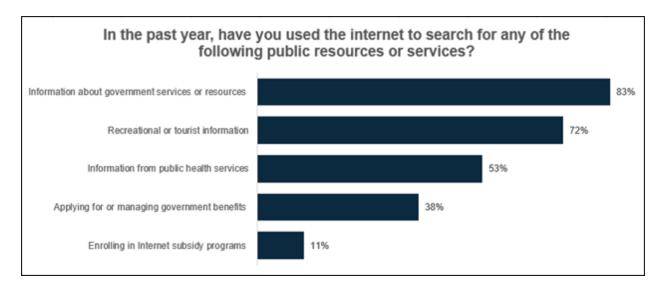
There are also international standards outlined in the Web Content Accessibility Guidelines (WCAG) with a goal of providing a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally.

Despite these laws and guidelines, conversations with North Carolina state government agencies, local governments, and organizations serving covered populations indicate a lack of understanding, knowledge, and standards to make web content inclusive and accessible. Inaccessible websites directly affect all covered populations but especially individuals with disabilities and individuals with language barriers.

Widely Cited Online Access and Accessibility Barriers and Needs

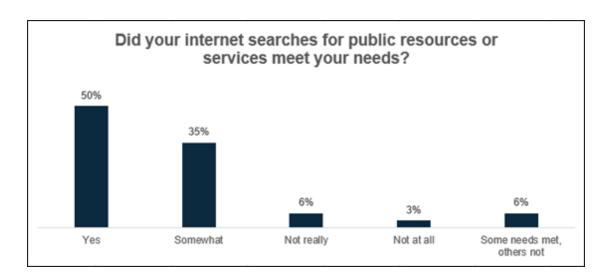
Most surveyed North Carolinians have used the internet to search for public resources and support. The most common searches were for information about government services (83%), recreational or tourist information (72%), and public health (53%). Residents used the internet less for applying for or managing

government benefits (38%) and subsidy programs (11%). In listening sessions, some community members noted that they were not aware of these resources, specifically the ACP program. Many were interested in learning more about it and other services and resources that could help them in their everyday lives. Most of these resources must be accessed online (e.g., DMV), which is a tremendous barrier to those without access to reliable devices and internet service. There is a great need to make sure there are more public resources available, that community members know what they are and where to find them, that they are accessible for all community members, and individuals have the tools they need to access them (e.g., internet, device, skills).

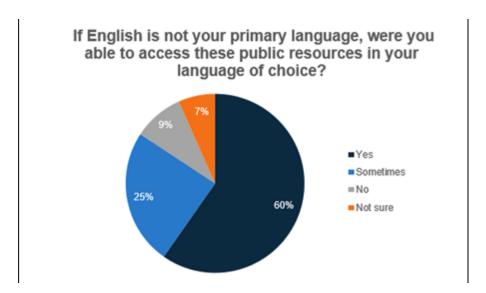


On the N.C. Digital Equity Survey, residents were also asked how well the searches for these resources met their needs. Half (50%) indicated that their internet searches met their needs, 9% indicated that they did not, and 35% indicated that their needs were somewhat met.

Barriers for Individuals with a Language Barrier



When looking at individuals for whom English is not their first language (n=616), 60% indicated that they were able to access public resources in the language of their choice, 9% said that they were not, and 25% indicated that their searches were sometimes successful.



Online Access and Accessibility by Covered Population

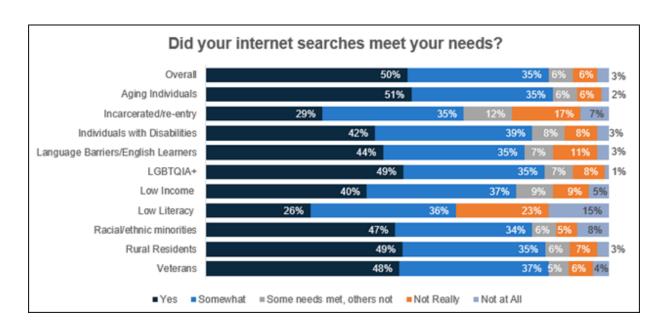
When looking across covered populations, individuals with low levels of literacy were far less likely to access most public resources than the general population or other covered populations (16-41%). Like the general population, most covered populations accessed information about government services/resources or recreational/tourist information the most frequently with the exception of those with low levels of literacy. Only 29% indicated they accessed information about government services or resources and 14% accessed information about recreational or tourist information. They were also the least likely to apply for or manage government benefits online (20%). Access covered populations accessing information about enrolling in internet subsidy programs (9-29%) was utilized the least.

Table: In the past year, have you used the internet to search for any of the following?

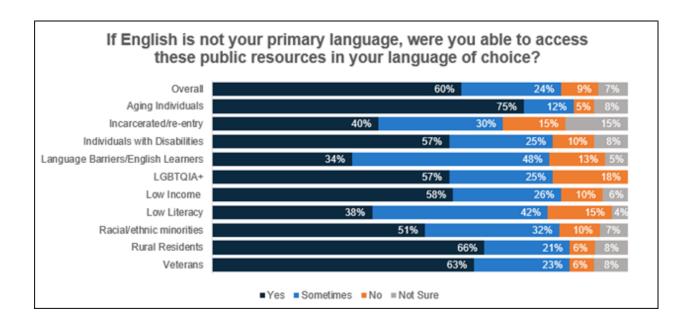
	Information about government services or resources	Recreation or tourist information	Information from public health services	Applying for or managing government benefits	Enrolling in internet subsidy programs	Not sure
Overall	83%	72%	53%	38%	11%	8%
Aging Individuals	83%	70%	51%	44%	9%	8%
Incarcerated/re-entry	59%	48%	46%	36%	29%	12%
Individuals with Disabilities	81%	64%	54%	42%	15%	10%
Language Barriers/English Learners	74%	66%	62%	36%	12%	9%
LGBTQIA+	94%	87%	76%	46%	16%	2%
Low Income (150% of Federal Poverty Line)	71%	50%	50%	43%	22%	15%
Low Literacy	29%	14%	41%	20%	16%	39%

	Information about government services or resources	Recreation or tourist information	Information from public health services	Applying for or managing government benefits	Enrolling in internet subsidy programs	Not sure
Racial/ethnic minorities	73%	59%	51%	34%	16%	12%
Rural Residents	82%	71 %	52%	38%	12%	8%
Veterans	85%	71 %	53%	44%	11%	7%

Incarcerated/reentry individuals (64%) and individuals with low levels of literacy (62%) were the least likely to engage in searches that met their needs either fully or somewhat and the most likely to indicate that their needs were not met (24% incarcerated/reentry; 38% low literacy). Aging individuals (86%), veterans (85%), rural residents (84%) were the most likely to indicate that their searches did meet their needs either fully or somewhat.



When looking at populations that were not native English speakers, most were rural residents (n=318) and the fewest were incarcerated/reentry individuals (n=6). Individuals with low literacy (15%), members of the LGBTQIA+ community (18%), and incarcerated/reentry individuals (15%) were the most likely to indicate their digital needs in a language other than English were not met. The need for more inclusive public and government resources was brought up in many listening sessions by the Spanish speaking community as well as refugees. It should be noted that due to the low sample size of individuals that were in one or more covered populations and for whom English was not their primary language, caution should be taken in generalizing the results.



For a deeper analysis of online access to public resource needs by covered population, click on the following link: Online Access to Public Resources.

Unique Barriers to Digital Equity for Specific Covered Populations

In addition to the barriers identified above, the division also identified barriers that did not easily fall into a digital equity category. These barriers included the need for:

- Transportation to access digital inclusion services such as digital literacy courses or public devices.
 Programs that can "come to" individuals who don't have transportation or who have mobility issues were also highlighted as a need (mobile computer labs or programs that come to senior centers were mentioned as examples);
- · Childcare so that parents and caregivers can access digital inclusion services; and
- Supporting organizations with community trust. One key finding from the listening sessions is that people
 want to receive digital inclusion services from organizations they trust. For example, if they receive food
 from a food pantry, they want to receive a device from that food pantry.

While many of the barriers to digital equity and inclusion are similar and cross many covered populations, there are many unique barriers faced by these groups. The division will need to address these unique challenges in addition to the overarching needs identified previously.



Veterans

A significant issue for veterans that do not have access to, or cannot afford, broadband access and devices is lack of connectivity to community and resources. Broadband serves as a vital means of social cohesion and connection for those living in sparsely populated, rural areas, and the lack of broadband access prevents veterans from accessing mental health resources such as support groups, therapy, and referral services. The social isolation made worse by the digital divide can exacerbate preexisting health

concerns, including the risk of substance use disorders and suicidal ideations.

Many veterans are concerned about the security of their information online. For instance, older veterans

have been found to be hesitant to manage their healthcare online and participate in telehealth services from Veterans Affairs, which will become more of a hindrance to their care as Veterans Assistance and other healthcare providers move toward more online communication and telehealth visits.



Incarcerated Individuals

To learn more about incarcerated individuals' experience, the N.C. Digital Equity Survey and community outreach data for incarcerated persons were collected through listening sessions with people in re-entry.

People who are confined to state prisons generally have tightly controlled access to communication devices and the internet. Many incarcerated individuals do not have regular access to computers or tablets, even for training or educational purposes. While state prisons have made progress in acquiring sufficient tablets for the incarcerated population in recent years, there continues to be room for improvement in access, affordability, and instruction. Further research will illuminate the extent to which those devices are being used.

When incarcerated individuals are allowed access to the internet for personal use, the cost of connecting to the internet is quite high. A participant in a listening session composed of formerly incarcerated people gave the example of earning approximately \$8 to \$16 dollars per month in prison but having to pay \$15 for 25 hours of internet access. Even if they can afford service, it often does not work well enough for them to complete necessary tasks.

For individuals who have been incarcerated for a significant amount of time, navigating digital tools and the internet may be a completely new experience. In Anson County, one individual shared, "I've been locked up 29 years, and I've seen cell phones, but I've never held one, sent a message, or made a call." This lack of access to devices and to internet connectivity results in individuals who are about to be released having limited ability to prepare to reconnect to the outside world; find resources like housing, employment, and healthcare; and prepare to function in a world that may be technologically very different from when they were first incarcerated.



English Language Learners

North Carolina residents who are not proficient in English face multiple barriers to digital equity. Research and deep asset scanning identified dozens of community assets that provide services or training in Spanish, but very few offer anything in other languages. Even assistance programs in Spanish are not geographically distributed well. For example, in Pitt County, some residents are willing to pay for digital training but have challenges accessing classes taught in Spanish. One resident voiced, "There

are courses we can pay for, but they don't speak our language." In Duplin County, residents emphasized the significance of offering services and training programs in Spanish, which should include childcare support. One resident shared, "I would love for those classes to be [offered] in Spanish, preferably after 5pm when we can all attend. [Additionally], I would love for these courses to provide childcare services because many of us have children and it makes it more difficult to attend [trainings] because of them." For immigrant and refugee communities, the lack of assistance and instruction in their first language hampers their ability to connect to resources and integrate into the community.

Another significant and deeply rooted barrier to access is fear of exposure for undocumented immigrants. For undocumented individuals, the apprehension of revealing their immigration status can be paralyzing, leading to a reluctance to engage in educational opportunities or access vital services. Advocates expressed that undocumented persons may be reluctant to register for digital instruction or attend classes in person unless the instruction or service is provided by a trusted organization, and it has been made clear that immigration status does not matter.

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English learners in foster care often face limited access to technology and broadband, making it challenging for them to utilize these resources effectively. This situation contributes to these children often "falling through the cracks," with foster youth potentially being one of the most vulnerable groups to the digital divide (Finn et al., 2005; Workie et al., 2022).

New Americans and Refugees

English language learners that are new Americans and refugees, face many hurdles in accessing the internet, devices, and skills necessary to live and thrive. During the listening session in Charlotte, the Afghan refugees voiced a range of needs. One of the most pressing is their desire for access to language classes. Many adults within the community expressed a strong wish to improve their English and develop their language and computer skills. They also emphasized the crucial role of internet access in their children's education, as they face challenges in finding educators who can teach their native language and require Wi-Fi for online learning. Additionally, the cost of internet service was highlighted as a major obstacle, with numerous families unable to afford it due to financial limitations, such as limited job opportunities and the high cost of living. Some families also expressed difficulties in accessing affordable internet service for low-income households. During the session, it became apparent that the children's education was being hindered by the slow and unreliable internet services. Many families lacked access to the internet, making it difficult for the children to complete homework and utilize online learning resources. Some families had been given laptops by the school but were unable to use them due to the lack of internet access. The new Americans expressed a strong desire for affordable and reliable internet access that would support their educational and skill development needs.

Low-literacy Population

Residents of North Carolina with low literacy are disproportionately affected by digital equity challenges as their limited reading and writing skills often intersect with barriers to digital inclusion. Access to digital tools and services has become a crucial gateway to education, employment, information, and social engagement that can be very helpful for these individuals. For individuals with low literacy skills, navigating the digital world can be especially challenging and alienating as a lot of online content, applications, and digital interfaces are text-heavy and require written and verbal communication. There are several agencies that target individual literacy instruction for adults. However, there is a crucial need for tailored initiatives that combine both linguistic and digital literacy.



Persons With Disabilities

Persons with disabilities face specific challenges related to the availability and affordability of devices and peripherals (headphones, speakers, text readers, etc.) that allow them to fully utilize technology. They also face unexpected and unintended barriers in accessing spaces where training, technical assistance, and Wi-Fi access are offered. A community-based organization may offer classes in a location that is not ADA compliant. A busy, noisy location may not be a viable place for a person with

any number of disabilities to attempt to focus on completing schoolwork or a job application. This covered population is also overrepresented among the rural, aging, and low-income groups.

In addition to the person with disabilities, parents and caregivers of disabled persons often struggle to find information and assistance in getting appropriate devices and instruction for their family members. In at least one community listening session, residents voiced the need for websites and audio to be inclusive for persons with disabilities. Larger font sizes and audio should be available for all internet web pages. This concern includes issues such as websites not being screen-reader friendly for the visually impaired, lack of captioning for deaf or hard-of-hearing users in video content, and the absence of keyboard navigation options for those with mobility impairments.

Affordability and access to assistive technology can be a significant challenge. Many persons with disabilities require specialized hardware and software to interact with digital devices and the internet. However, these tools can be expensive, and insurance coverage or government assistance may not always be sufficient to cover the costs. Moreover, persons with disabilities in low-income or underserved communities may have limited access to high-speed internet, making it difficult for them to take advantage of digital resources and services.



Aging Population

One of the most significant challenges facing aging individuals is acquiring the digital literacy and skills necessary to operate internet-enabled devices and navigate the online world. As one community member aptly put it, "You become proficient in one or two things, but you don't go much further than that [because] you haven't been taught, are scared, or you don't have the confidence" when using internet-capable devices such as computers. Aging individuals also frequently expressed a desire to receive

assistance from people who they already trust in places with which they are comfortable, such as houses or worship and senior centers.

Related are the concerns about the security of their information online. In Anson County, one community member shared, "some [seniors] just don't want anything to do with computers. My dad, who lived almost to 90, told me a couple months before he passed away that the best thing about being 89 years old was that he had managed to go through life without ever having to use a computer. You could have given him a computer and held his hand, but he had no interest. He didn't want to answer his cell phone either."

Complicating matters, there are situations where vital healthcare devices must be connected to the internet, making the absence of reliable internet access a serious health concern. Furthermore, concerns about internet security when utilizing these devices are widely shared. "I think it's the fear of scammers, too. A lot of times they're taking information from elderly and it's difficult for aging community members to mentally get back on the right track," said an Anson County resident.

Older adults and individuals with disabilities are also more likely to live or spend time in a residential living facility that includes residential programs for individuals with disabilities, as well as aging and long-term care. Residents, as well as staff and caregivers in these settings, often do not have access to the internet or devices and may not have the training necessary to use devices effectively. These conditions impact access to assistive technology and products aiding with independent living and self-help skills, in addition to social interaction.



Rural Residents

Rural residents bear a disproportionate burden when it comes to digital equity, with one of the most prevalent obstacles being the absence of dependable internet access. In certain regions of North Carolina, internet quality is subpar, and some areas lack any internet service altogether. In the absence of alternative internet providers in these locales, residents find themselves compelled to accept the services and pricing set by the sole provider available, resulting in a monopolistic situation in rural areas. If there

are no internet providers in the area that can affordably service their home, rural residents will drive far distances to access the internet at a local business, post-office, coffee shop, or other areas where there is free Wi-Fi. One Hyde County resident shared, "if you want the internet, you can go to the post office and you might get [service], but as far as really connecting to [the internet] for a length of time, we have to drive 20 miles to a restaurant somewhere and 18 miles to Belhaven to get internet." Another resident in Duplin County said, "If you live in this county, you have to drive up to 40 minutes so you can get internet access at a library or at a church."

Agricultural and Farmworker Community

Rural residents also frequently reported using smartphones to connect to the internet. Many participants in listening sessions who work in agriculture voiced their challenges on connecting to the internet, "While I live in the country area it is always really hard to use anything other than my phone". This is a suboptimal option as all business and schoolwork cannot be completed on a smartphone. It also requires reliable cellular phone service, which can also be a challenge in rural areas.

Migrant farm workers also shared that the devices they brought from their home countries are rarely compatible with service providers in North Carolina. Many are only in the country for a short period of time and would benefit from having short-term cellular contracts and assistance available to them in their native language.

Being an integral part of rural communities, farm workers' access to the internet holds significant importance. Reliable internet connectivity is essential within farm workers' camps as it enables them to access critical and life-saving information. A joint research team from East Carolina University and NC State University, partnered with 21 community health workers, to conduct a survey of 769 farmworkers during the 2023 agricultural season. The survey highlights what the division learned through listening sessions. Farmworkers in the survey rarely had access to devices other than cell phones, and 87% of participants with internet access used cellular networks. Few participants had access to other sources of internet like cable, fiber optic, wired internet (6%) or satellite (3%) (ECU-NCSU Internet Survey Project Team, 2023).

Various extreme weather events, including hurricanes, floods, and extreme heat, as well as the recent challenges posed by the COVID-19 pandemic, underscored the necessity of dependable communication channels for farm workers.

The COVID-19 pandemic exposed the vulnerabilities faced by farm workers due to limited connectivity. In the absence of internet access, farm workers encounter significant barriers in reaching healthcare providers, communicating about outbreaks, requesting outreach services, and staying connected with their families and loved ones. It's important to note that farm worker housing predominantly exists in rural areas with poor cell phone reception, and there is often a lack of available internet connectivity. Notably, North Carolina alone hosts over 1,000 farm workers' camps located in rural regions with limited access to broadband services, which highlights the complexity of finding a one-size-fits-all solution for internet connectivity.



Racial & Ethnic Minorities

Members of racial and ethnic minority groups often face barriers that compound the digital divide. The section below outlines just some of the barriers and needs shared by members of racial and ethnic minority groups.

Black/African American Population

In cities across North Carolina, the available broadband infrastructure often aligns with historical redlining practices, concentrating primarily in districts that were systematically marginalized in the past. This distribution has had a disproportionate impact on the Black/African American community, which constitutes a significant majority in these areas.

During a listening session in Forsyth County, residents shed light on the unique challenges faced by the Black/African American population in the area. Their voices resonated with concerns about the limited access to reliable internet services which hampers the community's ability to fully benefit from the resources intended to enhance digital literacy and participation. Further, their daily engagement with education and career opportunities is impacted. One resident and business owner shared that the public Wi-Fi in her

predominantly black neighborhood didn't work well enough for her to do any work.

American Indian Population

Many Native American and American Indian residents in North Carolina live in rural, low-median-income counties where internet service is limited. In Native American/Indian communities, there was some hesitancy to embrace the use of technological devices and the internet. During a listening session in Bolton, Columbus County, members of the Waccamaw Siouan Tribe emphasized the significance of trust in engaging with digital equity programs and services, as well as the importance of maintaining a clear separation between the church and the tribe. They humorously commented, "One thing you need to know about our people, they don't like to mix... anything." This comment underscores the need for many different access points for digital inclusion programs. Some covered populations may prefer receiving services from faith-based organizations (as often indicated by Black and African American participants in listening sessions), while others would prefer to receive services from other types of organizations (as indicated by members of the Waccamaw Siouan Tribe).

Furthermore, members expressed concerns about the lack of suitable space for hosting digital literacy classes, even though they have valuable community resources at their disposal. They shared, "We have resources for people in our community... we just don't have the space." Most of the counties that have a large minority population are rural and lower income counties outside of the urban core that stretches from Charlotte to the Triangle area.

Hispanic and Latino Population

The digital divide significantly impacts the Hispanic and Latino community, presenting a myriad of challenges that extend beyond mere connectivity issues. Geographically, this population is often concentrated in areas characterized by insufficient broadband infrastructure, as highlighted in a recent listening session. A resident emphasized, "Internet service is dependent on the area. Some areas don't have access at all."

As noted previously, language barriers compound the challenges faced by the Hispanic and Latino community. Navigating systems and processes in non-native language poses a significant obstacle. Bilingual services are crucial for facilitating internet access and negotiating contracts with service providers. Moreover, internet access is paramount for translation services, particularly in supporting their children's education. A resident advocated, "Support the parents so the parents can support their kids. In this group, we have a big necessity; we need to learn... we come from different countries."

Living in an English-speaking country, the Hispanic and Latino population expressed a need for comprehensive support services to aid their integration into the digital world. This encompasses a desire for classes taught in Spanish, situated in trusted spaces, and employing modalities that facilitate easy learning. Residents also noted that childcare support is also crucial to enable participation in these classes.



Low-income households

North Carolina residents who are classified as living within low-income households (within 150% of the federal poverty line) grapple with a myriad of challenges in achieving digital equity. Despite the existence of several digital inclusion assets within the communities that are intended to serve low-income individuals and households in North Carolina, a lack of access to reliable internet hampers these community members' effective use of, and connections to community resources, job opportunities,

educational opportunities, and financial assistance programs. This is especially highlighted by challenges from students in families experiencing homelessness that may not be able to participate fully or at all in online learning. During community listening sessions, participants consistently highlighted the availability of

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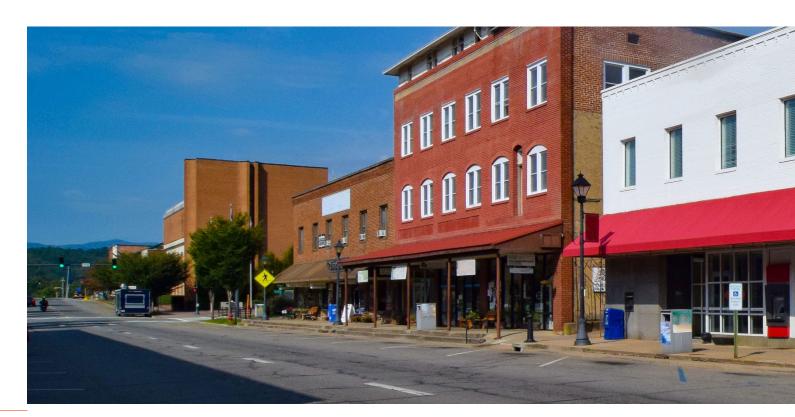
agencies willing to provide training and devices; however, in the absence of internet access, such support remains ineffectual.

"We're working in a very poor neighborhood where most of the people have subsidized rent, but we are providing computers for them if they attend a class. So, each person that attends the class will receive a laptop. The thing is that then we get the device, but they don't have the internet services to use them. So how do we address that in terms of this very low-resource neighborhood being able to afford those services to access?"

Currently, 30% of low-income households have reported no access to the internet at their place of residence, with an additional 19% indicating that while available, the internet does not function well enough to meet their needs. The foremost barrier to internet access, as underscored by most survey respondents, is affordability, with over half expressing concerns about the feasibility of adding this expense to their already stretched household budgets. An advocate participating in the Forsyth County listening session posed the question, "How can we overcome the challenge of enabling low-resource neighborhoods to afford the services required for access?"

Foster Youth

One unique population within this covered population is foster youth. According to iFoster, a national 501c3 nonprofit organization supporting foster youth, a staggering 80% of foster youth lack internet access and a computer in their living environments. This starkly contrasts with only 10% of "average" teenagers and 21% of low-income teens facing similar challenges. The absence of these essential resources places foster youth at a significant disadvantage, resulting in academic setbacks, high dropout rates, limited college opportunities, and increased risks of unemployment and poverty. More research and interventions are still needed in the foster care system to ensure these children can access digital technologies (Davis et al., 2023).





LGBTQIA+ members

Digital equity challenges intersect with limited resources for North Carolina residents who identify as part of the LGBTQA+ community. Access to digital tools and services has become vital for education, employment, information, and social engagement, presenting significant advantages for these individuals. Disparities in technology access and digital literacy within the LGBTQIA+ community contribute to existing inequalities, with some lacking the resources or knowledge to fully engage in the digital realm,

restricting their access to essential services and information. While various agencies cater to the LGBTQIA+ community, there is a critical need for initiatives that are both inclusive and address digital literacy concerns.

Thompson (2021), in her article, recognizes the historical importance of LGBTQIA+ individuals discovering a sense of community on the internet in North Carolina. Virtual spaces, including chat rooms and social media platforms, have long served as essential tools for mitigating loneliness and connecting with likeminded peers. The pandemic accelerated the adoption of virtual spaces, and the article emphasizes the continued importance of these spaces for LGBTQIA+ individuals. While recognizing the positive impact of virtual spaces, the article also acknowledges that the LGBTQIA+ community is not homogeneous, and the pandemic's effects have been nuanced. Some transgender youth found virtual living conducive to adjusting to their authentic selves, while others faced challenges, such as difficulties in changing names in online learning systems. (Thompson, 2021).

LGBTQIA+ youth face unique challenges, including higher rates of depression and suicide attempts, often attributed to discrimination, family rejection, and negative biases. Cyberbullying is a significant concern, with almost half of LGBTQIA+ students experiencing it annually, leading to emotional distress and thoughts of suicide. A digital divide compounds these issues, as millions lack internet access, affecting LGBTQIA+ youth, particularly in rural areas. The internet serves as a crucial resource for identity formation, job seeking, and safety, but the lack of online connectivity during the pandemic led to emotional and social isolation for many LGBTQIA+ youth. Homelessness is a substantial risk for LGBTQIA+ youth, with a 120% higher risk than their peers, often stemming from family rejection and discrimination. Acceptance from at least one adult significantly reduces the likelihood of suicide attempts among LGBTQIA+ youth. (Layton, 2023).







To address the barriers and needs of the covered populations outlined above, the division plans to advance digital equity and increase internet access, affordability, devices and repair services, digital literacy, cybersecurity and privacy, and the inclusivity of online services. The division's strategies will rely on expansions of successful digital equity programming and on new and innovative ideas to meet the needs of covered populations and create sustainable programs.

The division is committed to ensuring sustainability for the work outlined in this plan. North Carolina's expansive network of digital inclusion assets, state government partners, local and regional digital equity plans, on-theground digital equity champions, and strong device refurbishment agencies enables the division to support high impact, sustainable programming across the state and embed digital equity into existing state programs and strategies.

Evaluation of the objectives is paramount. The division derived baseline data for the development of these measurable objectives from American Community Survey (ACS) data, FCC Fabric, and responses to the N.C. Digital Equity Survey. The next comprehensive data available from the ACS is expected in 2026 or 2027. The N.C. Digital Equity Survey was first administered in 2023 and will be administered biannually (2025, 2027) to assess progress.

The division will utilize Digital Equity Capacity grant funding from NTIA to implement many of these strategies, though as outlined in the <u>Sustaining Digital Equity in North Carolina' section</u>, page 103, braided funding and partnering with other state agencies and philanthropy will prove critical to meet the goals. The division anticipates launching another round of Digital Equity Grants as noted in the implementation activities.

Overall objectives for key barriers and needs as well as objectives to meet those needs for each covered population are outlined below. The Implementation Plan outlines strategies, activities, and partners to meet each objective.

The objectives address the Common Digital Equity Needs described above in the <u>Barriers and Needs section</u>, page 40.

Digital Equity Barriers and Needs:

- **1.** Access to and affordability of high-speed internet. Access to high-speed internet for a home is defined as 100/20 Mbps (100 Megabits per second download/20 Mbps upload).
- 2. Accessibility and inclusivity of online public resources. Web accessibility and inclusivity means that websites, tools, and technologies are designed and developed so that people with disabilities and people who speak languages other than English (also called language access) can use them.
- **3. Digital literacy.** Digital literacy⁹ is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills (American Library Association).
- **4.** Cybersecurity and privacy. Ensuring that people know how to keep their data and identity safe and secure online is key to protecting people online and making sure individuals feel safe connecting to the internet and using a device.
- **5.** Availability and affordability of devices and technical support. Fully participating in a digital society requires access to reliable devices that meet the needs of users as well as repair and technical assistance services to address issues with those devices.

The strategies to meet these needs include:

- Strategy 1: All North Carolinians have access to high-speed internet and to affordable, low-cost internet services.
- **Strategy 2:** Promote practices that support online accessibility and inclusivity of public resources and services.
- Strategy 3: Ensure that North Carolinians can acquire the digital skills and understanding to meet their personal needs and the workforce needs of the state.
- **Strategy 4:** Promote practices and leverage tools to ensure online privacy and security.
- **Strategy 5:** Ensure that North Carolinians have access to digital devices to meet their needs.

The Implementation Activities and Key Components outlined under each Strategy address both the Common Barriers to Digital Equity and the Unique Barriers faced by each covered population.



⁹ While the division uses the term "digital literacy" for this plan, it acknowledges that not all community members agree with the term. NDIA recommends using terms like "digital skills" or "beginner computer training" while conducting community work. They explain that "the word "literacy" and the implication of "illiteracy" can be perceived negatively by communities who need digital inclusion most." Other suggestions from community stakeholders included replacing the term 'digital literacy' with 'digital fluency.' The division may ultimately adopt another term.

Strategy 1: All North Carolinians have access to affordable, reliable high-speed internet.

Measurable Objectives for All Covered Populations		Baseline		
•	Long term (2029): 100% of unserved and underserved households have access to high-speed internet Near term (2025): 98% of unserved and underserved households have access to high-speed internet Evaluation Measure: Number of units served through BEAD infrastructure grants divided by the total number of unserved and underserved units (FCC Broadband Data Collection)	 283,403 Unserved Broadband Serviceable Locations representing a total of 316,576 homes and businesses unserved (Less Than 25Mbps Download and 3Mbps Upload) 138,903 Underserved Broadband Serviceable Locations representing 156,100 homes and businesses underserved (Less Than 100Mbps Download and 20Mbps Upload) (FCC Broadband Data Collection – June 2023) 		
•	 Long term (2029): 80% of eligible households subscribed through low-cost and subsidized internet services Near term (2027): 65% of eligible households subscribed through low-cost and subsidized internet services Evaluation Measures: Current enrolled households from USAC divided by estimated eligible households Low-cost offerings from BEAD subgrantees (# of households) 	51.3% of eligible households enrolled in the ACP as of 1/4/24 (https://acpdashboard.com/)		
•	Long term (2029): 90% of households subscribe to high-speed internet (adoption rate) Near term (2027): 87% ¹⁰ of households subscribe to high-speed internet (adoption rate) Evaluation Measure: Number of households with a home internet subscription, American Communities Survey (ACS) 5-year estimates	85% of households have an internet subscription (ACS)		
•	Long term (2025): 100% of households with children subscribe to high-speed internet (adoption rate) ¹¹ Evaluation Measure: Number of households with children with a home internet subscription, American Communities Survey (ACS)	81% of households with children have an internet subscription (2019 ACS)		

Potential partners: internet service providers, tribal and local governments, K-12 schools, higher education institutions, Community Anchor institutions, workforce development agencies, labor organizations (such as Communications Workers of America), digital inclusion coalitions, housing authorities, organizations that provide direct digital inclusion services, community-based organizations and organizations that serve covered populations.

Go to the Implementation Timeline

Implementation Activity 1.1: Support the state's Broadband, Equity, Access, and Deployment (BEAD) program

¹⁰ The division had a goal of 80% adoption rate by 2025 (with ARPA funding), which we have already accomplished. This goal is considered an update to that original target.

¹¹ This goal aligns with the division's goals for ARPA funding.

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plan objectives and implementation to ensure alignment with North Carolina Digital Equity Plan Goals.

Covered Populations: ALL Populations¹²

Description: Access and affordability of high-speed internet are key priorities for achieving digital equity in North Carolina. The primary objective of the state's BEAD Five Year Plan and Initial Proposal is investing BEAD funding to build infrastructure to deliver internet speeds of 100/20 Mbps to all unserved and underserved locations in the state.

<u>Note</u>: This implementation activity connects directly to the BEAD Plan and will be led by the division's Broadband Infrastructure Office with support from the Office of Digital Equity and Literacy.

Key components:

- Affordability will be a primary criterion for selecting BEAD subgrantees. The BEAD subgrantee selection
 process will consider an applicant's commitment to provide the most affordable total price to the
 customer for 1 Gbps/1 Gbps service in the project area. Doing so will impact affordability across an entire
 project area.
- 2. For all BEAD funded infrastructure projects, the division will require subgrantees to offer a low-cost service option available to all eligible households (based on ACP eligibility criteria) consistent with BEAD requirements. In addition, during the application process, applicants may qualify for maximum points if they currently have a plan or commit to offering a plan that meets standards set forth in the state's approved BEAD plan. The scoring criteria will incentivize subgrantees to adopt an affordable service offering for their entire BEAD service area based on the FCC's U.S. benchmark rate. Consistent with the state's ARPA funded grant programs, subgrantees will be required to participate in the ACP.
- 3. BEAD subgrantees are required to participate in the FCC's ACP and ensure that prospective customers are aware of ACP availability for the low-cost service option. BEAD subgrantees are required to participate in any successor broadband subsidy program if Congress ceases to fund the ACP or the program otherwise expires. Barring a successor program, subgrantees will be required to continue offering the low-cost service option to, at a minimum, customers who meet the ACP eligibility criteria. If Congress ceases to fund the ACP or the program otherwise expires, and the federal government does not create a successor program or issue new criteria for eligible households, the division will propose new criteria for determining eligible households and publish such criteria for public comment for no fewer than 30 days before issuance.
- 4. Encourage prospective BEAD subgrantees seeking funding from broadband infrastructure grant programs to outline how they plan to engage covered populations to inform those populations of low-cost service options, ACP, digital literacy programs and other assistance in their project areas if awarded a grant. The BEAD subgrantee selection scoring rubric assigns points to applicants that provide a letter of support from local governments and federally recognized tribal governments. Local and tribal governments may support one or multiple applications.

Implementation Activity 1.2: Support Community Anchor Institutions (CAIs) to improve and expand free, public Wi-Fi locations.

¹² The division will prioritize covered populations with the greatest need based on the analysis in the needs and barriers section of this plan.

Covered Populations: ALL Populations¹³

Note: This implementation activity connects directly to the BEAD Initial Proposal and will be led by the division's Broadband Infrastructure Office with support from the Office of Digital Equity and Literacy.

Description: CAls represent a centerpiece for funding in North Carolina's BEAD Five-Year Plan with a stated goal of connecting 100% of all CAls in the state with fiber optic infrastructure. The characteristics of this technology provide the bandwidth and capacity for robust backhaul to support Wi-Fi connectivity. By providing Wi-Fi, CAls will allow covered populations without mobile service to access the internet using their own devices and provide access to numerous devices at one time. The state will leverage all federal, state and philanthropic resources to facilitate the expansion of public Wi-Fi.

Key Components:

- 1. Accurately classify and identify CAIs in the BEAD program to ensure access to high-speed internet infrastructure.
- 2. Collect input from communities to help ensure that all relevant institutions meeting the CAI criteria are eligible for funding.
- 3. Support the BEAD program efforts to assess network connectivity needs and ensure adequate technology and infrastructure is deployed to CAIs.
- 4. Provide or fund technical assistance to help CAIs learn how to leverage their high-speed wireline connection for public Wi-Fi access. This work could be funded through the Digital Equity Grant program offered by the Office of Digital Equity and Literacy.
- 5. Identify funding sources to support the purchase of equipment and operational costs, including security, to support public Wi-Fi, and ensure Wi-Fi is accessible for covered populations by creating comfortable spaces to connect (e.g., benches and a table in a public park to encourage use). This work could be funded through the Digital Equity Grant program offered by the Office of Digital Equity and Literacy.

Implementation Activity 1.3: Increase awareness of and enrollment in low-cost and subsidized broadband internet programs like the Affordable Connectivity program (ACP).

Covered Populations: ALL Populations¹⁴

Description: Expanding awareness of and enrollment in the ACP or other low-cost internet programs is key to addressing affordable internet access for eligible covered population households. Increasing ACP enrollment is a core activity of the division and significant progress is underway to expand awareness and enrollment. The following specifies ACP but will be expanded to low-cost options through BEAD once available.

Key components:

1. Ensure every North Carolina resident who is eligible for ACP knows it's available and how to enroll

¹³ The division will prioritize covered populations with the greatest need based on the analysis in the needs and barriers section of this plan.

¹⁴ The division will prioritize covered populations with the greatest need based on the analysis in the needs and barriers section of this plan.

- a. The division will continue identifying partners as trusted resources to promote and enroll households. These include partnerships between organizations like NC Counts Coalition and NC DHHS (as part of the division's FCC ACP outreach grant) as well as churches, community-based organizations and public benefit programs that work with ACP eligible households such as veterans' assistance, SNAP, and K-12 schools.
- b. The division will continue to leverage high-profile infrastructure announcements (grants, events, etc.) to advertise the ACP and will partner with local media organizations and diverse media outlets to increase awareness.
- c. Advocate to the FCC and the Universal Service Administration Co. (USAC) for more comprehensive ACP enrollment data to better understand who is enrolling, where and their internet type (home internet or mobile internet). This kind of data will enable the division and partners around the state to create targeted enrollment efforts. Better visibility of this data will be even more important if the ACP is no longer funded by Congress to understand who will be most affected by the program's absence.
- 2. Empower partners across the state to deliver solutions that work for low-income North Carolinians.
 - a. The division may develop an ACP peer-network where partners across the state can share challenges and best practices including coordination across FCC ACP Outreach Grant recipients.
 - b. The division will advocate for improvements to the program and enrollment process to the FCC and the Universal Service Administrative Co. (USAC), based on feedback from the peer network and other partners.
- 3. Make it easier for eligible residents to enroll in the program and receive benefits.
 - a. Evaluate current ACP pilots and programs like the recently launched NC 211 ACP hotline pilot to identify best practices for future funding through the Office of Digital Equity and Literacy.
 - b. Continue to fund digital navigator and other best practice programs through the Digital Equity grant program.
 - c. Educate internet service providers about the need to train their customer service staff on ACP.

Strategy 2: Promote practices that support online accessibility and inclusivity of public resources and services.

Mo	easurable Objectives for All Covered Populations	Baseline		
•	Long term (2029): Increase in confidence by 8% to access or apply online for government services. Near term (2027): Increase by 3%	77% indicated they were somewhat or very confident in accessing or applying online for government services.		
•	Evaluation Measure: Data collected from the Digital Equity Survey	The section titled "Digital Literacy by Covered Populations" provides baseline data by covered population.		

Measurable Objectives for All Covered Populations

Baseline

Long term (2029):

- X%¹⁵ Cabinet-level agencies are trained on accessible website content.
- Train X number of¹⁶ other public entities (ex. local governments) to provide accessible online content.
- Near term (2027): Guidelines and recommendations developed
- Evaluation Measure:
 - Audit of Language access completed
 - % of cabinet level agencies trained
 - % of cabinet level agencies that adopt standards
 - # of other public entities trained
 - # of public entities that adopt standards

Baseline will be determined through implementation of the Digital Equity Capacity Building Grant Program.

Potential partners: State agencies, tribal and local governments, community-based organizations, N.C. League of Municipalities, N.C. Association of County Commissioners, Regional Councils of Government, Higher Education, K-12 schools, and healthcare providers.

Go to the Implementation Timeline

Implementation Activity 2.1: Leverage partnerships within state government, local government and organizations serving covered populations to adhere to standards for online accessibility and inclusivity.

Covered Populations: All Covered Populations¹⁷

Description: Making online content accessible and inclusive is critical to improving government services, especially for people with disabilities and for individuals with a language barrier. The N.C. Department of Information Technology (NCDIT) provides web services to all state agencies and incorporates federally mandated Section 508 compliance standards and best practices recommended by the World Wide Web Consortium's latest Web Content Accessibility Guidelines (WCAG). Despite these services, conversations with North Carolina state agencies, local governments, and organizations serving covered populations indicate a lack of understanding and knowledge to make web content inclusive and accessible. Some stakeholders also indicated existing standards may be inadequate for ideal accessibility (such as plain language) and language access (which WCAG standards do not address). Some state agencies are making great strides in considering online accessibility and inclusivity: the N.C. Department of Health and Human Services and the Governor's Office of Public Engagement and Inclusion. The division will continue supporting these efforts and provide convening capacity to increase online accessibility and inclusivity as needed.

Key Components:

 The division will partner with other personnel within NCDIT, as well as the N.C. Department of Health and Human Services and the Governor's Office of Public Engagement and Inclusion, to convene a working group of state and local government and community partners to adhere to standards for online

¹⁵ Specific measurable objectives will be developed once baseline is determined

¹⁶ Specific measurable objectives will be developed once baseline is determined

¹⁷ The division will prioritize covered populations with the greatest need based on the analysis in the needs and barriers section of this plan.

accessibility and inclusivity. This working group will build off existing work by NCDIT to comply with federally mandated standards and guidelines.

- 2. The division will partner with the Governor's Office of Public Engagement and Inclusion to conduct an audit of language access of cabinet-level agency websites and explore the feasibility of a web accessibility audit for all cabinet-level agencies.
- 3. The working group will develop guidance for online accessibility and inclusivity to clearly articulate standards and recommendations for implementation. Organizations serving covered populations (especially those serving people with disabilities and with language barriers) will be able to provide feedback on the guidance.

Implementation Activity 2.2: Leverage partnerships to train staff in all cabinet-level agencies on online accessibility standards to improve the accessibility and inclusivity of state government websites and expand training and capacity to local governments and beyond.

Covered Populations: All Covered Populations¹⁸

Description: Articulating standards does not ensure compliance and adoption. Training is an essential component of creating accessible and inclusive online content. Training and capacity must be comprehensive and include partners beyond state government.

Key Components:

- 1. Based on the guidance developed in Implementation Activity 2.1, the Online Accessibility and Inclusivity working group will develop a toolkit for state, local and community partners on how to implement online accessibility and inclusivity standards. This toolkit could include standards for providing accessible webinars/virtual meetings, designing mobile-friendly websites, as well as increasing the accessibility and inclusivity of websites. It could also include requirements that entities that receive technology funding from state agencies are required to comply with online standards.
- 2. The working group will create on-going training for state government staff and will train staff members representing all cabinet-level agencies.
- 3. Expand online accessibility and inclusivity training to local governments and community organizations serving covered populations.
 - a. Funding must be prioritized to build capacity for non-state government agencies. The division anticipates future rounds of the Digital Equity Grant program will support this work. Improving accessibility of online content will be an eligible criterion for funding.

¹⁸ The division will prioritize covered populations with the greatest need based on the analysis in the needs and barriers section of this plan.

Strategy 3: Ensure that North Carolinians can acquire the digital and information-gathering skills and understanding to meet their personal needs and the state's workforce needs.

Measurable Objectives for All Covered Populations **Baseline** Long term (2029): Increase in percentage of North Somewhat or very confident in the following: Carolinians who are confident using word processing Word processing, such as Google Docs or programs, finding educational content, applying for jobs, Microsoft Word: 85% and communicating with a healthcare provider by 10% Searching for/applying for jobs: 81% Near term (2027): increase by 5% Finding educational content such as taking a **Evaluation Measure:** Digital skills confidence data from course: 82% Digital Equity Survey Making an appointment, checking test results, or communicating with a healthcare provider online (ex. Using MyChart). No baseline but identified as a need in listening sessions. Will add to future survey and baseline will be determined during implementation. The section titled "Digital Literacy by Covered Populations" provides baseline data by covered population.

- Long term (2029): Increase access to and geographic reach of services that meet individual needs to advance digital literacy by X%¹⁹ (including digital navigator programs).
- Near term (2027): Increase by X%²⁰
- Evaluation Measure: Evaluating "access" will require a
 more refined measure. It may include a density metric to
 understand where programs are in relation to where there
 is the greatest need by covered population. Consideration
 of organizational capacity to meet needs is also an
 element of access. The division will continue to develop
 and refine this measure.

Available data indicate:

- 328 entities offering digital skills training
- 157 entities offering digital navigation

<u>Table</u> on page 25 displays available assets by covered population.

A more robust baseline evaluating "access" will be developed through implementation of the Digital Equity Capacity Building Grant Program.

Potential partners: Education partners (including: N.C. Department of Public Instruction, N.C. Community College System, University of North Carolina System, N.C. Independent Colleges and Universities, and HBCUs), workforce partners (N.C. Department of Commerce), the North Carolina State Library, N.C. Department of Health and Human Service, local library systems, N.C. Cooperative Extension and county extension offices, senior centers, organizations and agencies with established digital navigator programs, community-based organizations, digital inclusion coalitions, nonprofits, literacy organizations, regional councils of governments, tribal governments and organizations, local governments, community-based organizations serving covered populations, Civil Rights organizations (e.g. NAACP), senior centers, housing authorities life-long learning centers, healthcare providers, N.C. Department of Adult Corrections and Reentry councils, local and public news organizations, and faith-based organizations.

Go to the Implementation Timeline

¹⁹ Specific measurable objectives will be developed once a more robust baseline is determined

²⁰ Specific measurable objectives will be developed once a more robust baseline is determined

Implementation Activity 3.1: Partner with workforce and education agencies at the state and local levels to identify and adopt high quality digital skills standards, including digital privacy and cybersecurity standards and digital health literacy.

Covered Populations: All covered populations²¹

Description: This strategy addresses the need for clear standards for digital skills and literacy across the state to ensure meeting individual and workforce needs. Depending on the sector, different entities are using different curricula with different standards. For example, the N.C. Department of Public Instruction uses ISTE standards while adult education classes often use NorthStar Digital Literacy curriculum and assessments. Based on this analysis, developed standards to align with state strategic education and workforce goals are needed, though global frameworks exist such as the DQ Framework for Digital Literacy, Skills and Readiness which include broader digital standards including digital citizenship and media and information literacy.

Key components:

- The division will partner with workforce and education agencies at the state and local levels to identify and recommend digital skills standards, including digital privacy and cybersecurity standards and digital health literacy.
- 2. The division will publish a set of digital skills standards, including developing a toolkit and training materials for state and local partners with recommendations for integrating standards into existing training programs (for example job training programs).
- 3. The division will integrate standards into future funding cycles of the Digital Equity grant for applicants developing or expanding digital literacy services.

Implementation Activity 3.2: Build on lessons learned from existing <u>digital navigator</u> programs to expand services across the state.

Covered Populations: All covered populations

Description: Throughout the listening sessions, a key theme identified was the need for individualized digital literacy and skills support. Digital Navigators, guides who assist community members in internet adoption and the use of computing devices, can offer this individual support and attention. Digital navigation services can look different based on community needs. They can include ongoing assistance with accessing affordable internet like the ACP, affordable device acquisition and technical assistance (as outlined in Strategy 5), as well as technical and digital skills training. Depending on the organization and institution, they can provide more one-off support like a help desk at a library or provide more long-term continuum, holistic support to meet an individual's comprehensive digital needs. This implementation activity will require 1) Increasing the capacity of current digital navigator programs and 2) developing new programs.

Key Components:

 The division will develop a peer network of digital navigators and digital literacy programs to share challenges, best-practices, and coordinate services. Goals of this network could include improving communication and awareness of digital navigator programs across the state, identifying ways to assess

²¹ The division will prioritize covered populations with the greatest need based on the analysis in the needs and barriers section of this plan.

impact to inform future projects, and recommending workforce pathways into the digital navigation field.

- 2. The division will partner with healthcare providers and organizations supporting telehealth such as the Office of Rural Health to promote digital literacy and integrate digital health equity training into digital navigation curricula, including their work on connecting farmworkers to digital health literacy resources. As part of the Appalachian Regional Commission Digital Health Equity grant, the Center for Digital Equity developed a <u>Digital Health Literacy Playbook for Rural Communities</u>.
- 3. The division will make it easier for people to access digital navigator and digital literacy programs. Increasing the number and geographic reach of high-quality programs in North Carolina is a key priority.
 - a. Expanding the capacity and reach of existing programs: North Carolina has several strong and well-established digital navigator programs, like the Center for Digital Equity's 311 digital navigation hotline and newer pilot programs (such as the Digital Navigation Initiative that partners with the state library, N.C. Cooperative Extension, and the N.C Community College System). Through future rounds of the Digital Equity Grant program, the division anticipates funding the expansion of current programs. Ensuring funding can also address other barriers to digital equity (such as transportation costs, childcare, and other wrap-around services) is necessary to ensure programs are expanded in an accessible way.
 - b. Development and creation of new programs: A key theme in the listening sessions was that people want to receive digital skills training and navigation from organizations they already trust (food banks, community centers, churches, and others). Listening session participants also often expressed preference in learning from peers who have similar life experiences (for example a Spanish speaker learning from another native Spanish speaker), though some expressed interest in intergenerational programs (e.g. youth teaching digital skills to seniors), highlighting the need to build flexible and multi-faceted programs that meet individual needs. Building the capacity of trusted organizations to provide these programs is critical. Through future rounds of the Digital Equity Grant program, the division anticipates funding capacity building to provide digital skills training and digital navigation. Ensuring funding can also address other barriers to digital equity (such as transportation costs, childcare, and other wrap-around services) is necessary to ensure programs are expanded in an accessible way.
 - c. <u>Develop workforce pathways into the digital navigation field</u>: As new programs are developed and existing programs expanded and scaled, creating training and pathways into the digital navigation field will be essential.
- 4. The division will work to ensure that all counties have access to digital navigation services through community anchor institutions such as libraries, community colleges, cooperative extension, and senior centers, prioritizing counties with the fewest existing services. The Digital Navigator curriculum under development by the N.C. Community College system could be deployed to train individuals and organizations across the state.
 - a. The division will partner with state and local government to build digital navigation curricula into essential services (i.e., SNAP, WIC).

Implementation Activity 3.3: Leverage digital navigator and digital literacy programs to expand partnerships with organizations serving covered populations to meet their specific digital literacy needs including supporting upskilling and reskilling.

Covered Populations: All covered populations²²

Description: Critical digital literacy needs vary (and sometimes overlap) across covered populations. For example, job training skills for a digital workforce meet the needs of low-income populations (Horrigan, 2018), veterans (National Telecommunications and Information Administration, 2013), and incarcerated individuals (Prison Scholars Fund, 2023), while those with low literacy and the aging adults benefit more from individualized instruction that focuses on basic computing skills (Lee & Kim, 2019). The North Carolina Digital Equity survey also highlighted a need for digital skills training on accessing online government services. Evidence suggests that an expanded, yet tailored curriculum leads to improved outcomes (Lyons et al., 2019). Therefore, these programs could benefit from allowing families/individuals to customize digital equity services based on their needs (Katz & Levine, 2015). As outlined in Activity 3.2, holistic services such as transportation costs, childcare, and other wrap-around services are also necessary to ensure programs are expanded in an accessible way. Additionally, Digital literacy and device access are foundational to digital equity and often go hand-in hand. A person needs a device to reap the benefits of digital skills, and a device is useless if someone doesn't know how to use it. Therefore, this activity overlaps directly with Strategy #5: Ensure that North Carolinians have access to digital devices to meet their needs and specifically Implementation Activity 5.3.

Key Components:

- 1. Tailor existing programs to meet the needs of covered populations. As mentioned in Implementation Activity 3.2, North Carolina has several strong, well established digital navigator and digital literacy programs. However, not all programs are equipped to meet the needs of covered populations or have the cultural competency or training to serve them well. Digital Equity Grant funding to expand the capacity of these programs must include strategies to tailor existing programs to the needs of covered populations and foster cultural competency.
- 2. Build the capacity of organizations serving covered populations to develop digital navigator and literacy programs. One key finding in the listening sessions is that people want to receive digital navigation services from organizations they trust. For example, if they receive food from a food pantry, they would like to connect with a digital navigator at that food pantry. Coupled with this need is a lack of trust in traditional community anchor institutions. Digital Equity grant funding will be available to build the capacity of trusted community organizations through strategies such as:
 - a. Increasing capacity of organizations with community trust to develop digital navigation programs.
 - b. Increasing culturally competent programs that are available in multiple languages such as Winston Net's Multilingual Digital Skills Training courses that offer classes in Chinese, Swahili, Arabic, Spanish, and Karenni, which was developed to help immigrants and newcomers navigate community resources using technology.
 - Increasing programs focusing on the needs of specific covered populations such as but not limited to:
 - i. Programs for people with disabilities. Digital navigators serving individuals with disabilities must be specifically trained in technologies to meet their needs. For individuals who are deaf and hard of hearing, navigation services must be offered in American Sign Language (ASL).
 - ii. Programs for incarcerated individuals and those in re-entry to help them upskill or reskill and

²² The division will prioritize covered populations with the greatest need based on the analysis in the needs and barriers section of this plan.

prepare for reintegration into society.

Implementation Activity 3.4: Leverage existing partnerships with state education agencies to engage students and families in digital literacy programs.

Description: A widely cited concern, particularly from immigrant and new American communities, was the need to better serve families with school-age children to navigate the K-12 school system's digital requirements. Schools are using applications and emails to communicate with parents, which is a barrier for many parents who are not digital natives and for those who do not speak English.

Covered Populations: All covered populations²³

Key Components:

- The division will work with partners to integrate digital literacy into existing training aimed at parents and caregivers. For example, integrating digital literacy concepts into parent academies offered through schools or ESL training at local community colleges. The division will make Digital Equity Grant funding available to support digital literacy of parents and caregivers.
- The division will leverage lessons learned and expand programs like Tech Teams through the N.C. Business Committee for Education, which provide free training and paid experience to high school students who can provide technical training for adults and peers and help desk support to their schools and communities.
- 3. The division will partner with state and local education entities to provide resources on website accessibility and inclusivity standards identified in Strategy 2: Applications and websites are accessible and inclusive.

Strategy 4: Promote practices and leverage tools to ensure online privacy and security.

Measurable Objectives for All Covered Populations	Baseline
 Long term (2029): Improve confidence and ability to protect personal data online by 10% Near term (2027): increase by 5% Evaluation Measure: Digital safety measures data from Digital Equity Survey 	 Somewhat or very confident in the following: Knowing how to keep yourself safe online: 79% Protecting the privacy of your personal data: 75% The table on pg. 54 in the Online Privacy and Cybersecurity by Covered Population section displays baseline data by covered population.

Potential partners may include but are not limited to: N.C. Department of Information Technology's privacy and cybersecurity personnel, education partners (including: N.C. Department of Public Instruction, N.C. Community College System, University of North Carolina System, N.C. Independent Colleges and Universities), workforce partners (N.C. Department of Commerce), cybersecurity programs (e.g. Carolina Cyber Network), tribal governments and organizations, local governments, regional Councils of Government, organizations

²³ The division will prioritize covered populations with the greatest need based on the analysis in the needs and barriers section of this plan.

and agencies with established digital navigator programs, housing authorities life-long learning centers, healthcare providers, N.C. Department of Adult Corrections and Reentry councils, faith-based organizations and Community Anchor Institutions (e.g., senior centers, libraries, K-12 schools).

Go to the Implementation Timeline

Implementation Activity 4.1: Partner with workforce and education agencies at the state and local levels to identify and adopt digital skills standards, including digital privacy and cybersecurity standards. (Crossover from Strategy 3 Activity 1)

Description: As described above, this strategy centers on the need for clear standards for digital skills and literacy across the state to ensure meeting individual and workforce needs. These standards must include online safety to keep personal data safe and secure and could include information about privacy settings, online consent options and rights regarding sharing personal information. A key theme from focus groups and the digital equity survey was that digital safety was a concern across all covered populations, and many residents do not feel very confident keeping their data safe, private, and secure online.

Covered Populations: All covered populations²⁴

Key components:

- 1. The division will partner with workforce and education agencies at the state and local levels to identify and recommend digital skills standards, including digital safety standards.
- 2. The division will publish a set of digital skills standards, including developing a toolkit and training materials for state and local partners with recommendations for integrating standards into existing training programs (for example trainings already targeting seniors and youth).
 - a. The division will partner with community-based organizations and organizations serving covered populations to create training materials that meet needs, are culturally competent, and available in multiple languages other than English.
- 3. The division will integrate digital safety standards into future funding cycles of the Digital Equity grant for applicants developing or expanding digital literacy services.

Implementation Activity 4.2: Integrate cybersecurity and privacy training into curricula being implemented by digital navigators and other digital literacy efforts across the state.

Covered Populations: All covered populations²⁵

Description: As described above, digital navigators can address digital needs in communities and for covered populations. However, cybersecurity and privacy are often an "invisible need," because people do not know where to start or even the right questions to ask. Online safety must be integrated into training curricula for digital navigators and other digital literacy programs, so it becomes embedded into programming. For example, if someone needs help setting up an email account, a digital navigator will also provide insight into how to create a strong password and strategies for keeping the password private.

²⁴ The division will prioritize covered populations with the greatest need based on the analysis in the needs and barriers section of this plan.

The division will prioritize covered populations with the greatest need based on the analysis in the needs and barriers section of this plan.

Key Components:

- 1. The division will develop guidance and toolkits to help entities integrate online safety standards into digital navigator training. All materials should be available in languages other than English.
 - a. Partner with existing digital navigation and literacy programs to ensure alignment, such as the N.C. Community College System's digital navigator certificate and NC 211's digital navigator hotline.
 - b. Launch a campaign to increase awareness of safety standards and toolkits.
- 2. Digital Equity grant funding will be available to train staff members at organizations and anchor institutions on online safety. For example, as learned through the Digital Navigator Initiative, libraries are often on the frontlines of the digital divide, but library staff often lack training to provide support.

Strategy 5: Strategy 5: Ensure that North Carolinians have access to digital devices to meet their needs.

Measurable Objectives for All Covered Populations Baseline Long term (2029): All North Carolinians²⁶ have access²⁷ 519 organizations serving all covered populations to a quality public computer through a community anchor are providing public device access (such as institution. public computer labs) and internet access, however the division needs to better understand Near term (2027): Increase access to a quality public how many people these organizations serve. computer by X%²⁸ Table on page 25 displays available assets Evaluation Measure: Evaluating access will require a more by covered population including public device refined measure. It may include a geographic analysis of the access. N.C. Asset Inventory for public device access. Consideration of organizational capacity to meet needs is also an element A more robust baseline evaluating "access" will of access. The division will continue to develop and refine be developed through implementation of the this measure.29 Digital Equity Capacity Building Grant Program. Long term (2029): 95% of North Carolina households will 92% of households (ACS 5-year estimates) own a working, large-screen (laptop, desktop, or tablet), internet-capable computer that meets their needs. Near term (2027): Increase by 1%

Evaluation Measure: Households with a home desktop or laptop computer data from American Community Survey

5-year estimates.

²⁶ Specific measurable objectives will be developed once a more robust baseline is determined. Partners in device access are encouraging the use of 100%

²⁷ A public device that is nearby, convenient, and appropriate to the intended use

²⁸ Specific measurable objectives will be developed once a more robust baseline is determined.

²⁹ Other criteria could include resident satisfaction, reduction in barriers to access (distance, for example) and if the device and length of time are adequate for meeting a resident's needs.

Measurable Objectives for All Covered Populations

- Long term (2028): North Carolinians have access to lowcost or no-cost computers, and no-cost or low-cost technical support.
 - Increase in households having enough working digital devices to meet their needs by 5%
 - Increase in the number of technical support services that are free or considered very/somewhat affordable by 5%
 - Increase in the number, capacity, and reach of organizations providing low-cost devices and technical support by X%³⁰

Near term (2027):

- Increase in households having enough working digital devices to meet their needs by 3%.
- Increase in the number of technical support services that are free or considered very/somewhat affordable by 3%
- Increase in the number, capacity, and reach of organizations providing low-cost devices and technical support by X%³¹
- **Evaluation Measure:** Digital Equity Survey and a Geographic analysis of N.C. Asset Inventory, however evaluating reach and capacity will require a more refined measure.

Baseline

86% of survey respondents report having enough working digital devices to meet their needs.

26% of survey respondents who needed technical support received services for free; 47% who needed technical support reported services to be "very or somewhat" affordable.

193 organizations provide devices access and distribution³². Of those, there are 5 nonprofit device refurbishers (2 larger regional refurbishers and 3 small, county-based refurbishers).

The <u>Asset Inventory</u> displays available resources by covered population and county including public device access.

A more robust baseline evaluating "capacity and reach" of organizations will be developed through implementation of the Digital Equity Capacity Building Grant Program.

Potential partners: Education, corporate, and government sectors for device donation, device and technology refurbishers, organizations that serve covered populations, community anchor institutions (e.g., senior centers, libraries, K-12 schools), tribal governments and organizations, housing authorities, civil rights organizations, local news organizations, and federal agencies.

Go to the Implementation Timeline

Implementation Activity 5.1: Increase public access to devices at community anchor institutions.

Covered Populations: All covered populations³³

Description: Many of North Carolina's county-level digital equity plans identified public device access locations and lending programs as important. To truly advance digital equity, the ultimate goal is to move toward universal device ownership among Covered Populations. Public device access and lending programs can serve as a steppingstone toward adoption and ownership. Encouraging and supporting the use of devices in any form can assist with increasing users' confidence and comfort with becoming a device owner

³⁰ Specific measurable objectives will be developed once a more robust baseline is determined.

³¹ Specific measurable objectives will be developed once a more robust baseline is determined.

³² Organizations or programs that help people access affordable digital devices. This could include organizations and programs along the entire device supply chain, including device donation sources, refurbishers, retailers, and distribution locations.

³³ The division will prioritize covered populations with the greatest need based on the analysis in the needs and barriers section of this plan.

themselves. Additionally, people need to know where and how to access public computing devices.

Key Components:

- The division will partner with key anchor institutions such as the State Library of North Carolina, the N.C. Community College System, high education institutions, K-12 systems, community centers and others to increase public computer labs and device lending programs and partner with local news organizations and other diverse media channels to increase awareness of available programs and services.
 - a. Device lending programs should provide longer-term lending periods to increase ongoing access.
 - b. Clear pathways should exist so that those relying only on smartphone use, a loaned device or public access can move to device ownership. The transition can be facilitated by providing clear information to residents on how to access free or affordable devices. Public device access should be considered when developing a pilot of the hub-and-spoke model referenced elsewhere in these recommendations.

Implementation Activity 5.2: Increase the supply of no cost and low-cost devices in North Carolina.

Covered Populations: All covered populations

Description: A consistent supply of devices is critical to effective device distribution. A range of sources including both new and refurbished devices to address a variety of needs and budgets should be considered. Refurbished devices can be leveraged as a result of donations made by individuals and organizations. To keep the overall costs of devices as low as possible, the goal is to encourage or incentivize a larger volume of donated devices for refurbishing. To achieve this goal, new and innovative partnerships will need to be leveraged.

Key Components:

- 1. The division will identify, prioritize, and build relationships with public and private entities with a large inventory of computers to be donated and refurbished (education, corporations, and government), expand education around device donation, and simplify the donation process.
- 2. The division will leverage the Federal Computers for Veterans and Students Act, which intends to direct repairable federal computers to nonprofit technology refurbishing organizations and is expected to be operationalized by the General Services Administration in 2024. The division may need to assess the federal agency footprint is in the state and to actively engage those agencies.
- 3. The division will work to improve current state law and policy to encourage and facilitate donations from state and local government, as well as colleges and universities.

Implementation Activity 5.3: Develop and sustain a high-volume preparation and logistics system (of new and refurbished devices) system that supports the efficient movement of devices throughout the state and matches computing devices with the unique needs of the intended Covered Populations.

Covered Populations: All covered populations³⁴

Description: Preparation³⁵ and logistics³⁶ of devices are not linear processes and may be done in tandem within an organization or by different organizations.

<u>Logistics</u>: The planning and coordination of the movement of devices from sources (donors, manufacturers, resellers of both new or refurbished computers) to preparation sites and ultimately for deployment is essential to meeting the household device ownership goal. By building upon existing assets and bolstering resources and capacity where needed, increased scalability can be achieved.

<u>Preparation</u>: A range of partners play a pivotal role in preparing devices for the unique needs and intended uses of Covered Populations. Devices must be tailored to the unique needs of recipients, demanding specialized experience and skill in device selection, assessment, and preparation. Partners may include refurbishers, manufacturers, resellers, and workforce development, nonprofit, and community programs. Collectively referred to as "preparation sites," they have the crucial task of customizing and bundling initial devices, whether new or used, for optimal use (see Digitunity's graphic, "Device Essentials for Digital Equity").

Key Components:

- The division will evaluate in-state technology refurbishing organizations to examine their capacity to scale operations and their interest in expanding capacity to meet demand for preparing and distributing devices.
- 2. The division will leverage the significant expertise of North Carolina technology refurbishers to expand their services, including preparation and distribution throughout the state by identifying pilot regional organizations that can be upfitted to provide logistics and preparation. This is called a "Hub and Spoke" model, where established refurbishers (hubs) that have large physical capacity and expertise support strategically placed community-based organizations (spokes) to refurbish and distribute devices. This program will be initially funded through existing ARPA funds but is integral to the overall strategy.
- 3. Recycling programs: The device distribution system can seamlessly integrate into local, county, and state systems through device recycling programs. The division will review current programs to identify opportunities for obtaining a supply of devices that can be refurbished and directing end-of-life equipment into recycling efforts, creating a sustainable device lifecycle loop.
- 4. The division will work with partners to expand existing and develop new workforce development programs that train individuals within Covered Populations in technical skills and refurbishment not only to increase device preparation capacity but also to create an in-state pipeline of technology talent.

³⁴ The division will prioritize covered populations with the greatest need based on the analysis in the needs and barriers section of this plan.

^{35 &}lt;u>Preparation</u>: The preparation of computing devices by entities within the ecosystem is a critical process that ensures they are properly configured, customized, and equipped with the necessary components to serve their intended purpose effectively, applicable to both new and refurbished systems. Proper preparation ensures that devices are ready for deployment and meet the specific needs of users.

[•] For new devices, this process typically involves configuring the hardware and loading software tailored to the intended user population, such as specialized software programs designed for older adults or unique configuration for users with disabilities.

[•] For used or refurbished devices, preparation includes a comprehensive set of activities such as screening for disposition, data wiping to ensure data privacy, diagnostic testing, repair, refurbishment, configuration, and software loading.

Additionally, both new and refurbished computers may undergo "kitting," which involves the assembling of associated
peripherals and accessories to be bundled with devices, such as keyboards, mice, headsets, or assistive devices.

³⁶ The logistical pathway and considerations for device movement from the supply source to the preparation partners, and from the preparation partner to deployment sites.

Implementation Activity 5.4: Utilize trained and qualified partners for device deployment³⁷ and technical support

Covered Populations: All covered populations³⁸

Description: To effectively reach and support Covered Populations, working with trusted community organizations remains critical. The Office of Digital Equity and Literacy will identify and train trusted community "deployment partners" (organizations that serve covered populations) to ensure devices are received by those who need them most. Trained and qualified deployment partners can coordinate with device preparation sites and serve as direct points of contact with Covered Populations. Deployment partners' responsibilities include conducting outreach to Covered Populations, engaging directly with clients including identifying their device needs and intended uses, providing referrals, and disseminating devices, as well as employing specific criteria for qualifying individuals to receive a device. Depending on capacity, deployment partners may also be able to provide help desk support (accessible and user-friendly assistance for everyday computer issues) and/or technical support (resolving technical problems such as hardware repair services), or they may work with other partners (such as device suppliers or preparation or logistics partners) to provide those services. Deployment partners can also ensure devices meet specific individual needs such as accessibility features for people with disabilities and that services are culturally competent and available in languages other than English. This Activity directly connects with Implementation Activity 3.3. Many of the deployment partners may also be providing digital literacy trainings as well or connecting them to trusted digital literacy partners.

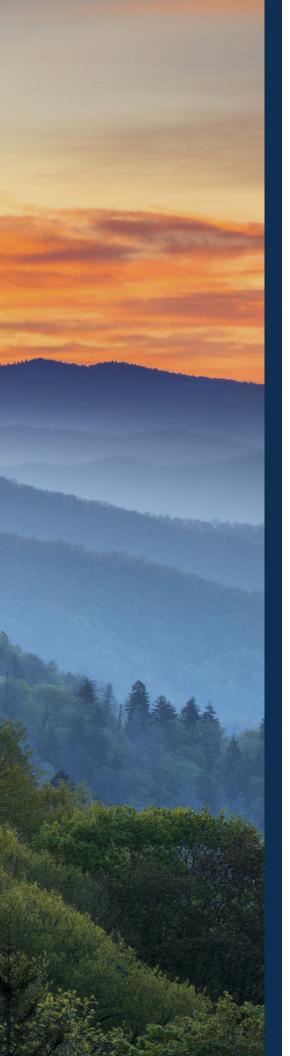
Key Components:

- 1. The division will develop minimum requirements for device deployment partners encompassing core responsibilities, deliverables, and key criteria for Covered Populations eligible for devices. These requirements should also include specific expectations such as coordinating with device preparation partners, serving as direct points of contact with Covered Populations, conducting outreach to these populations, facilitating direct client contact, offering support referrals, disseminating devices, and implementing recipient vetting and qualification criteria.
- 2. Partnering with device refurbishers and other key partners, the division will identify and train trusted community organizations that serve covered populations as "deployment partners." As noted in Strategy 3, a key finding in the listening sessions is that people want to receive digital inclusion services from organizations they trust, including devices, technical support, and help desk support.
- 3. Incorporate into the state's response and recovery programs community organizations that can provide digital access and technical assistance during and after declared emergencies. Educational materials should be developed for deployment partners that can be customized to local contexts. Materials should offer comprehensive information for effective referrals to technical support, skills training, and affordable connectivity. Templates for communication and outreach materials, designed to reach specific Covered Populations, should also be developed and disseminated to deployment partners.

³⁷ The process of distributing large-screen, internet-enabled devices to individuals.

³⁸ The division will prioritize covered populations with the greatest need based on the analysis in the needs and barriers section of this plan.





The following timeline summarizes the activities described in detail in the previous section. The timeline includes the following for each year:

- Key Milestones for Communication, Evaluation and Programs which includes public annual reports to evaluate progress, re-deployment of the Digital Equity Survey (in 2027 and 2029), and the expected release of the Digital Equity Grant application utilizing the State Capacity Grant funds. Note: annual reports may include plan amendments and updates to measurable objectives;
- Key Data Milestones to measure progress on the measurable objectives for each category; and
- Implementation Activities and which strategy they are supporting.

Most of the implementation activities are listed in the year in which they will begin, however their implementation will be ongoing throughout the five-year period.



DATES	ACTIVITIES & MILESTONES	STRATEGY / ACTIVITY
	Key Milestones for Communication, Evaluation, ar	nd Programs
Jan. 2	Public Comment Ends	
Jan. 14	Final plan sent to NTIA	
Feb. 28	Digital Equity Plan officially accepted by NTIA and Planning Period ends	
Spring-Fall	Digital Equity Capacity Building Grant Funding applied for and received for plan implementation	
	Implementation Activities	
2024-2025	Encourage prospective BEAD subgrantees seeking funding from broadband infrastructure grant programs to outline how they plan to engage covered populations	Strategy 1, Activity 1.1
2024-2025	Classify and identify Community Anchor Institutions in the BEAD program to ensure access to high-speed internet infrastructure.	Strategy 1, Activity 1.1
2024-2025	Continue identifying trusted partners to promote and enroll households in ACP and develop peer network	Strategy 1, Activity 1.3
2024-2026	Convene a working group of government and community partners to review standards for online accessibility and inclusivity	Strategy 2, Activity 2.1
2024-2029	Develop and facilitate a peer network of digital navigator and digital literacy programs to share challenges, best practices, and coordinate services	Strategy 3, Activity 3.2
2024-2025	Partner with workforce and education agencies to define digital skills standards, including digital privacy and cybersecurity standards and digital health literacy.	Strategy 3, Activity 3.1
2024-2025	Integrate digital safety standards into future funding cycles of state Digital Equity grants	Strategy 3, Activity 3.1 Strategy 4, Activity 4.1
2024-2029	Identify, prioritize, and build relationships with public and private entities or sectors with a large inventory of computers to be donated and refurbished	Strategy 5, Activity 5.2
2024 - 2029	Leverage the expertise of North Carolina technology refurbishers to expand their services	Strategy 5, Activity 5.3



DATES	ACTIVITIES & MILESTONES	STRATEGY / ACTIVITY
	Key Milestones for Communication, Evaluation, ar	nd Programs
2025-2026 ³⁹	State Digital Equity Grant application process opens and grants are made to Implementation Partners	
December 2025	Annual Report to the Public on progress made over the past year.	
	Key Data Milestones	
December 2025	Goal: 98% of households have access to high-speed internet	Measurable Objective for Strategy #1
December 2025	Goal: 100% of households with children subscribe to the internet	Measurable Objective for Strategy #1
	Implementation Activities	
2025-2029	Increase participation in low-cost option internet subscriptions through BEAD program	Strategy 1, Activity 1.1
2025-2027	Support BEAD program efforts to assess network connectivity needs of Community Anchor Institutions	Strategy 1, Activity 1.2
2025-2026	Evaluate ACP pilots and programs to identify best practices for future funding	Strategy 1, Activity 1.3
2025-2026	The online accessibility and inclusivity working group will develop guidance to clearly articulate standards for online accessibility and inclusivity	Strategy 2, Activity 2.1
2025-2026	Publish a set of digital skills standards, including a toolkit and training materials for state and local partners with recommendations for integrating standards into existing training programs	Strategy 3, Activity 3.1
2025-2029	Partner with organizations supporting telehealth to integrate digital literacy into their training and digital navigation programs	Strategy 3, Activity 3.2
2025- 2029	Build the capacity of organizations serving covered populations to develop and refine digital navigator and literacy programs	Strategy 3, Activity 3.2, and Activity 3.3
2025- 2029 Tailor existing programs to meet the needs of covered populations		Strategy 3, Activity 3.3

³⁹ Expect the grant to open in summer 2025 and grants awarded by the end of 2025 or early 2026, but it will depend on when State Capacity grant funds are awarded and the length of the contracting process for Digital Equity Grant awardees.

DATES	ACTIVITIES & MILESTONES	STRATEGY / ACTIVITY
2025- 2029	Work with partners to integrate digital literacy into existing trainings aimed at parents and caregivers	Strategy 3, Activity 3.4
2025-2026	Strategy 4, Activity 4.2	
2025- 2029	Partner with key anchor institutions to develop strategies to increase public computer labs and device lending programs	Strategy 5, Activity 5.1
2025-2029	Work to improve current state law and policy to encourage and facilitate donations from state and local government, as well as colleges and universities	Strategy 5, Activity 5.2
2025-2026 ⁴⁰ Develop minimum requirements for device deployment partners encompassing core responsibilities, deliverables, and key criteria for Covered Populations eligible for devices		Strategy 5, Activity 5.4

2024	2025	2026	2027	2028	2029

DATES	ACTIVITIES & MILESTONES	STRATEGY / ACTIVITY			
Key Milestones for Communication, Evaluation, and Programs					
December 2026	Annual Report to the Public on progress made over the past year.				
Summer 2026	Digital Equity Convening to bring together stakeholders for peer learning and to discuss progress				
	Implementation Activities				
2026-2027	Create on-going training for state government staff and train staff members representing all cabinet-level agencies	Strategy 2, Activity 2.1			
2026-2029	Work with partners to expand existing and develop new workforce development programs that train individuals within Covered Populations in technical skills and refurbishment	Strategy 5, Activity 5.3			

⁴⁰ Finalized before Digital Equity Grant program implementation partners awarded

DATES	ACTIVITIES & MILESTONES	STRATEGY / ACTIVITY
2026-2029	Partner with device refurbishers and other key partners to identify and train trusted community organizations that serve covered populations as deployment partners	Strategy 5, Activity 5.4

2024 2025 2026 2027 2028 2029

DATES	ACTIVITIES & MILESTONES	STRATEGY / ACTIVITY
	Key Milestones for Communication, Evaluation, ar	nd Programs
January-May 2027	Digital Equity Survey re-deployed to measure progress	
December 2027	Annual Report to the Public Incorporating 2025 American Community Survey Data	
December 2027	Sustainability Plan Developed and published	
	Key Data Milestones	
July 2027	65% of eligible households subscribed through low-cost and subsidized internet services	Measurable Objective for Strategy #1
July 2027	87% of households subscribe to high-speed internet	Measurable Objective for Strategy #1
July 2027	80% of North Carolinians indicate they are somewhat or very confident in accessing or applying online for government services (increase in 3% across covered populations).	Measurable Objective for Strategy #2
July 2027	Increase by 5% the percentage North Carolinians who are confident using word processing programs, finding educational content, and applying for jobs	Measurable Objective for Strategy #3
July 2027	Increase access to and geographic reach of services that meet individual needs to advance digital literacy	Measurable Objective for Strategy #3
July 2027	Improve confidence and ability to protect personal data online by 5%	Measurable Objective for Strategy #4
July 2027	Increase in North Carolinians having access to a quality public computer through a community anchor institution.	Measurable Objective for Strategy #5

DATES	ACTIVITIES & MILESTONES	STRATEGY / ACTIVITY
July 2027	93% of North Carolina households will own a working, large-screen (laptop, desktop, or tablet), internet-capable computer that meets their needs.	Measurable Objective for Strategy #5
July 2027	Increase in households having enough working digital devices to meet their needs by 3%; Increase in the number of technical support services that are free or considered very/somewhat affordable by 3%; and Increase in the number, capacity, and reach of organizations providing low-cost devices and technical support	Measurable Objective for Strategy #5
	Implementation Activities	
2027-2028	Working group will develop a toolkit for state, local and community partners on how to implement online accessibility and inclusivity standards	Strategy 2, Activity 2.1
2027-2029	Expand online accessibility and inclusivity training to local government and community organizations serving covered populations	Strategy 2, Activity 2.1
2027-2029	Increase digital navigation services through community anchor institutions	Strategy 3, Activity 3.2
2027-2029	Partner with state and local education entities to provide resources on website accessibility and inclusivity	Strategy 3, Activity 3.4
2027-2029	Incorporate community organizations that can provide digital access and technical assistance, during and after declared emergencies, into the state's response and recovery programs	Strategy 5, Activity 5.4

2024	2025	2026	2027	2028	2029

DATES	ACTIVITIES & MILESTONES	STRATEGY / ACTIVITY
	Key Milestones for Communication, Evaluation, an	d Programs
Summer 2028	Digital Equity Convening to bring together stakeholders for peer learning and to discuss progress	
December 2028 Annual Report to the Public		

DATES	ACTIVITIES & MILESTONES	STRATEGY / ACTIVITY			
Key Milestones for Communication, Evaluation, and Programs					
January-May 2029	Digital Equity Survey Re-deployed to evaluate progress				
December 2029	Final Report to the Public				
Fall 2029	Federal Program Closeout				
	Key Data Milestones				
December 2029	100% of unserved and underserved households have access to high-speed internet	Measurable Objective for Strategy #1			
July 2029	80% of eligible households subscribed through low-cost and subsidized internet services	Measurable Objective for Strategy #1			
July 2029	90% of households subscribe to high-speed internet	Measurable Objective for Strategy #1			
July 2029	85% of North Carolinians indicate they are somewhat or very confident in accessing or applying online for government services (increase in 8% across covered populations from baseline).	Measurable Objective for Strategy #2			
July 2029	Cabinet-level agencies are trained on accessible website content as well as other public entities (ex. local governments) to provide accessible online content.	Measurable Objective for Strategy #2			
July 2029	Increase by 10% the percentage North Carolinians who are confident using word processing programs, finding educational content, and applying for jobs	Measurable Objective for Strategy #3			
July 2029	Increase access to and geographic reach of services that meet individual needs to advance digital literacy	Measurable Objective for Strategy #3			
July 2029	Improve confidence and ability to protect personal data online by 10%	Measurable Objective for Strategy #4			
July 2029	All North Carolinians have access to a quality public computer through a community anchor institution.	Measurable Objective for Strategy #5			
July 2029	95% of North Carolina households will own a working, large-screen (laptop, desktop, or tablet), internet-capable computer that meets their needs.	Measurable Objective for Strategy #5			

DATES	ACTIVITIES & MILESTONES	STRATEGY / ACTIVITY
July 2029	Increase in households having enough working digital devices to meet their needs by 5%;	Measurable Objective for Strategy #5
	Increase in the number of technical support services that are free or considered very/somewhat affordable by 5%, and	
	Increase in the number, capacity, and reach of organizations providing low-cost devices and technical support	

Potential Risks to Implementation

While the division has made every effort to develop strategies that are sustainable and transformational, the next five years may bring unanticipated hurdles. One of the biggest risks to implementation is the future of the Affordable Connectivity Program (ACP) which as of the writing of this plan, is set to run out of funding in spring 2024. Without the ACP, access to free or low-cost reliable internet would become even more challenging. Through Digital Equity Plan annual reports, the division will maintain transparency about any amendments made to the North Carolina Digital Equity Plan.



This digital equity plan was not created in a vacuum, and it will not be implemented in one. The community driven planning process confirmed the interconnection of challenges that covered populations face and solutions that will close the digital divide. Alignment with state strategic priorities is essential to the division's success in implementing the strategies outlined in this plan.

Descriptions below outline the clear connection to economic and workforce development goals, plans, and outcomes; educational outcomes; health outcomes; civic and social engagement; and delivery of other essential services. As the division refines the plan and receives public comment, other relevant strategic plans will be added as connections to this plan.

Economic and Workforce Development

The N.C. Department of Commerce is a critical partner and embraced high-speed internet access and adoption as a crucial goal for building a stronger workforce including aligning with the division's goal to expand high speed internet access and lower costs for 98% of North Carolina's households. This ambitious goal is in alignment with Strategy 1 of this plan. Other goals to increase digital skills and engage more North Carolinians in the digital economy connect to this plan's goals to enhance opportunity through increasing digital skills (Strategy 3 and 4).

Education

While K-12 public schools and their students are not a "covered population," they are an essential part of the State's digital equity plan. This plan includes extensive partnerships with the N.C. Department of Public Instruction, local public-school systems, and education advocates to ensure that the digital inequities brought into sharp focus by the COVID-19 pandemic continue to be addressed. Common plan elements include ensuring that schools have reliable, high-speed internet (Strategy 1) and that educators have more than adequate digital resources (Strategy 3 and 4).

Strategic plans for the University of North Carolina system and the N.C. Community College System highlight increasing rural enrollment and online learning options. These focus areas require increased infrastructure to provide digital access in rural and underserved areas, as well as devices and skills for students. North Carolina's Independent Colleges and Universities also have a key role to play; four of the nine Connecting Minority Communities grantees referenced in the Assets section are independent colleges and leaders in promoting digital equity on and off their campuses. Several plans at the college or campus level more specifically focus on digital access and literacy. These institution-level plans will continue to be reviewed and incorporated as implementation plans are refined.

Health

Access to health care and health information are major components of this plan, as they are central to the ability of North Carolina residents to work, learn, and enjoy a high quality of life. This plan aligns with N.C. Department of Health and Human Services' plans to train and deploy digital navigators (Strategy 3); equip healthcare providers with the internet speed, devices, and skills to effectively provide telehealth services (Strategies 1-5); and increase the number of patients, especially, rural, disabled, and elderly, who have high-speed internet service, devices, and skills to connect to health care providers and manage their health care accounts online (Strategies 1-5).

The division also participates a core team member of the N.C. Agriculture Digital Alliance, a collaborative led by the N.C. Office of Rural Health which aims to create a space for partners to learn, share and collaborate to support digital inclusion and equity among the agricultural community inclusive of growers, agricultural workers and their families. As part of the planning process, the division hosted a pilot listening session to better understand the needs of the agricultural community and the organizations that serve them.



Delivery of Essential Services

Under this broad category this plan includes goals to ensure that residents have the necessary skills and access to avail themselves of services offered by state and local agencies, as well as goals to increase the availability and accessibility of essential online services (Strategy 2). These services include health care and health information, training for general education and specific occupations, communicating with family members who are incarcerated, applying for public benefits, and managing accounts.

This category also includes emergency management and disaster recovery. With a population of more than 10 million people living in a diverse geographical and topographical area, including a coastline susceptible to hurricanes and flooding, North Carolina is vulnerable to a wide variety of natural and technological hazards. The state recognizes the vital role of broadband infrastructure and device access to communication during and immediately following natural or manmade disasters (Strategies 1 and 5). Through the N.C. Department of Public Safety's Division of Emergency Management, the state works closely with communications companies to ensure networks can deliver messages to residents.

This category also intersects affordable housing. <u>Connect Home USA</u> (CHUSA) is a federal Housing and Urban Development (HUD) program that works to ensure HUD-assisted residents have access to affordable, in-home internet service, devices, and training (Strategies 1-5). While not a state-funded program, CHUSA relies on locally tailored solutions are produced to help narrow the digital divide.

Civic and Social Engagement

The plans highlighted below do not directly highlight increased civic or social engagement as an outcome of increasing digital access and inclusion. However, the plans to increase access, affordability, and adoption at home, to improve access in public spaces and anchor institutions, and to increase accessibility and inclusivity of online content will indirectly improve civic and social engagement (Strategies 1-5). North Carolinians will have more opportunities to access information about elections, learn about events in their community, access local news (and reduce the prevalence of news deserts), communicate with teachers and professors, and access knowledge that may be unavailable without high-speed internet.

While not a state agency - the NC Counts Coalition, a nonpartisan, nonprofit organization committed to building a healthy, just, and equitable North Carolina - is partnering with state agencies to advance digital equity to ensure a fair and accurate census in 2030 and beyond.

Links to Strategic Plans and Priorities

The following table includes some of the state agency strategic plans that can be enhanced by the expansion of North Carolina government services and digital equity efforts. These state agencies represent key partners for the division's success in implementing the strategies outlined in this plan.

Agency / Division	Strategy/Plan/Program	Covered Populations
NCDHHS- Aging and Adult Services AdvaNCing Equity in Aging: A Collaborative Strategy for NC (2023-27)	Create a scalable, master digital health navigator trainer program responsible for supporting digital navigator services and community-based partners across the state that also will enhance the ability to deliver and sustain equitable, usable, and community-centered digital equity training for and with older North Carolinians. This program seeks to address multiple and overlapping "domains of livability" (AARP) for aging adults, including social participation, work and civic engagement, communication and information, access to state and local information about transportation options, and community health services.	Priority: Aging Individuals Other: All other covered populations
NCDHHS- Services for the Deaf and Hard of Hearing Telehealth Resource Center	Telehealth resource center that provides patients, healthcare providers, and American Sign Language interpreters the tools and resources that they need to have a successful telehealth appointment.	Priority: Individuals with disabilities (specifically those who are deaf and hard of hearing) Other: All other covered populations
NCDHHS-Health Benefits Home and Community Based Services (HCBS)	 Special Assistance for In Home Assistance: ARPA funds available to purchase devices (laptops, cell phones, tablets) Purchase software to facilitate socialization. Remote Technology Support: Hotspots and devices to beneficiaries to increase access to HCBS. Provide technology to support telehealth visits to maintain community placement. Strengthen HCBS through collaboration utilizing provided internet 	Priority: Aging individuals, individuals with disabilities Other: All other covered populations

Agency / Division	Strategy/Plan/Program	Covered Populations
N.C. Department of Public Instruction - Information Technology Plan	 K-8 Digital Literacy Establish convenience contracts for local school systems and charter schools to purchase online digital literacy solutions. Collaborate with NCSU-Friday Institute and MCNC to improve student outcomes School Connectivity Initiative \$32M with \$4.5M recurring to ensure all public-school units have equitable access to secure, reliable, high-speed internet. Proof of concept initiative to find innovative solutions to close the connectivity gap for students. Digital Learning Initiative \$2.3M to implement and adopt educator preparedness for digital learning, provide digital resources, and ensure technology access across all schools through transition to open license education materials 	Priority: All covered populations (with a focus on youth in the K-12 school system)
N.C. Department of Transportation - Right of Way and Broadband Strategy	 Use controlled access right of way backbone networks to provide NCDOT with broadband connectivity for the deployment of information technology infrastructure Support state's digital equity goals through better use of tax revenues 	Priority: All Covered populations
N.C. Department of Natural & Cultural Resources Support Rural Communities	 Enable collaborative work in distressed counties Increase digital access for residents of rural or underserved areas through funding programs and local library projects Working with Hometown Strong to bridge work with NCDIT and NCDHHS 	Priority: Rural Inhabitants Other: All Covered Populations
N.C. Department of Adult Correction- Prison Strategic Plan	 Provide training/education to offenders Develop program curriculum for offender use of tablets Target offender needs with specificity 	Priority: Incarcerated Individuals Other: All Covered Populations
N.C. Department of Public Safety- Juvenile Justice	National Center on Institutions and Alternatives Herbert J. Hoelter Vocational Training Center Include digital literacy training in programs Provide virtual training with online simulators	Priority: Incarcerated Individuals Other: All Covered populations

Agency / Division	Strategy/Plan/Program	Covered Populations
UNC System 2022 Strategic Plan	Goal 1: Increase access for underserved populations, including military-connected and rural students. Goal 3: make progress on equity gaps by race/ethnicity and income	Priority: Veterans, Rural inhabitants Other: All Covered populations
North Carolina Community College System 2022 Strategic Plan	Goal 2: Increase access and enrollment at North Carolina community colleges to meet the state's educational attainment goal and expand postsecondary opportunities. Goal 3: Provide resources inside and outside the classroom for all students to successfully enroll, persist, and complete a career program of study.	Priority: All Covered Populations
N.C. Department of Commerce	 First in Talent: Strategic Economic Development Plan for the State of North Carolina (Goal 3 Strategy 10) Tactic 10.1: Support efforts to expand access and lower costs of at least 100:20 Mbps for more than 98 percent of North Carolina households Tactic 10.2 Improve awareness and enable North Carolinians to realize the benefits of high-speed internet through digital literacy and upskilling aimed at accessing the digital economy Tactic 10.3: Assist small businesses with managerial, workforce, and technical barriers to adopting internet-based technologies to enhance their operations 	Priority: All Covered Populations
Disaster Recovery Framework	 The purpose of the North Carolina Disaster Recovery Framework (NCDRF) is to offer direction to the North Carolina Disaster Recovery Task Force in its mission to address the unmet needs of communities affected by a disaster. Recovery Support Function - Education: The development of digital learning products that allow students to continue their education while in interim housing outside their school district or while their school facility is closed. 	Priority: All Covered Populations
North Carolina Assistive Technology Program	The North Carolina Assistive Technology Program (NCATP) is a state and federally funded program that provides assistive technology services statewide to people of all ages and abilities. NCATP provides device demonstration, short-term device loans, reutilization of assistive technology, and promotes independence for people with disabilities through access to technology.	Priority: individuals with disabilities Other: All Covered Populations



The goals, strategies and activities outlined above should all work together to build and strengthen a strong digital equity network (often described as an ecosystem) to meet digital needs of all covered populations. This network will be the backbone of the work, ensuring digital needs are met and that programs are sustainable long after Digital Equity Act funding has been spent. Below outlines key elements of a sustainability plan to ensure a healthy, robust digital equity network into the future.

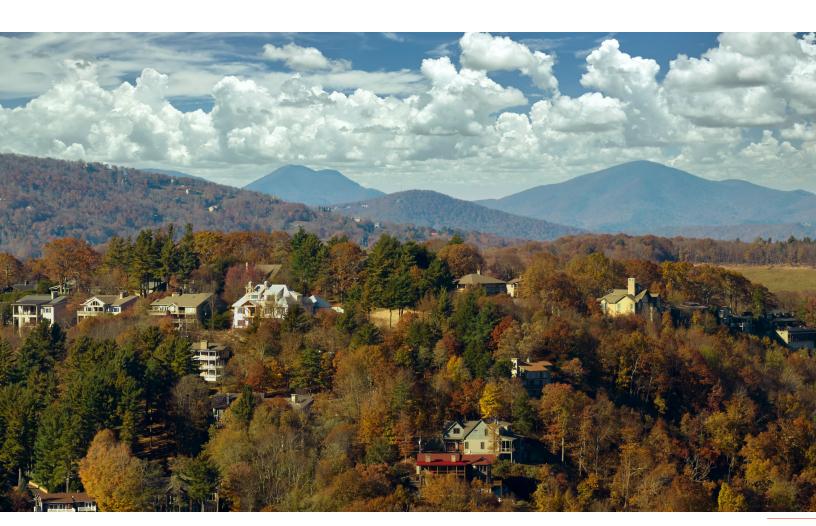
Sustain a diverse, inclusive community of digital equity practitioners

- Continue to identify "assets", organizations that are meeting digital needs and providing resources.
 - Publish an interactive online asset map and invest in regular updates.
 - Partner with local news organizations and diverse media channels to promote available resources.
- Continue to create opportunities to connect digital equity practitioners to one another for peer learning and collective impact, such as public events, listening sessions, and roundtables. The following goals will be prioritized:
 - <u>Integration with government systems</u>: Digital equity should be fully integrated into broader state and local government activities and strategic priorities beyond what has already been identified through this planning process.
 - <u>Digital equity stakeholders</u>: The work of advancing digital equity encompasses a broad range of stakeholders across numerous sectors. Stakeholders, like members of the Digital Equity and Inclusion Collaborative, should span diverse areas, including financial institutions, healthcare providers, educational institutions, local news organizations, and others, and should be encouraged and invited to participate in the ecosystem.
- Align programs and partners identified in the strategies above. The work of digital equity cannot be
 achieved in a vacuum. Collaboration and partnership between agencies and organizations must be
 prioritized throughout the implementation process.
 - <u>Evaluate progress</u>: Beyond the measures outlined above, evaluating progress and identifying what's
 working is vital. Any digital equity funding provided through the division should require evaluation
 of grantees including key performance indicators (already a requirement of the Digital Equity Grant
 program), which could include:
 - Number of ACP enrollment events
 - Number of households enrolled in the ACP
 - Number of individuals (by covered population) trained in digital skills training
 - Number of devices distributed to households
 - Number of individuals served provided technical support for devices

Build Capacity across the state to identify and meet local needs.

• Continue to support coalitions and planning teams (led by the Institute for Emerging Issues) at the local level to develop and implement digital inclusion plans and programs.

- Leverage AmeriCorps programs like American Connection Corps or other volunteer or National Service programs to train talent and meet local needs.
- Identify sustainable funding sources: A healthy, digital equity network requires on-going funding. There are several approaches to funding this work that should be considered, which will contribute to the sustainability of the ecosystem. They include:
 - Braided funding: A significant opportunity lies in continued exploration of funding for digital equity from various federal and state sources such as the FCC's E-Rate Program, the Workforce Innovation and Opportunity Act and SNAP Employment and Training programs, among others.
 - <u>Collaborative funding</u>: By working together and sharing the financial burden among many members
 of the ecosystem, including the philanthropic, government, and corporate sectors, resources can be
 pooled to ensure reduced pricing (for devices as an example) and that digital needs are met.
 - Non-government digital equity fund: Drawing both in-state and out-of-state partners into the effort to ensure the sustainability of the ecosystem can allow for additional financial resources to support key functions. One recommended option is the creation of a digital equity fund. This fund could be established at and managed by a community foundation and could serve as a centralized destination for financial support generated from individual, corporate, or philanthropic donors.







The Division of Broadband and Digital Equity was created in 2021 to serve as the statewide resource for broadband access, digital inclusion, and digital literacy initiatives the state leads. The Division serves as the lead administrative entity for both the BEAD and Digital Equity Act Planning and State Capacity Grant Programs. During the BEAD and digital equity plan development the Division coordinated activities, including in-person community engagement meetings, enhanced promotion of ACP, a workforce development plan, and approaches to address affordability. The BEAD and digital equity planning teams participated in coordination meetings to discuss alignment of objectives and programs and used a central document filing resource.

Coordination with BEAD funding

This Plan's Strategy 1 establishes an objective to align with the BEAD Five Year Plan and the Initial Proposal where plan objectives overlap on deployment, affordability, and community outreach objectives and strategies. The Implementation Plan section clarifies how the digital equity measurable objectives will align with and support other funded digital equity programs in the State. In addition, that section also uses findings from the asset inventory and stakeholder engagement to identify common initiatives, goals and gaps.

Coordination with ARPA funds

As noted in the introduction, the division has utilized state American Rescue Plan Act (ARPA) funds to: 1) design and deploy grants to advance digital equity in communities across the state, 2) pilot a digital navigator program with key community anchor institutions, and 3) launch an ACP enrollment hotline. These ARPA funded programs are aligned with many of the strategies described in the Implementation Plan and each project must prioritize the needs of covered populations (as defined in the Digital Equity Grant guidelines). The strategies described in the Implementation Plan will in part build off lessons learned from these programs and have enabled the division to support the capacity of digital inclusion programs across the state in preparation for digital equity plan implementation and the State Capacity Grant Program.





The Division of Broadband and Digital Equity is truly grateful for the time, expertise, and inspiration that thousands of North Carolinians put into this plan. The division learned from community members across the state through community input and the identification of assets, through dozens of public meetings, interviews, community-led research, and extensive public surveying. The division also benefited from the work of the many excellent local, regional, and state level plans reviewed.

Outreach efforts and research confirmed what many already believed: access to affordable, reliable, high speed internet service, and the devices and skills to connect to it, are essential for individual and community progress in North Carolina. The process of developing this plan also confirmed that most North Carolina residents know that they need and deserve digital equity, even if they may not have known the term. For students who must sit in coffee shops and fast-food restaurants for hours to use the internet to complete schoolwork; for homebound elders who could benefit from being able to confidently conduct business online; and for recently incarcerated people who are returning to a world where daily life requires a smartphone and digital literacy, a lack of digital equity could truly be the difference between success and failure. And because internet access and use are essential, people who don't have reliable access know that they're missing opportunities. What opportunities are being lost because some residents aren't connected?

This plan is a living document, meant to be revisited often and improved as new information becomes available. The division will convene partners regularly and continue to survey residents to document progress. The division will share accomplishments and learnings with North Carolinians and will pursue the strategies described in this plan as though the future of all North Carolinians depends on it, because it does.





APPENDIX A: GLOSSARY OF TERMS

American Communities Survey: The American Community Survey (ACS) is an ongoing survey that provides vital information on a yearly basis about our nation and its people including internet and use data.

Digital Equity: Digital equity is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services.

Digital Inclusion: Digital Inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs). This includes five elements:

- 1. Affordable, robust broadband internet service;
- 2. Internet-enabled devices that meet the needs of the user;
- 3. Access to digital literacy training;
- 4. Quality technical support; and
- 5. Applications and online content designed to enable and encourage self-sufficiency, participation and collaboration.

Digital Navigator: Digital navigators are trusted guides who assist community members in internet adoption and the use of computing devices. Digital navigation services include ongoing assistance with affordable internet access, device acquisition, technical skills, and application support.

Community Anchor Institution: The division defines Community Anchor Institutions (CAIs) to mean a school, library, health clinic, health center, hospital or other medical provider, public safety entity, institution of higher education, public housing organization (including any public housing agency, HUD-assisted housing organization, or tribal housing organization), or community support organization that facilitates greater use of broadband service by covered populations.

NTIA: National Telecommunications and Information Administration, an agency of the United States Department of Commerce that are awarding the Digital Equity Act and Broadband Equity Access and Deployment (BEAD) funding.

FCC: Federal Communications Commission

ACP: The Affordable Connectivity program (ACP) is a federal program run through the FCC that reduces the cost on internet for eligible households by \$30 per month and \$75 per month on tribal lands.

APPENDIX B: KEY PARTNERSHIPS

This plan, and the rich data upon which it is based, would not be possible without the partners engaged during this process.

NC STATE

College of Education
Friday Institute
for Educational Innovation

The William and Ida Friday Institute for Educational Innovation at North Carolina State University (The Friday Institute)

Two teams at the Friday Institute for Educational Innovation at NC State University were involved in supporting the development of the Digital Equity Plan. The Program Evaluation and Educational Research team led data collection and analysis efforts for the Digital Equity Survey, Asset Inventory Survey, and statewide listening sessions. They also provided ongoing data updates to NCDIT, the Core Team, and working groups throughout data collection and writing of the Digital Equity Plan. The Technology Infrastructure Lab led the efforts to create the Digital Equity Survey and related data dashboard.



North Carolina Central University (NCCU)

The division partnered with N.C. Central University (NCCU) to develop a comprehensive asset inventory for the state. NCCU utilized the National Digital Inclusion Alliance's asset survey as a baseline and updated it for these purposes. The division planned a statewide deployment utilizing anchor institutions and partner organizations from working groups.



Institute for Emerging Issues at North Carolina State University (IEI)

The division partnered with the Institute for Emerging Issues (IEI) to review all adopted and draft digital inclusion plans in North Carolina. The review consisted of a literature review of plans and associated asset maps published in the past year through IEI's BAND-NC program and interviews with planning leads for plans published prior to 2022. Interviews were conducted with digital inclusion leads of draft plans.



National Institute of Minority Economic Development (NIMED)

The Research, Policy and Impact Center (RPIC) of the National Institute of Minority Economic Development (NIMED) was engaged to produce this plan document, incorporating the research, public comments, and partner input gathered over a nine-month period by the organizations listed above. The production of this draft plan required the synthesis of the collected data and wisdom of partners with the institutional experience of NIMED in closing opportunity gaps for minorities and women for almost four decades.



Digitunity

Digitunity is a national nonprofit with a mission to make owning a computer possible for everyone. Digitunity was engaged to create a set of recommendations to ensure equitable device ownership for all North Carolinians, inclusive of availability, accessibility, and affordability.

Core Planning Team

This team represents anchor institutions, state government, local government and community-based organizations supporting digital inclusion and/or serving covered populations across the state. This group has been meeting bi-weekly since October 2022.

Name	Organization
Bruce Clark	Center for Digital Equity at Queens University of Charlotte
Christopher Campbell	Inlivian (Charlotte Housing Authority)
Sara Nichols	Land of Sky Regional Council
Merald Holloway	MDC Rural Forward
Kenny Sherin	N.C. Cooperative Extension
Cristina España	North Carolina Governor Roy Cooper's Office of Public Engagement, and Inclusion
Amanda Johnson and Jackie Haske	State Library of North Carolina
Mavis Hill	Tyrrell County Community Development Corporation
Lakisha Jordan	WinstonNet

Assets and Best Practices Working Group

These individuals advised the division on key elements of the Asset Inventory development including the deployment of the asset inventory survey.

Name	Organization
Sara Knapp	AARP
Angela Caraway	Caraway Foundation
Gwenn Weaver	Digital Durham
Martha Allman	Forsyth County Digital Equity Committee
Cari DelMariani	Kramden Institute
Bridget Pfifer	Living a Better Life
Leah Proctor	NC 211 (United Way of North Carolina)
Melanie Morgan	Neuse Regional Library System

Data and Barriers Working Group

These individuals advised the division on key elements of the Digital Equity Survey development including the deployment of the survey.

Name	Organization
Lillian Scott Lee	AARP
Natali Betancur	Center for Digital Equity
Ken Rogerson	Duke University, Sanford School of Public Policy
Adam Hill	Forsyth Futures
Shaun Glaze and Kathleen Perez	Inclusive Data Solutions
Kamela Heyward-Rotimi	Knowledge Exchange Research Group
Jocelyn Romina Santillán-Deras	N.C. Office of Rural Health
Lori Special	State Library of North Carolina
Tianca Crocker	UNC Charlotte

Device Working Group

These individuals supported the creation of a comprehensive device strategy for the division.

Name	Organization
Caitlin Moen	Charlotte Mecklenburg Library
Emery Ortiz	Charlotte Mecklenburg Library
Jamar Davis	City of Charlotte
Henry Rock	City Startup Labs Inc.
Cynthia Speight	Division of Services for the Blind
Pat Millen	E2D, Inc.
Chastan Swain	Hometown Strong
Nikki Crawford	HubZone Technology Initiative
Deirdre Greene	HubZone Technology Initiative
Mark Williams	HubZone Technology Initiative

Name	Organization
James Walker II	Informative Technologies Inc.
Cari DelMariani	Kramden Institute
Tom Walters	Kramden Institute
Cyndy Yu-Robinson	Kramden Institute
Sara Nichols	Land of Sky Regional Council
Torre Jessup	N.C. Department of Information Technology
Michelle Underhill	North Carolina State Library
John Graham	N.C. Telehealth Network
Dawn Baldwin Gibson	Peletah Ministries
Greg Clinton	Virtual Justice.US
Ashley Jacobs	Wake County

<u>Listening Session Partners and Hosts</u>

Working with MDC Rural Forward, the division identified organizations to host listening sessions. While the Friday Institute for Educational Innovation facilitated each session, hosts were responsible for recruiting individuals, providing space, food, and other accommodations as needed. Some organizations chose to host sessions on their own, while others served more of a coordination role and partnered with more local organizations to host the sessions.

MDC Rural Forward

MDC Rural Forward envisions healthier, more sustainable rural communities with increased capacity to solve their own health problems. The division partnered with MDC Rural Forward to help identify and provide support to organizations as listening session hosts.

The division conducted 23 listening sessions in every prosperity zone in North Carolina, reaching each covered population multiple times. The division engaged with a total of 259 North Carolina residents through these listening sessions.

Date	County	Location Name	Coordinating Partner	Number Attended	Populations Represented
6/23/23	Beaufort	Alpha Life	Disability Rights	10	Aging populations, racial/ethnic minority (Black and Native American), low income, people with special needs, veterans, rural areas

Date	County	Location Name	Coordinating Partner	Number Attended	Populations Represented
6/27/23	Halifax	ABC2	NC Counts Coalition	10	Aging populations. racial/ethnic minority (Black & Native American), people with special needs, rural areas
6/29/23	Robeson	American Indian Mothers	Disability Rights	12	Aging populations, racial/ethnic minority (Native American & Black), low income, incarcerated individuals, veteran, people with special needs, rural areas
7/9/23	Jackson	Vecinos	Hispanic Federation	11	Racial/ethnic minority (Hispanic/Latino), low-income, language barriers, people with special needs, low literacy levels, aging populations, rural areas, youth
7/13/23	Triangle/ Triad Blend	AMEXCAN	AMEXCAN	12	Racial/ethnic minorities (Hispanic/Latino)
7/17/23	Wilson	Seeds of Hope	AMEXCAN	12	low literacy, racial/ethnic minority (Hispanic/Latino), low income, language barrier (Spanish), individuals with special needs, veterans
7/18/23	Burke	Industrial Commons	Industrial Commons	13	Racial/ethnic minority (Hispanic/Latino, Asian or Asian American, Black), low income, language barrier, individuals with special needs, veteran, rural areas
7/19/23	Durham	Wilson Center for Science and Justice at Duke Law	OurJourney	12	Aging populations, ethnic/racial minority (Black, Native American), low income, LGBTQIA+, individuals with special needs, veterans, formerly incarcerated (100%)
7/20/23	Cumberland	The Enclave	NC Counts Coalition	5	Racial/ethnic minority (Hispanic/Latino, Black), low income, language barrier, individuals with special needs, veterans
7/24/23	Wake	Garner Rd. Community Center	NC Counts Coalition	8	Racial/ethnic minority (Black), low income, individuals with special needs, veterans
7/25/23	Columbus	Waccamaw Siouan Tribal Grounds	Disability Rights	7	Aging populations, ethnic/racial minority (Native American), low income, individuals with special needs, rural areas
7/27/23	Mecklenburg/ Sampson Blend	Hispanic Federation	Hispanic Federation	12	Aging populations, racial/ethnic minority (Black, Native American), low income, individuals with special needs

Date	County	Location Name	Coordinating Partner	Number Attended	Populations Represented
7/28/23	Pitt/Greene	James D Bernstein Community Health Center	AMEXCAN	9	Low literacy, racial/ethnic minority (Hispanic/Latino), low income, language barrier (Spanish), individuals with special needs, veterans
7/31/23	Anson	Caraway Foundation	NC Counts Coalition	12	Aging populations, racial/ethnic minority (Black), low income, veterans, currently incarcerated, rural areas
8/2/23	Pasquotank	Sunshine Station	Disability Rights	11	Aging, low-income, racial ethnic minority (Black, Other), Language Barrier (Spanish), individuals with special needs, veterans, formerly incarcerated, rural areas
8/3/23	Henderson	Western NC Worker Center	Hispanic Federation	10	Low literacy, racial/ethnic minority (Hispanic/Latino), low income, language barrier (Spanish), LGBTQIA+, individuals with special needs, rural areas
8/12/23	Forsyth	Other Suns	NC Counts Coalition	18	Aging individuals, racial/ethnic minorities (Black, Native American, Pacific Islander, Hispanic/Latino), low income, language barrier, LGBTQIA+, individuals with disabilities. veterans
8/21/23	Stanly	Glory Beans Coffee Shop	OurJourney	13	Low literacy, racial/ethnic minority (Native American, Black, and Pacific Islander), low income, language barrier, LGBTQIA+, individuals with disabilities, formerly incarcerated, aging, rural areas
8/29/23	Mecklenburg	OurBridge	Hispanic Federation	20	Racial/ethnic minorities, refugees (Afghan and Burmese), low income, language barrier
8/30/23	Alamance	Valores	Hispanic Federation	8	Low literacy, racial/ethnic minority (Hispanic/Latino), low income, language barrier, individuals with disabilities, rural areas
9/12/23	Tyrrell	Tyrrell County CDC	Tyrrell County CDC	6	Racial/ethnic minority (Black), aging, rural areas, formerly incarcerated
9/18/23	Pamlico	Youth Navigating Toward Opportunity	Youth Navigating Toward Opportunity	15	Youth, aging populations, low literacy, racial/ethnic minorities (Black, Hispanic/Latino, Native American, Pacific Islander), low income, rural areas

STATE OF NORTH CAROLINA

Date	County	Location Name	Coordinating Partner	Number Attended	Populations Represented
9/19/23	Wilkes	NC Tech Paths	NC Tech Paths	13	Racial/ethnic minority (Black). low income. individuals with disabilities, rural areas, aging, language barrier, LGBTQIA+, special needs, veterans, formerly incarcerated, rural areas

N.C. Telehealth Network Association

The division partnered with the N.C. Telehealth Network Association's Healthcare Broadband Coalition to conduct conversations with telehealth partners around the state. Healthcare providers from the following systems were included in the conversations:

- UNC Chapel Hill Healthcare
- Albemarle Regional Health Services
- Kinston Community Health
- Pearson Family Medical Center
- ECU-Health
- Daymark Recovery Services
- Fellowship Hall

APPENDIX C: RESEARCH QUESTIONS AND RELATED DATA SOURCES

Key Questions

- **1. Availability.** What digital equity resources, programs, plans, and organizations currently exist in North Carolina?
 - To what extent do digital equity resources, programs, plans, and strategies exist in North Carolina related to:
 - i. Availability of affordable broadband?
 - ii. Accessible and inclusive public resources and services?
 - iii. Digital literacy and online security support?
 - iv. Availability and affordability of devices and tech support?
- **2. Quality.** To what extent do the existing digital equity resources, programs, plans, and organizations meet the needs of their community?
 - a. How well do existing resources and services meet the needs of the communities where they are offered?
 - b. To what extent do the available resources support covered populations' economic and workforce development, educational outcomes, health outcomes, civic and social engagement, and delivery of other essential services?
- **3.** Barriers. What barriers to digital equity and inclusion exist that are faced by covered populations in North Carolina?
 - a. What specific barriers does each covered population face?
 - b. How are communities and community members able to overcome those barriers to digital equity and inclusion?
- 3. Improvement. How can North Carolina improve its digital equity offerings across the state?
 - a. What needs related to digital equity and inclusion do covered populations have in communities across North Carolina?
 - b. How feasible is it to meet the needs of covered populations?
 - c. What digital equity and inclusion resources, programs, plans, and organizations need to be established to meet the needs of communities in North Carolina?
 - i. Specifically for the Covered Populations
- **2. Replication and Scale.** What are the most effective and efficient ways to replicate and scale the digital equity resources, programs, plans, and organizations to meet the needs of all North Carolinians?
 - a. What practices could be replicated and scaled to other areas of the state?
 - b. What are the best strategies and platforms for sharing information about digital equity offerings across the state?
 - c. What strategy should NCDIT use to maintain and sustain these resources, programs, plans, and organizations over time?

Evaluation Questions	Data Sources						
	A	sset Invent	ory		Review of Digital Inclusion Plans		
	Content Analysis	Survey	Interviews	Lit Review	Interviews	State Survey	Listening Sessions
Availability. What digital equi	ity resources	, programs,	plans, and or	ganizatio	ns currently e	exist in Nortl	n Carolina?
Resources, programs, plans, and strategies	Х	X	X	X	X		×
Quality. To what extent do the existing digital equity resources, programs, plans, and organizations meet the needs of their community?							
Meet needs of covered populations		Х	X		Х	Х	Х
Support populations' outcomes, engagement, and services			X		X		×
Barriers. What barriers to dig Carolina?	ital equity ar	nd inclusion	exist that are	faced by	covered pop	ulations in N	North
Barriers for each covered population		X	X	X	X	X	X
How do they overcome barriers						Х	X
Improvement. How can North	n Carolina im	prove its di	gital equity o	fferings ac	cross the stat	e?	
Covered populations' needs		Х	Х	Х	X		Х
Feasibility of meeting needs	X				×		X
Needed resources, programs, plans and organizations	Х	×	X	X	Х	×	×
Replication and Scale. What a resources, programs, plans, a							al equity
What practices can be replicated and scaled	Х	Х	X	X	Х		Х
Best strategies and platforms to share information	Х	X	X	X	X		
Strategies to sustain efforts over time	X	X	X	X	X	X	X

APPENDIX D: DIGITAL EQUITY SURVEY

Methodology

The N.C. Digital Equity Survey was designed using guidance from NDIA. Researchers modified the instrument created by NDIA which identified barriers and needs of the general population as well as covered populations for each of the key barriers to digital access: access to and affordability of high-speed internet, accessibility and inclusivity of online public resources, digital literacy, cybersecurity and privacy, availability and affordability of devices and technical support. The instrument was vetted among digital inclusion experts from across the state and revised based on their feedback. The survey instrument was created in Qualtrics, an online survey tool where users can build and distribute surveys, and printable versions were also created. Each was available in the top eight languages which are spoken less than fluently in North Carolina (See below).

The survey was distributed using a snowballing approach where the division first shared the online survey and access to printable copies with partner organizations across the state involved in digital inclusion efforts (e.g., libraries, department of Health and Human Services, senior centers, community organizations, churches, etc.) and asked that they share the survey more broadly within their communities. This sampling method was chosen for gathering baseline data for several reasons. First, the goal of gathering baseline data was to understand the unique needs of covered populations without regular access to reliable internet service, digital devices, and the skills needed to thrive in a digital world. North Carolina has a vast network of digital equity and inclusion networks, which are key to connecting with these most vulnerable communities. The research team relied heavily upon partner organizations during data collection to ensure that we were able to capture the specific needs of covered populations. Second, the covered populations were difficult populations to reach and may not have been well represented in a randomized sample (e.g., inmates) (Sedgwick, 2013). Third, the division was limited in the time allotted for instrument design, data collection, and analysis, which made this method the most reasonable choice given the constraints. Prior studies of the digital divide only surveyed the public using instruments available online. This did not take into account the most vulnerable populations and those most in need of surveying regarding their digital needs. The snowball sampling approach also allowed trusted partners in digital equity to share printed surveys and call-in numbers with patrons who otherwise would not have been able to participate in data collection and analysis.

Language, PDFs, and links to the online survey were provided to make sharing the survey easier for partners. The division also provided printed paper copies with self-addressed, stamped envelopes when requested for these organizations to share printed surveys directly with the public. The survey opened on April 20, 2023, and data were collected through December 8. The plan is to deploy the survey at two additional time points during the implementation phase of the grant to measure progress toward the state's digital equity goals.

See Linked Instrument

Analysis of the survey included an analysis of overall results as well as an analysis by subpopulation. Survey results included 7,447 responses from 100% of NC counties and 96% of zip codes. Other breakout reports were used to identify the specific needs of unique populations beyond covered populations (e.g., the needs of individuals who attended listening sessions and the LGBTQIA+ community). Further analysis will examine trends in the data at different time points.

Methodological Considerations for Future Surveys:

Future data collection efforts may include a combination of snowball sampling, relying on trusted digital equity partners, especially those identified in the asset inventory, to help elicit information about the needs of covered populations they serve, but also include a stratified sampling of the general population which will allow researchers to better understand the differences in the general versus covered population's needs with regards to digital equity and inclusion (Groves, Floyd, Couper, Lepkowski, Singer, and Tourangeau, 2009)

There are also several considerations for redeployment of the digital equity survey instrument. These include a more robust distribution of the survey among digital inclusion partners across the state, a target email and mail campaign to elicit responses from all of our target demographic populations, continued use of phone-in options and printed surveys with prepaid envelopes, cognitive interviews to review and assess clarity, comprehension, and interpretation of survey questions, ensure survey is offered in formats inclusive for individuals with disabilities, include more than the nine language originally offered, work to identify better strategies for distribution of the survey to less represented covered populations (e.g., currently incarcerated).

APPENDIX E: ASSET INVENTORY

The <u>N.C. Asset Inventory</u> survey was developed based upon recommendations from NDIA. North Carolina's asset inventory survey is a modified version of their instrument. The survey was created in Qualtrics and uses survey logic to show only applicable questions. Specifically, organizations were only given blocks of questions based on the types of digital inclusion services they provided. See a survey preview <u>here</u>.

Methodology

The goal of the N.C. Asset Inventory was not to identify a comprehensive list of all digital assets in the state, but rather to develop a baseline of known partner organizations in each of the 100 North Carolina counties. Developing a comprehensive list of digital assets will be a key part of program implementation and will consist of very targeted analysis of programs and resources in each North Carolina county for each of the main barriers to digital inclusion: access to and affordability of high-speed internet, accessibility and inclusivity of online public resources, digital literacy, cybersecurity and privacy, availability and affordability of devices and technical support.

The first phase of the asset inventory data collection consisted of a content analysis of all currently submitted digital inclusion plans. These plans were carefully reviewed by a team of graduate students from NC State University to identify all organizations identified within the digital inclusion plans that provide digital services and resources within their local communities. These organizations served as the initial contacts for survey distribution.

With guidance from NDIA, an asset inventory survey was created to identify all the potential programs and resources available across North Carolina. The survey aimed to identify what digital resources and organizations exist and what is needed in communities across the state. This survey was vetted by digital inclusion experts across the state, and their feedback was used to modify the instrument to identify and meet the needs of North Carolina. It was then distributed to an initial list of organizations identified through the digital inclusion plan content analysis. Using a snowballing approach, the division then asked these organizations to share the survey more broadly with other known organizations. Graduate students also conducted a content analysis of potential resources (e.g., local libraries, community organizations, senior centers, prisons) to determine if they offered digital inclusion services. The division also contacted over 100 nonprofit organizations and gathered additional survey data from senior centers.

For Phase 2, staff and graduate students at N.C. Central University (NCCU) conducted a series of in-depth interviews based on the results of the content analysis and survey to determine which digital equity offerings are working well within the state as well as which need improvement. They also worked to identify what features are most important in a publicly available searchable database which will be developed to share the digital assets with the public. They also worked to identify what gaps exist in the state.

Phase 3 will include the development of a searchable digital equity asset tool, which will allow the public to find resources and offerings in their communities. Additionally, a report will be provided summarizing the planning and implementation, key findings and recommendations for improving digital equity services in the state.

See Linked Instrument

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Methodological Considerations for Future Iterations of the Asset Inventory

There are several considerations for increasing the breadth and reach of the Asset Inventory. These include conducting cognitive interviews with organizations to determine which data points are critical to collect as the searchable public website is developed and identify ways to ensure we are identifying organizations serving all covered populations, continue conducting content analysis of organizational websites to identify more digital inclusion assets, identify best practices in updating and maintaining the Asset Inventory, connect with underrepresented organizations on the current Asset Inventory (e.g., faith-based organizations) to identify a broader range of assets, develop a strategy for dissemination of the Asset Inventory to the public, identify best practices for making the Asset Inventory website accessible for all individuals, and develop training materials to share with local organization to support their efforts to serve community members and ensure consistent implementation.

APPENDIX F: LISTENING SESSIONS

Methodology

To gather more in-depth information about the specific needs of diverse communities and covered populations across the state, NCDIT partnered with Rural Forward and the Friday Institute to identify sites and community members and conduct a series of 23 listening sessions (19 in-person and four virtual) across the state to capture a representative sample of the needs of North Carolina residents, including all covered populations, related to digital equity and inclusion. Specifically, the listening sessions were used to help identify the best ways to overcome barriers to digital equity faced by covered populations and assess the availability and affordability of fixed and wireless broadband technology, digital literacy online security support, and the availability and affordability of tech devices and support in the community. Additionally, the division examined how these barriers affect covered populations' economic and workforce development goals, plans, and outcomes; educational outcomes; health outcomes; civic and social engagement; and delivery of other essential services. The listening sessions largely focused on how best to overcome the identified barriers to replicate and scale best practices.

To ensure the division captured the voices and needs of residents, researchers worked with DIT and Rural Forward to identify several key partners (e.g., Hispanic Federation, Disability Rights, AMEXCAN, NC Counts, OurJourney, The Industrial Commons, and other local and statewide organizations) to identify representative locations and grassroots organizations to host the listening sessions. The division also utilized the connections and trusted relationships within their communities to enlist these organizations in bringing together small groups of community members (8-12 individuals) to share their experiences, needs, and assets as they relate to digital equity and inclusion. While this approach was somewhat cumbersome, it truly ensured that the voices of North Carolinians were heard and reflected into the plan that was created to address their needs.

The instrument developed was created as a semi-structured protocol. Largely, the groups drove conversations, and facilitators ensured that they touched upon components of digital equity and inclusion that were relevant to their community. While this instrument was used as a guiding tool, the listening sessions provided much richer nuance which supported many of the recommendations that went into this plan.

See Linked Instrument

Methodological Considerations for Future Listening Sessions

To continue identifying the specific needs of covered populations and areas of success during program implementation, several recommendations were suggested. These include providing protocols and eliciting feedback from local organization serving covered populations, using insights from the original listening sessions to fine-tune language for both the Asset Inventory and Digital Equity Survey, continue working with a network of organizations from the state level down to local grassroots organizations to identify key locations and individuals that will allow us to hear insights from community members, and work with local partners to include other populations that are not listed as covered populations but are also marginalized (e.g., refugees).

APPENDIX G: DEEPER ANALYSIS OF BARRIERS AND NEEDS BY COVERED POPULATION

- Internet Access and Affordability Needs for Covered Populations
- Online Accessibility and Inclusivity by Covered Population
- Device Access and Technical Assistance Barriers and Needs by Covered Population
- Digital Literacy Needs by Covered Population
- Online Privacy and Cybersecurity Barriers and Needs

APPENDIX H: COVERED POPULATION DEMOGRAPHIC SUMMARIES

*Underlying Counties indicate where clusters exist.

Poverty: Individuals who live in covered households (households with income no greater more than 150% percent of federal poverty threshold)

Shares

The average poverty rate among the 100 counties in North Carolina is around 15.9%. Counties with the highest shares of their population with incomes below the federal poverty line tend to be in the southern and eastern parts of the state. Robeson County has the highest poverty rate among counties in North Carolina at 27.3%. Halifax County has the second highest poverty rate at 26.2%. Camden County has the lowest poverty rate among counties in North Carolina at 6.2%. Dare County has the second lowest poverty rate at 6.8%.

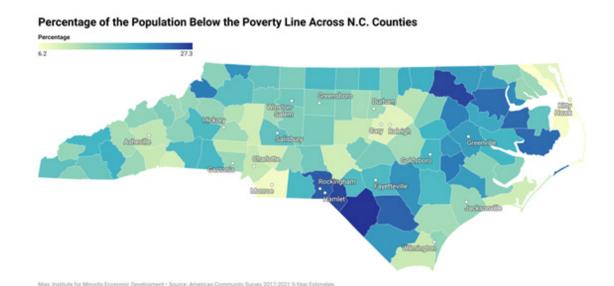


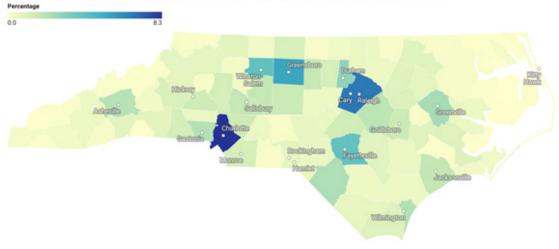
Figure 1A

- Link to live interactive map: https://datawrapper.dwcdn.net/rA7Pf/3/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of individuals with incomes below the federal poverty line. Counties that contain large cities, like Mecklenburg County and Wake County, tend to have the highest share of the state's total population of individuals with incomes below the federal poverty line. Mecklenburg County has around 8.3% of the state's total, while Wake County has around 6.7% of the state's total. Tyrrell County only has around 0.03% of the state's total, while Camden County has only around 0.05%.

Percentage of the State's Population Below the Poverty Line in the Underlying Counties



Map: Institute for Minority Economic Development - Source: American Community Survey 2017-2021 5-Year Estimates

Figure 1B

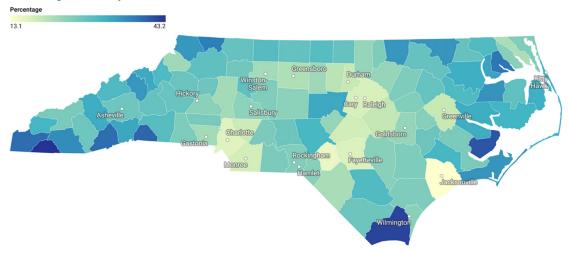
- Link to live interactive map: https://datawrapper.dwcdn.net/bE6s9/1/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Aging individuals

Shares

The average percentage of the population that is 60 or older among the 100 counties in North Carolina is around 27.4%. Counties with the highest shares of their population at least 60 years old tend to be in the western parts of the state. According to the 5-Year estimates (2017-2021) ACS data, Clay County has the highest share of its population that is 60 years old or older at 43.2%. Brunswick County has the second highest share at 41.9%. Onslow County has the smallest share at 15.3%.

Percentage of the Population that is 60 Years Old or Older Across N.C. Counties



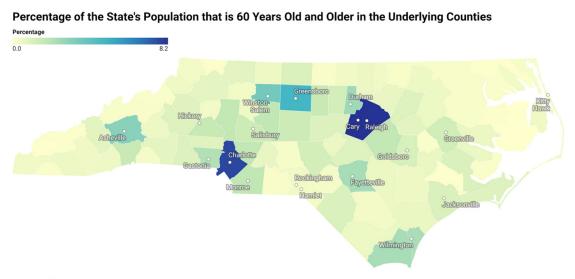
Map: Institute for Minority Economic Development • Source: American Community Survey 2017-2021 5-Year Estimate

Figure 2A

- Link to live interactive map: https://datawrapper.dwcdn.net/xl2Gp/1/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of aging individuals (60 and up). Most of NC's total population of residents 60 and older live in counties with large metropolitan areas. For example, Wake County (with the city of Raleigh) and Mecklenburg County (with the city of Charlotte) have large shares of the state's entire aging population, with Guilford County (with Greensboro) and Forsyth County (with Winston-Salem) following.



Map: Institute for Minority Economic Development • Source: American Community Survey 2017-2021 5-Year Estimat

Figure 2B

- Link to live interactive map: https://datawrapper.dwcdn.net/FQdAN/2/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Incarcerated individuals, other than individuals who are incarcerated in a federal correctional facility

Rates

The average incarceration rate among the 100 counties in North Carolina is around 917 per 100,000 people (between 15-64 years old). Martin County has the highest rate in North Carolina at 2,457 per 100,000, while Pamlico County has the second highest rate at 2,011 per 100,000. Currituck County has the lowest rate among counties in North Carolina at 347 per 100,000, while Orange County has the second lowest rate 383 per 100,000.

Jail and Prison Incarceration Rates per 100,000 Residents 15-64 Across N.C. Counties

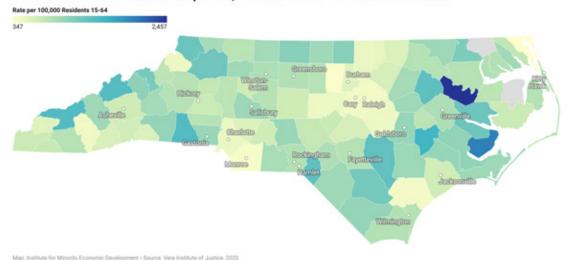


Figure 3

- Link to live interactive map: https://datawrapper.dwcdn.net/8pmze/2/
- Data Source: Vera Institute of Justice
- Downloaded from: Vera Institute of Justice

Share

The average percentage of the population that is incarcerated among the 100 counties in North Carolina is less than 1% at around 0.9%. Martin County has the highest percentage in North Carolina at 2.5%, while Pamlico County has the second highest at 2.0%. Currituck County has the lowest percentage among counties in North Carolina at 0.3%, while Orange County has the second lowest percentage 0.4%.

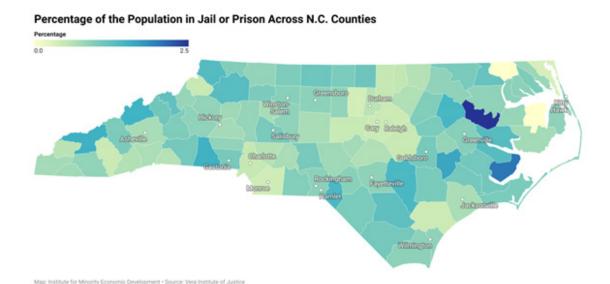


Figure 4A

- Link to live interactive map: https://datawrapper.dwcdn.net/7K5pi/3/
- Data Source: Vera Institute of Justice; 2020 Decennial Census
- Downloaded from: Vera Institute of Justice; Integrated Public Use Microdata Series National Historical Geographic Information System

Cluster

The average county in the state contains around 1% of the entire state's population of imprisoned individuals. Counties that contain large cities, like Mecklenburg County, Wake County, and Guilford County tend to have the highest share of the state's total population of imprisoned individuals. Mecklenburg County has around 6.8% of the state's total, while Wake County has around 6.3% of the state's total. Hyde County only has around 0.04% of the state's total, while Graham County has only around 0.06%.

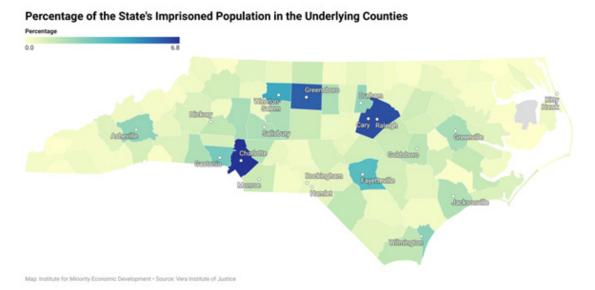


Figure 4B

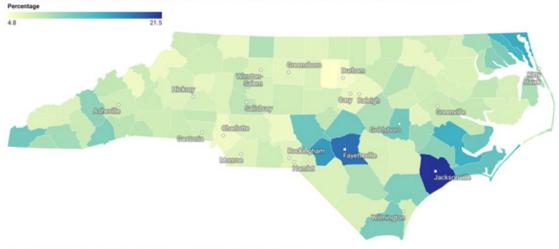
- Link to live interactive map: https://datawrapper.dwcdn.net/BQrw5/3/
- Data Source: Vera Institute of Justice; 2020 Decennial Census
- Downloaded from: Vera Institute of Justice; Integrated Public Use Microdata Series National Historical Geographic Information System

Veterans

Shares

The average percentage of the civilian population (18 and up) comprised of veterans among the 100 counties in North Carolina is around 8.6%. Counties with the highest shares of veterans tend to be located along the coast, especially the southeastern counties along the coast. Onslow County has the highest percentage in North Carolina at 21.5%, while Cumberland County has the second highest at 18.8%. Orange County has the lowest percentage among counties in North Carolina at 4.8%, while Durham County has the second lowest percentage 5.4%.

Percentage of the Population, 18 Years Old or Older, that are Veterans Across N.C. Counties



Map: Institute for Minority Economic Development • Source: American Community Survey 2017-2021 5-Year Estimate

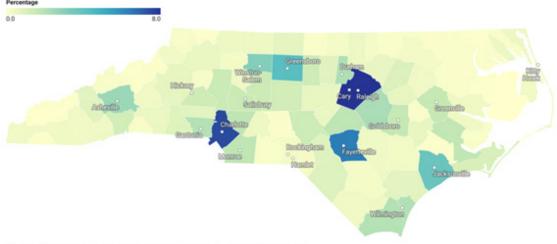
Figure 5A

- Link to live interactive map: https://datawrapper.dwcdn.net/NA2zx/4/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of veterans. Counties that contain large cities, like Mecklenburg County and Wake County, tend to have the highest share of the state's total population of veterans. Wake County has around 8.0% of the state's total, while Mecklenburg County has around 7.6% of the state's total. Tyrrell County only has around 0.03% of the state's total, while Hyde County has only around 0.04%.





Map: Institute for Minority Economic Development - Source: American Community Survey 2017-2021 5-Year Estimates

Figure 5B

- Link to live interactive map: https://datawrapper.dwcdn.net/uhS5r/3/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Individuals with disabilities

Shares

The average percentage of the civilian non-institutionalized population with a disability among the 100 counties in North Carolina is around 16.6%. Counties with the highest shares of the population with a disability tend to be located along the coast in the northeast. Washington County has the highest percentage in North Carolina at 24.0%, while Lenoir County has the second highest at 23.9%. Mecklenburg County has the lowest percentage among counties in North Carolina at 8.0%, while Orange County has the second lowest percentage at 8.1%.

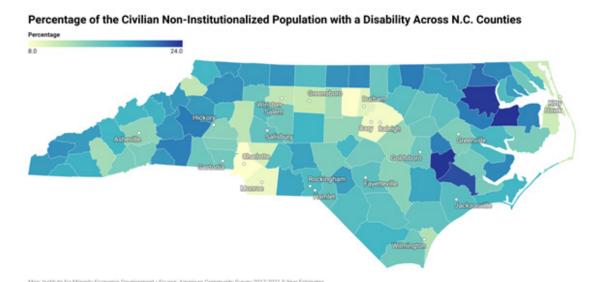


Figure 6A

- Link to live interactive map: https://datawrapper.dwcdn.net/ApV7k/6/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of people with disabilities. Counties that contain large cities, like Mecklenburg County and Wake County, tend to have the highest share of the state's total population of individuals with a disability. Wake County has around 7.0% of the state's total, while Mecklenburg County has around 6.5% of the state's total. Tyrrell County only has around 0.04% of the states total, while Hyde County has only around 0.05%.

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Percentage of the State's Civilian Non-Institutionalized Population with a Disability in the Underlying Counties

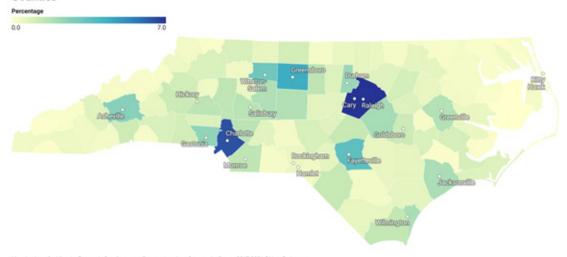


Figure 6B

- Link to live interactive map: https://datawrapper.dwcdn.net/X2qWi/7/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Individuals with a language barrier, including individuals who are English learners and have low levels of literacy

Share

The average percentage of the population (at least 5 years old) who do not speak English among the 100 counties in North Carolina is around 1.5%. Counties with the highest shares of the population who do not speak English well tend to be located in counties toward the central part of the state. Duplin County has the highest percentage in North Carolina at 7.0%, while Montgomery County has the second highest at 5.1%. Bertie County has the lowest percentage among counties in North Carolina at 0.02%, while Jones County has the second lowest percentage 0.04%.

Percentage of the Population, 5 Years Old and Older, that Do Not Speak English Well or At All Across N.C. Counties

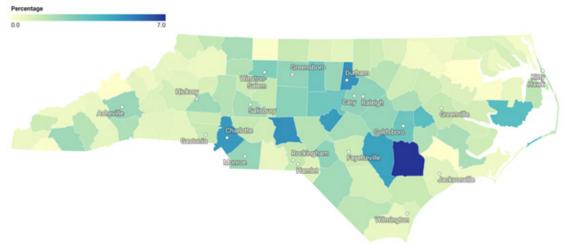


Figure 7A

- Link to live interactive map: https://datawrapper.dwcdn.net/OtB80/4/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of people who do not speak English well. Counties that contain large cities, like Mecklenburg County and Wake County, tend to have the highest share of the states total population of individuals who do not speak English well. Mecklenburg County has around 22.6% of the state's total, while Wake County has around 11.7% of the state's total. Bertie County only has around 0.001% of the states total, while Hyde County has only around 0.002%.

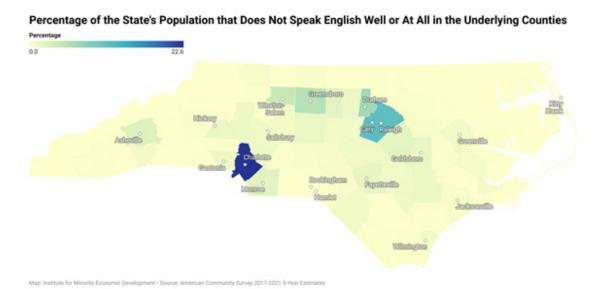


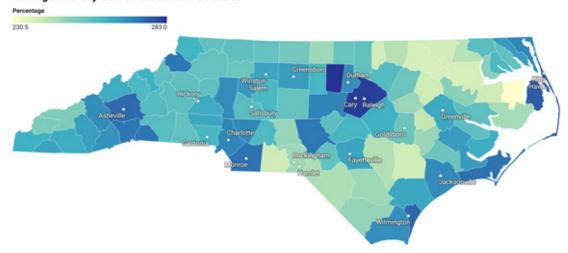
Figure 7B

- Link to live interactive map: https://datawrapper.dwcdn.net/m51uk/3/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Score

The average literacy score among the 100 counties in North Carolina is around 258.5. Counties with the lowest scores tend to be in counties toward the eastern and southeastern part of the state. Orange County has the highest score in North Carolina at 283.0, while Wake County has the second highest at 281.4. Tyrrell County has the lowest score among counties in North Carolina at 230.5 while Halifax County has the second lowest at 238.

Average Literacy Score Across N.C. Counties



Map: Institute for Minority Economic Development - Source: Program for the International Assessment of Adult Competencies (PIAAC) & American Community Survey 2013-2017 5-Year Estimates

Figure 7C

- Link to live map: https://datawrapper.dwcdn.net/lnxP7/1/
- Data Source: Program for the International Assessment of Adult Competencies (PIAAC); American Community Survey
 5-Year Estimates
- Downloaded from: Institute of Education Sciences' (IES) National Center for Education Statistics (NCES)

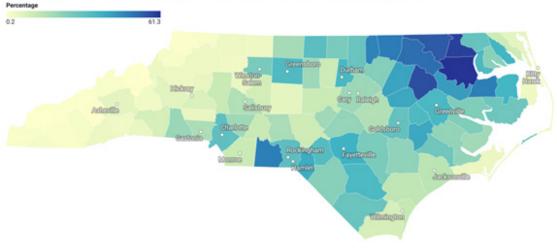
Individuals who are members of a racial and/or ethnic minority group

Black Population

Share

The average percentage of the population comprised of Black residents among the 100 counties in North Carolina is around 20.0%. Counties with the highest shares of the population comprised of Black residents tend to be in counties towards the northeastern corner of the state. Bertie County has the highest percentage in North Carolina at 61.3%, while Hertford County has the second highest at 59.1%. Graham County has the lowest percentage among counties in North Carolina at 0.17%, while Mitchell County has the second lowest percentage 0.30%.

Percentage of the Population that is Black/African-American Across N.C. Counties



Map: Institute for Minority Economic Development - Source: American Community Survey 2017-2021 5-Year Estimates

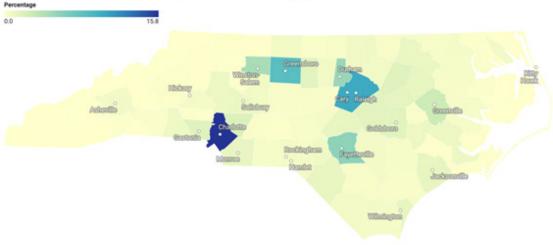
Figure 8A

- Link to live interactive map: https://datawrapper.dwcdn.net/6vJ72/8/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of Black residents. Counties that contain large cities, like Mecklenburg County, Wake County, and Guilford tend to have the highest share of the state's total population of Black residents. Mecklenburg County has around 15.8% of the state's total, while Wake County has around 10.1% of the state's total. Graham County only has around 0.001% of the states total, while Hyde County has only around 0.002%.

Percentage of the State's Black Population in the Underlying Counties



Map: Institute for Minority Economic Development - Source: American Community Survey 2017-2021 5-Year Estimate

Figure 8B

- Link to live interactive map: https://datawrapper.dwcdn.net/In8to/4/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Hispanic Population

Share

The average percentage of the population comprised of Hispanic residents among the 100 counties in North Carolina is around 7.7%. Counties with the highest shares of the population comprised of Hispanic residents tend to be in counties towards the southeastern corner of the state. Duplin County has the highest percentage in North Carolina at 22.9%, while Sampson County has the second highest at 20.5%. Clay County has the lowest percentage among counties in North Carolina at 1.6%, while Bertie County has the second lowest percentage 2.2%.

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lap: Institute for Minority Economic Development - Source: American Community Survey 2017-2021 5-Year Estimates

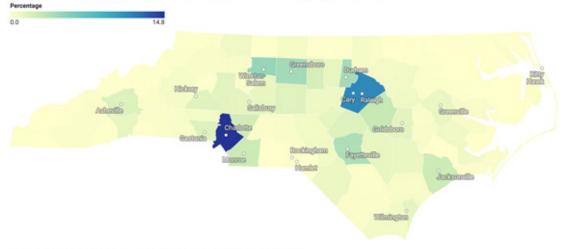
Figure 9A

- Link to live interactive map: https://datawrapper.dwcdn.net/i3UqR/4/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of Hispanic residents. Counties that contain large cities, like Mecklenburg County and Wake County, tend to have the highest share of the state's total population of Hispanic residents. Mecklenburg County has around 14.8% of the state's total, while Wake County has around 11.3% of the state's total. Tyrrell County only has around 0.01% of the states total, while Clay County has only around 0.02%.

Percentage of the State's Hispanic Population in the Underlying Counties



Map: Institute for Minority Economic Development - Source: American Community Survey 2017-2021 5-Year Estimates

Figure 9B

- Link to live interactive map: https://datawrapper.dwcdn.net/a5oBA/7/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Asian Population

Share

The average percentage of the population comprised of Asian residents among the 100 counties in North Carolina is around 1.3%. Counties with the highest shares of the population comprised of Asian residents tend to be in counties toward the central part of the state. Orange County has the highest percentage in North Carolina at 7.9%, while Wake County has the second highest at 7.5%. Graham County has the lowest percentage among counties in North Carolina at 0.0%, while Hyde County has the second lowest percentage 0.0%.

Percentage 0.0 7.9 Cremition Cremition Charleston Ch

Figure 10A

- Link to live interactive map: https://datawrapper.dwcdn.net/zUK2Y/4/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of Asian residents. Counties that contain large cities, like Mecklenburg County and Wake County, tend to have the highest share of the state's total population of Asian residents. Wake County has around 26.6% of the state's total, while Mecklenburg County has around 21.1% of the state's total. Tyrrell County has 0% of the states total, while Clay County also has 0%.

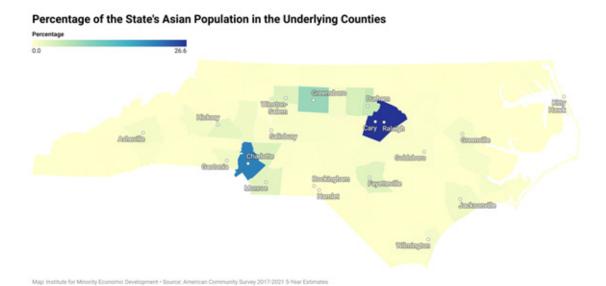


Figure 10B

- Link to live interactive map: https://datawrapper.dwcdn.net/v4VdS/3/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

American Indian or Alaskan Native Population

Shares

The average percentage of the population comprised of American Indian and Alaskan Native residents among the 100 counties in North Carolina around 1.7%. In N.C., counties with the highest shares of the population comprised of American Indian and Alaskan Native residents tend to contain tribal lands. Robeson County has the highest percentage in North Carolina at 41.6%, while Swain County has the second highest at 30.3%. Camden County has the lowest percentage among counties in North Carolina at 0.0%, while Beaufort County has the second lowest percentage at 0.04%.

Percentage of the Population that is American Indian or Alaskan Native Across N.C. Counties



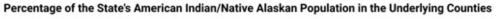
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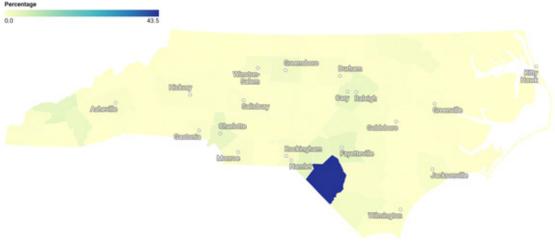
Figure 11A

- Link to live interactive map: https://datawrapper.dwcdn.net/mD4L0/6/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of American Indian and Native Alaskan residents. Robeson County has around 43.5% of the state's total, while Scotland County has around 3.8% of the state's total. Camden County has 0% of the state's total, while Hyde County also has only 0.006%.





Map: Institute for Minority Economic Development - Source: American Community Survey 2017-2021 5-Year Estimate

Figure 11B

- Link to live interactive map: https://datawrapper.dwcdn.net/19X8p/3/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Native Hawaiian or Pacific Islander Population

Shares

The average percentage of the population comprised of Native Hawaiian or Pacific Islander residents among the 100 counties in N.C. is around 0.06%. Cumberland County has the highest percentage in N.C. at 0.39%, while Granville County has the second highest at 0.37%. Twenty-nine counties in the state have no residents who are Native Hawaiian or Pacific Islander.

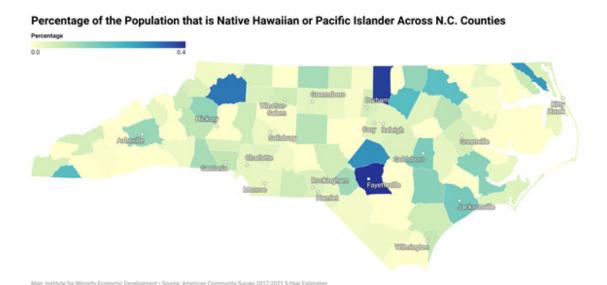


Figure 12A

- Link to live interactive map: https://datawrapper.dwcdn.net/KOIEd/4/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of Native Hawaiian or Pacific Islander residents.

Percentage of the State's Native Hawaiian/Pacific Islander in the Underlying Counties



Map: Institute for Minority Economic Development - Source: American Community Survey 2017-2021 5-Year Estimater

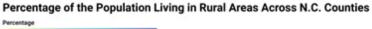
Figure 12B

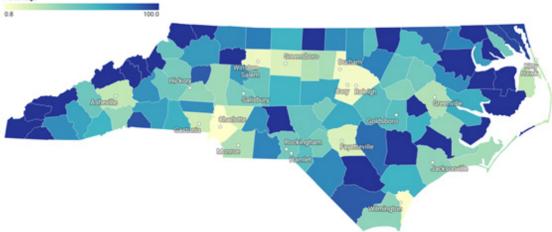
- Link to live interactive map: https://datawrapper.dwcdn.net/ddUa5/3/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Individuals who primarily reside in a rural area

Shares

The average percentage of the population living in rural areas among the 100 counties in North Carolina is around 63.9%. In 25 counties in the state, 100% of the population lives in a rural area. These counties tend to be located along the edges of the state. Some counties have only a small share of their residents living in rural areas. In Mecklenburg County, only 0.8% of the population lives in a rural area and in New Hanover County, only 1.7% live in a rural area.





Mag: Institute for Minority Economic Development - Source: 2020 Decennial Census

Figure 13A

- Link to live interactive map: https://datawrapper.dwcdn.net/Yv2Zr/3/
- Data Source: 2020 U.S. Census
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's rural population. Johnston County has around 3.3% of the state's total, while Robeson County has around 2.5% of the state's total. Tyrrell County has 0.1% of the state's total, while New Hanover County also has only 0.1%.

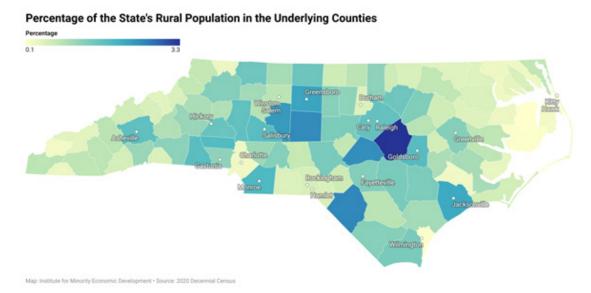


Figure 13B

- Link to live interactive map: https://datawrapper.dwcdn.net/bgL2f/2/
- Data Source: 2020 U.S. Census
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

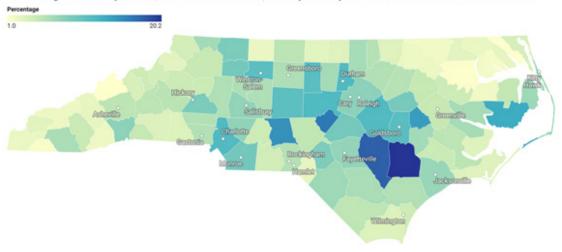
Languages Spoken at Home

Spanish

Shares

The average percentage of the population, at least 5 years old, that speaks Spanish at home among the 100 counties in North Carolina is around 6.1%. These counties tend to be located towards the central part of the state. In Duplin County, around 20.2% of the population speaks Spanish at home, and in Sampson County, around 17.9% speaks Spanish at home. In Madison County, only around 1% of the population speaks Spanish at home, and in Camden County, only around 1% speaks Spanish at home.

Percentage of the Population, at Least 5 Years Old, that Speaks Spanish At Home Across N.C. Counties



Map: Institute for Minority Economic Development - Source: American Community Survey 2017-2021 5 Year Estimate

Figure 14A

- Link to the live map: https://datawrapper.dwcdn.net/Mnzuf/2/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of residents (at least 5 years old) that speak Spanish at home. Counties that contain large cities, like Mecklenburg County and Wake County, tend to have the highest share of the states total population of residents that speak Spanish at home. Mecklenburg County has around 15.9% of the state's total, while Wake County has around 11% of the state's total. Camden County only has 0.01% of the state's total, while Clay County has 0.02%.

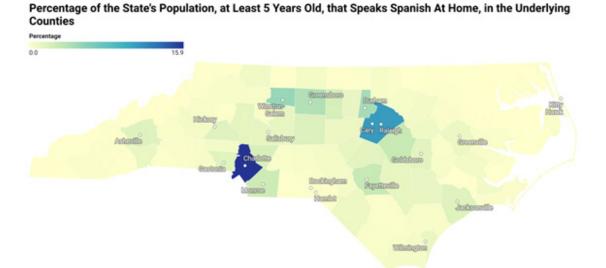


Figure 14B

- Link to the live map: https://datawrapper.dwcdn.net/BPjcT/2/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Chinese (including Mandarin and Cantonese)

Shares

The average percentage of the population, at least 5 years old, that speaks Chinese at home among the 100 counties in North Carolina is around 0.18%. These counties tend to be located around Raleigh and Durham. In Orange County, around 2.9% of the population speaks Chinese at home, and in Gates County, around 1.2% speaks Chinese at home. There are 25 counties in the state where no one speaks Chinese at home.

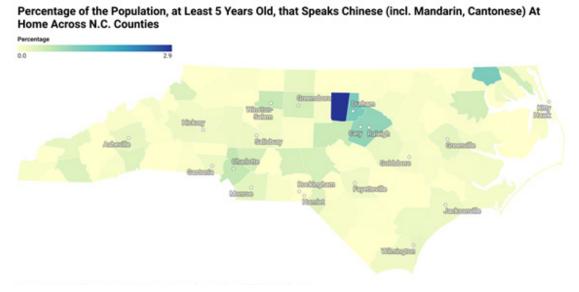


Figure 15A

- Link to the live map: https://datawrapper.dwcdn.net/mlDwQ/2/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of residents (at least 5 years old) that speak Chinese at home. Counties that contain large cities, like Mecklenburg County and Wake County, tend to have the highest share of the state's total population of residents that speak Chinese at home.

Percentage of the State's Population, at Least 5 Years Old, that Speaks Chinese (incl. Mandarin, Cantonese) At Home, in the Underlying Counties

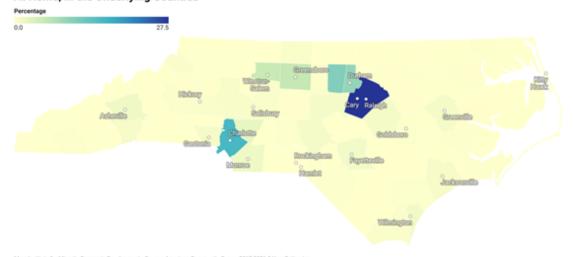


Figure 15B

- Link to the live map: https://datawrapper.dwcdn.net/HC2jw/2/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

French

Shares

The average percentage of the population, at least 5 years old, that speaks French at home among the 100 counties in North Carolina is around 0.22%. In Duplin County, around 1.1% of the population speaks French at home, and in Mecklenburg County, around 0.8% speaks French at home. There are 7 counties in the state where no one speaks French at home.

Percentage of the Population, at Least 5 Years Old, that Speaks French (incl. Cajun) At Home Across N.C. Counties

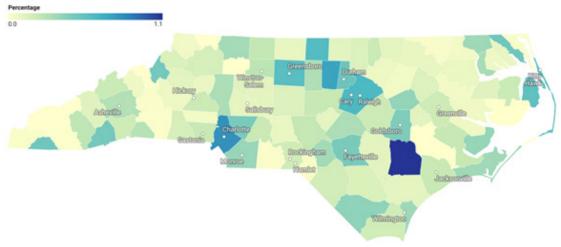


Figure 16A

- Link to the live map: https://datawrapper.dwcdn.net/D8VAW/2/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of residents (at least 5 years old) that speak French at home. Counties that contain large cities, like Mecklenburg County and Wake County, tend to have the highest share of the state's total population of residents that speak French at home.

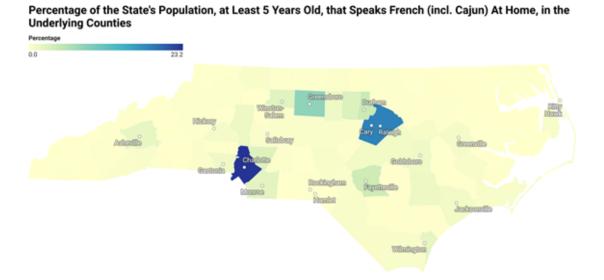


Figure 16B

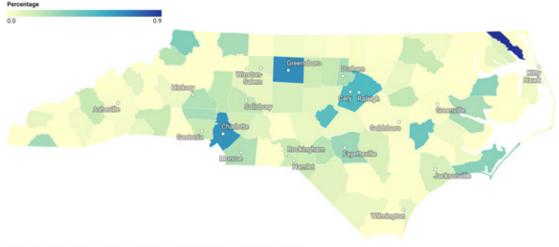
- Link to the live map: https://datawrapper.dwcdn.net/dVEgI/2/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Vietnamese

Shares

The average percentage of the population, at least 5 years old, that speaks Vietnamese at home among the 100 counties in North Carolina is around 0.12%. In Camden County, around 1% of the population speaks Vietnamese at home, and in Guilford County, around 0.7% speaks Vietnamese at home. There are 33 counties in the state where no one speaks Vietnamese at home.

Percentage of the Population, at Least 5 Years Old, that Speaks Vietnamese At Home Across N.C. Counties



Map. Institute for Minority Economic Development - Source: American Community Survey 2017-2021 5-Year Estimate

Figure 17A

- Link to the live map: https://datawrapper.dwcdn.net/pDRF4/2/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of residents (at least 5 years old) that speak Vietnamese at home. Counties that contain large cities, like Mecklenburg County and Wake County, tend to have the highest share of the state's total population of residents that speak Vietnamese at home.

Percentage of the State's Population, at Least 5 Years Old, that Speaks Vietnamese At Home, in the Underlying Counties

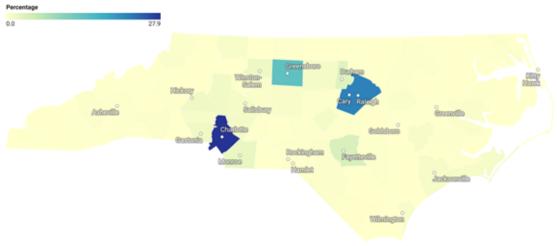


Figure 17B

- Link to the live map: https://datawrapper.dwcdn.net/ioEnO/2/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

German

Shares

The average percentage of the population, at least 5 years old, that speaks German at home among the 100 counties in North Carolina is around 0.23%. In Polk County, around 1.4% of the population speaks German at home, and in Yadkin County, around 1% speaks German at home. There are 7 counties in the state where no one speaks German at home.

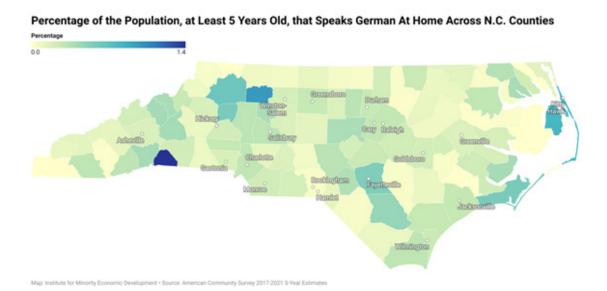


Figure 18A

- Link to the live map: https://datawrapper.dwcdn.net/lq1L4/2/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of residents (at least 5 years old) that speak German at home. Counties that contain large cities, like Mecklenburg County and Wake County, tend to have the highest share of the state's total population of residents that speak German at home.

Percentage of the State's Population, at Least 5 Years Old, that Speaks German At Home, in the Underlying Counties

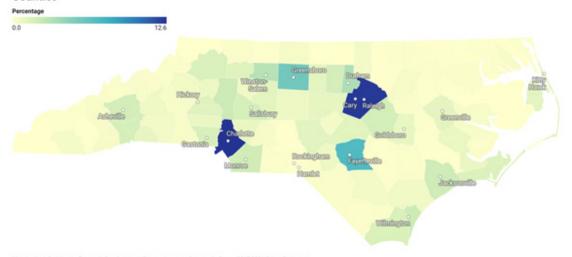


Figure 18B

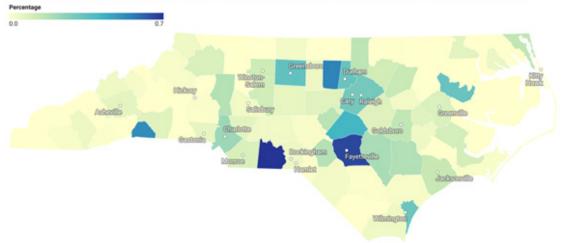
- Link to the live map: https://datawrapper.dwcdn.net/pL0Op/2/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Korean

Shares

The average percentage of the population, at least 5 years old, that speaks Korean at home among the 100 counties in North Carolina is around 0.08%. In Anson County, around 0.7% of the population speaks Korean at home, and in Cumberland County, around 0.7% speaks Korean at home. There are 32 counties in the state where no one speaks Korean at home.

Percentage of the Population, at Least 5 Years Old, that Speaks Korean At Home Across N.C. Counties



Map: Institute for Minority Economic Development - Source: American Community Survey 2017-2021 5-Year Estimate

Figure 19A

- Link to the live map: https://datawrapper.dwcdn.net/PJTLX/2/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of residents (at least 5 years old) that speak Korean at home. Counties that contain large cities, like Mecklenburg County and Wake County, tend to have the highest share of the state's total population of residents that speak Korean at home.

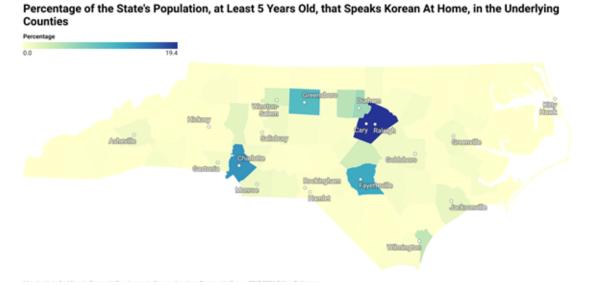


Figure 19B

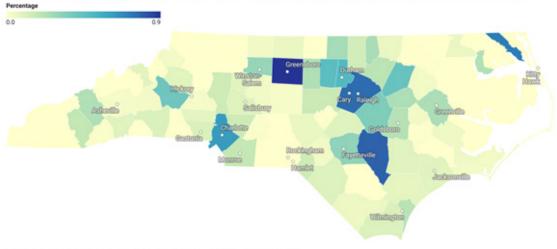
- Link to the live map: https://datawrapper.dwcdn.net/nOm86/2/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Arabic

Shares

The average percentage of the population, at least 5 years old, that speaks Arabic at home among the 100 counties in North Carolina is around 0.12%. In Guilford County, around 0.9% of the population speaks Arabic at home, and in Sampson County, around 0.8% speaks Arabic at home. There are 33 counties in the state where no one speaks Arabic at home.

Percentage of the Population, at Least 5 Years Old, that Speaks Arabic At Home Across N.C. Counties



Map: Institute for Minority Economic Development - Source: American Community Survey 2017-2021 5-Year Estimater

Figure 20A

- Link to the live map: https://datawrapper.dwcdn.net/y0STu/2/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

Clusters

The average county in the state contains around 1% of the entire state's population of residents (at least 5 years old) that speak Arabic at home. Counties that contain large cities, like Mecklenburg County and Wake County, tend to have the highest share of the state's total population of residents that speak Arabic at home.



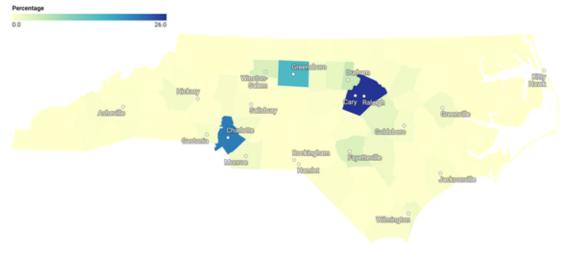


Figure 20B

- Link to the live map: https://datawrapper.dwcdn.net/Kl844/2/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System (NHGIS)

Languages Spoken at Home

Table 1. Top 10 Counties for Percentage of Different Languages Spoken at Home

	Spa	nish		Chir	nese		French			Vietnamese		
Rank	County	%	#	County	%	#	County	%	#	County	%	#
1	Duplin County	20.23	9,468	Orange County	2.93	4,125	Duplin County	1.14	535	Camden County	0.92	90
2	Sampson County	17.89	9,960	Gates County	1.21	124	Mecklenburg County	0.84	8,603	Guilford County	0.69	3,486
3	Lee County	16.63	9,765	Durham County	1.21	3,625	Orange County	0.76	1,069	Mecklenburg County	0.67	6,842
4	Montgomery County	15.02	3,686	Wake County	1.01	10,564	Wake County	0.65	6,793	Wake County	0.52	5,386
5	Greene County	14.26	2,781	Mecklenburg County	0.60	6,151	Caswell County	0.63	136	Lee County	0.48	282
6	Hyde County	13.16	583	Forsyth County	0.57	2,050	Guilford County	0.61	3,080	Lenoir County	0.43	223
7	Chatham County	11.75	8,412	Chatham County	0.54	389	Dare County	0.58	204	Ashe County	0.36	93
8	Johnston County	11.64	23,097	Camden County	0.46	45	Durham County	0.53	1,597	Carteret County	0.34	221
9	Durham County	11.62	34,885	Bertie County	0.44	77	Clay County	0.52	55	Washington County	0.33	36
10	Mecklenburg County	11.61	119,494	Cabarrus County	0.44	915	Camden County	0.52	51	Cumberland County	0.29	906

	German		Ко	rean		Arabic			
Rank	County	%	#	County	%	#	County	%	#
1	Polk County	1.45	270	Anson County	0.70	148	Guilford County	0.87	4,385
2	Yadkin County	1.02	359	Cumberland County	0.66	2,033	Sampson County	0.76	421
3	Dare County	0.84	296	Orange County	0.54	764	Wake County	0.73	7,678
4	Wilkes County	0.67	420	Polk County	0.52	97	Camden County	0.70	68
5	Carteret County	0.60	394	Harnett County	0.41	507	Mecklenburg County	0.60	6,173
6	Alexander County	0.60	210	Guilford County	0.35	1,754	Durham County	0.48	1,440
7	Cumberland County	0.57	1,770	Durham County	0.33	1,004	Orange County	0.46	644
8	Bladen County	0.49	139	Martin County	0.33	70	Nash County	0.42	374
9	Yancey County	0.43	76	New Hanover County	0.32	692	Burke County	0.40	331
10	Henderson County	0.43	475	Wake County	0.30	3,167	Johnston County	0.35	687

Notes:

- 1. Rank indicates the rank in terms of the percentage (%), ranked in descending order.
- 2. Percentage (%) is the percentage of the population that is at least 5 years old.
- 3. Data comes from the ACS 5-Year Estimates for 2017-2021.

Less than a High School Education

Shares

The average percentage of the population, at least 25 years old, with less than a high school education among the 100 counties in North Carolina is around 13.3%. In Tyrrell County, 23.8% of the population, 25 and up, has less than a high school level of education. In Greene County, 22.4% of the population, 25 and up, have less than a high school education. In Dare County, only 4.7% of the population, 25 and up, has less than a high school education.

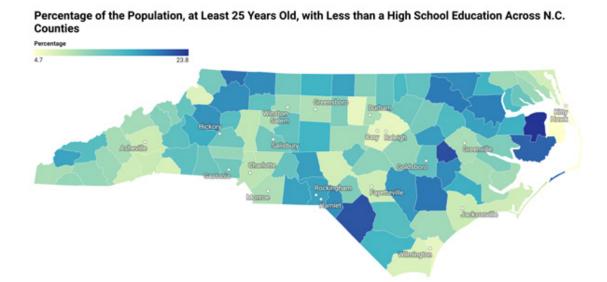


Figure 21

- Link to the live map: https://datawrapper.dwcdn.net/r7Yvg/1/
- Data Source: American Community Survey 5-Year Estimates, 2017-2021
- · Downloaded from: Integrated Public Use Microdata Series National Historical Geographic Information System

APPENDIX I: STUDENT FREEDOM INITIATIVE

North Carolina Digital Equity (DE) Plan Community Briefing SFI NC Community Briefing

From: Student Freedom Initiative (SFI)

Date: December 2023

Context

As the world transitions to a more complete digital economy, it is more critical than ever for historically marginalized or under-resourced communities to gain access to funding opportunities to deploy affordable, high-speed internet, and ensure all residents have access to internet-enabled devices and possess the digital skills to productively use them.

In North Carolina, racial and ethnic underrepresented minorities, low-income households, and individuals living with disabilities are of particular concern, and constitute populations highly represented in North Carolina's HBCU communities. These dynamics sparked the Student Freedom Initiative's goal to ensure the needs of these communities are reflected in state plans for Digital Equity—namely, the communities of North Carolina's 10 HBCUs—Shaw, Fayetteville State, Johnson C. Smith, St. Augustine's, Bennett, Livingstone, Elizabeth City State, North Carolina A&T State (NCAT), Winston-Salem State and North Carolina Central Universities. To assess these needs, SFI analyzed 34 different digital equity metrics using publicly available sources of information for 5 of these HBCUs and worked closely with St. Augustine's, Shaw, and Bennett to host joint town halls and gather survey responses from over 220 community stakeholders. The lived experiences of residents, businesses, local government, faith-based, and other organizations provided a qualitative layer to the quantitative data analyses.

Digital equity needs identified in HBCU communities

The communities of North Carolina's HBCUs are facing outsized challenges in connectivity and affordability that impede participation in the digital economy and may contribute to deepening the existing digital divide.

North Carolina's HBCUs are surrounded by diverse communities with high concentrations of vulnerable populations—48 – 73% of individuals are part of a racial or ethnic underrepresented population, 33 – 62% of the population is Black, and 14 – 18% are living with a disability (See Appendix B of the SFI NC Community Briefing). 100% of the population surrounding Elizabeth City State resides in a rural area compared to the state average of 22%. These are some of the main criteria of individuals the North Carolina Department of Information Technology (NCDIT) has identified for engagement in the BEAD and Digital Equity Coordination and Outreach Strategy, for example. North Carolina's HBCUs can amplify these initiatives by serving as trusted Community Anchor Institutions for target populations and work with state programs to address the following challenges:

¹ Rurality is calculated using the definition outlined by the Office of Management and Budget (i.e., areas where population density is below 50,000) and publicly available 2010 Rural-Urban Commuting Area codes

1. Residents face challenges in connectivity due to gaps in infrastructure and device access. For example, in the surrounding community of NCAT, up to 42% of households do not have a broadband subscription, ~14pp higher than the average across the state (See Appendix B of the SFI NC Community Briefing). Though most North Carolina HBCU communities are deemed well-served, there are still many unserved and underserved locations that have yet to receive federal funding—this number is as high as 100% in the surrounding communities of Elizabeth City State, Fayetteville State, Livingston, and NCAT (See Appendix B of the SFI NC Community Briefing). Of organizational respondents, 50% reported that their current internet service does not meet their needs, with the primary reasons being slow or unreliable service (See Figure 1). 5% of individuals reported a lack of internet service in their households (See Figure 2).

Figure 1: Internet services meet organization's needs (# (%) of respondents, N = 20 organizations)

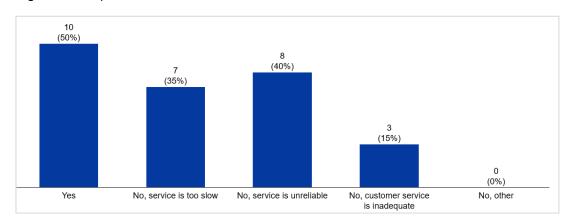
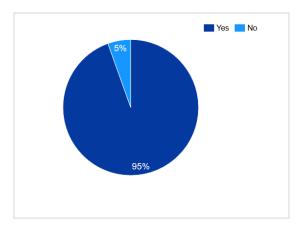


Figure 2: Individuals with internet access at home (% of respondents, N = 201 individuals)



In addition to broadband availability, device access levels are also subject to concern—while most households own at least 1 computing device (ownership ranges from 82 – 91% across HBCU communities), the number of households with a desktop or laptop in the surrounding communities of NCAT, Fayetteville State, Elizabeth City State, and Bennett is up to 12% lower than the state average, indicating demand for widely accessible and inexpensive options (See Appendix B of the SFI NC Community Briefing). 9% of survey respondents reported insufficient access to devices in their household (See

Figure 3). Device access for households is an important indicator of broadband adoption—for example, 20% of individuals without internet highlighted the lack of devices as a barrier to access (See Figure 4). In addition to household access, 37% reported a lack of publicly available devices nearby (See Figure 3). 35% of organizational survey respondents similarly highlighted a lack of devices in public spaces as a barrier to community device access, which can be a focus for future community initiatives (See Figure 5).

Figure 3: Household device access (# of respondents, N = 187 individuals)

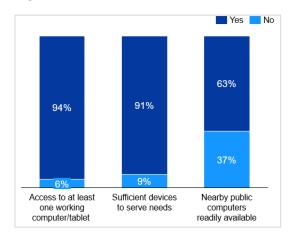


Figure 4: Why individuals do not have internet (# (%)) of respondents, N = 10 individuals)

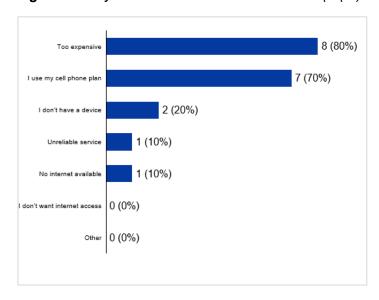
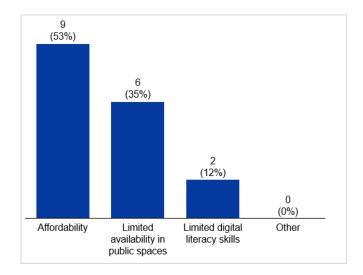


Figure 5: Barriers to device access (# (%) of respondents, N = 17 organizations)



2. Many households in the surrounding HBCU communities are likely to face affordability challenges. 22 – 44% of families are living on less than 150% of the federal poverty level in the areas surrounding Bennett, Elizabeth City State, Fayetteville State, Livingstone, and NCAT (See Appendix B of the SFI NC Community Briefing). In some communities this percentage is up to 2.5x as high as the state average of 17% (See Appendix B of the SFI NC Community Briefing). Up to 52% of households are ACP-eligible in communities like Bennett and NCAT—there is opportunity to increase ACP enrollment rates as 28 – 46% of eligible households have not yet enrolled across North Carolina's HBCUs (See Appendix B of the SFI NC Community Briefing). Survey respondents highlighted affordability as a major barrier to internet access—of individuals without internet, 80% of survey respondents reported their primary reason for lack of internet access was affordability (See Figure 4). Of all survey respondents, 35% of individuals and 88% of organizations find their current internet service unaffordable (See Figure 6). 53% of respondents reported a monthly price of <\$30/month would be affordable, while many ISPs list internet services at \$50/month or more (Figure 7).

Figure 6: Internet service is affordable (% of respondents, N = 187 individuals, 17 organizations)

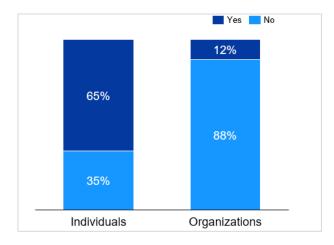
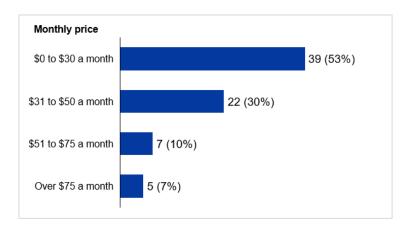


Figure 7: Affordable monthly price for internet (# (%) of respondents, N = 73 individuals)



Some areas also feature limited ISP competition, which may contribute to the lack of affordability of broadband services. In the community surrounding Elizabeth City State, for example, there are just 2 providers which offer fiber technology, which limits the subscription options for residents in those areas (See Appendix B of the SFI NC Community Briefing). To address this issue, the NCDIT could develop programs and funding vehicles specifically to foster increased market competition through an Open Access Conduit Network (as illustrated by the city of West Des Moines, Iowa)². A citywide open access conduit system will promote increased competition and provide a revenue stream to municipalities, similar to rights-of-ways and utility access. Public awareness efforts for these job programs could be made available via state unemployment offices, periodic visits to community outreach organizations, churches, vocational schools, junior colleges, HBCU sponsored career fairs and advertisements through local radio and television stations and internet service providers.

3. Populations in the surrounding communities of HBCUs could be a priority for digital literacy outreach efforts. In the BEAD 5-Year Action Plan, NCDIT recalled Governor Cooper's aim to close the digital divide specifically by creating awareness and supporting digital literacy and skills training to participate in the digital economy. Digital literacy initiatives are particularly pertinent in the communities surrounding HBCUs, where covered populations are highly represented. For aging individuals, NCDIT may consider incorporating the results of several recent studies on effective methods and approaches to offer deep, immersive government-funded digital literacy training programs within senior living centers and retirement communities. For example, the Stanford Center on Longevity highlighted library laptop checkout programs to enable older adults to reinforce new skills on their own tablets or laptops at home³. Researchers from the Universities of British Columbia and Toronto also created a conceptual framework for implementing technology literacy programs in retirement homes and residential care facilities⁴.

Further, up to 17% of the populations surrounding HBCUs could be a priority for digital literacy outreach, including those above the age of 25 with less than a high school

² https://ilsr.org/open-access-conduit-des-moines-fiber

³ https://longevity.stanford.edu/older-adults-and-technology-moving-beyond-the-stereotypes/

⁴ https://pubmed.ncbi.nlm.nih.gov/35984689/

degree and those with income at the poverty level (See Appendix B of the SFI NC Community Briefing). Survey respondents reported low confidence across several digital skills—40% of respondents reported they were somewhat or not confident in scheduling telemedicine appointments, 35% in joining meetings or completing work tasks, and 34% in using social media and video messaging (See Figure 8). 12% of organizations reported lack of confidence in community members' ability to understand and evaluate digital information and 18% reported lack of confidence in community members protecting their information online (See Figure 9). Proficiency in these digital skills is critical to encourage participation in the digital economy and improved health outcomes.

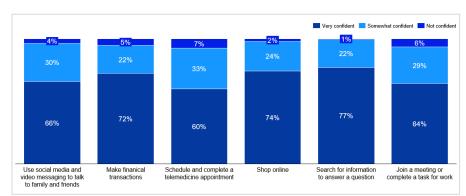
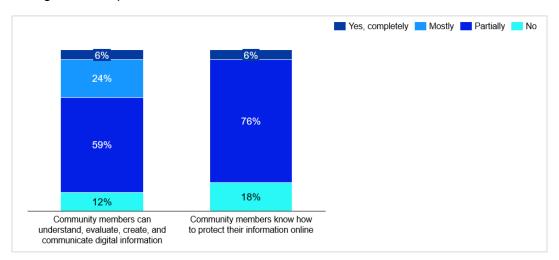


Figure 8: Level of confidence in digital skills (% of respondents, N = 187 individuals)

Figure 9: Perceived digital literacy skills of community members (% of respondents, N = 17 organizations)



It's key to address the challenges faced by communities in HBCUs in North Carolina across these three areas to encourage digital equity and equal participation in the digital economic opportunities. The significant differences in digital access, affordability, and literacy in these communities compared with the state overall is an indicator of a deepening digital divide and a call-to-action to ensure no community is left behind in an era of increasing digitization.

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Synthesis of insights from North Carolina survey respondents

CURRENT AS OF NOVEMBER 13, 2023 (N = 263)

Key takeaway

Initial survey insights



Lack of internet access threatens individuals' ability to access critical services—in North Carolina, personal finance, healthcare, and government services are particularly important for survey respondents

75% of state respondents are using the internet to access personal finance services, 71% use the internet for healthcare services, and 56% for



While most respondents have internet access at home. high costs and use of personal cell plans prevent the inder from getting internet sul

Additionally, some respondents with internet access report being unsatisfied with their service due to slow internet speed, unreliable service, and high costs

- 95% of North Carolina state respondents have internet access
- For those without internet access, the main reasons are high costs (80%) and use of personal cell plans (70%)
- 76% of individuals are satisfied or completely satisfied with their current
- · 53% of responding organizations stated that affordability is one of the biggest barriers to device access for individuals in their community



Affordability is a noticeable challenge for some residents of North Carolina's HBCU communities

Majority of North Carolina respondents are not enrolled in ACP, with the rates being higher across veterans, members of racial or ethnic minorities, and seniors

- 35% of individuals do not find the current cost of internet affordable. 83% respondents consider \$0 - 50 as affordable
- ACP enrollment is low amongst respondents, with only 21% of individual survey respondents being enrolled in the program
- Significant majority of members of covered populations are not enrolled in ACP (e.g., veterans (98%), members of racial or ethnic minorities (91%), seniors (90%))
- The main barrier preventing North Carolina respondents from ACP participation is lack of awareness of the program or its benefits (51%)

Source: SFI Community Survey, North Carolina, November 2023
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Synthesis of insights from North Carolina survey respondents

CURRENT AS OF NOVEMBER 13, 2023 (N = 263)

Key takeaway

Individuals in North Carolina are likely to have sufficient devices to serve their needs at home, but many lack access in public spaces

Initial survey insights

- . 94% of respondents have access to at least one working computer or tablet
- 63% of respondents have access to readily available public computers



Most respondents are confident in their use of internet across most activities, but slightly lack confidence with joining meetings or completing work tasks, as well as scheduling and completing telemedicine appointments

- Individuals indicate high confidence across most activities, specifically when it comes to searching for information online (77%), shopping online (74%), and making financial transactions (72%)
- 7% of respondents lack confidence in scheduling telemedicine appointments; 6% lack confidence in joining meetings or completing work



Additional programming could address current gaps in programming for accessible online content and support for subsidy programs

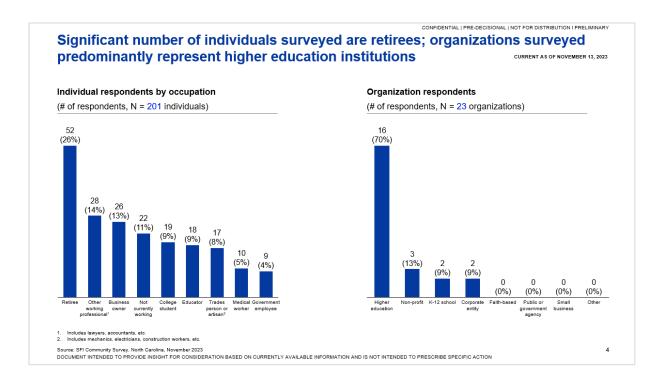
- 59% of respondents expressed interest in programs that assist with internet bill payments; 43% expressed interest in public or free Wi-Fi hotspots
- 48% of organizations provide advocacy for digital inclusion, affordability, and broadband-related needs



Majority of individuals in North Carolina are not aware of workforce development/digital skills training programs. Lack of awareness is higher across most covered populations than it is in respondents generally

- 70% of individuals are not aware of workforce development training programs available in their community
- Lack of awareness is higher across covered populations: aging individuals (79%), members of racial or ethnic underrepresented minority (75%), and low-income households (70%)

Source: SFI Community Survey, North Carolina, November 2023
DOCUMENT INTENDED TO PROVIDE INSIGHT FOR CONSIDERATION BASED ON CURRENTLY AVAILABLE INFORMATION AND IS NOT INTENDED TO PRESCRIBE SPECIFIC ACTION



Synthesis of insights from North Carolina's community needs

assessment

Based on this analysis, there are 4 potential focus areas to increase broadband and digital equity in North Carolina's HBCU communities:

- · Prioritize developing broadband infrastructure in lower income communities
- Expand broadband availability to the remaining underserved and unserved locations
- · Address additional challenges with internet and device affordability and access
- Increase broadband adoption amongst those without subscriptions

Digital equity dimension













Initial insights

Up to 42% of households do not have a broadband subscription in surrounding communities like North Carolina A&T (NCAT), which is ~14pp higher than the state and national averages

Though most of the HBCU communities would be deemed well-served, there are still many unserved and underserved locations that have yet to receive federal funding - this number is as high as 100% in Elizabeth City State University, Fayetteville State University, Livingston College, and NCAT's communities While most households own at least 1 computing device – ownership ranges from 82-

91%- there is opportunity to increase the share with access to a laptop/desktop computers. Approximately 65-72% of households in these communities own these devices compared to the state average of 77%

Many of the households in these surrounding communities are likely to be facing affordability challenges – 22-44% of families are living on less than 150% FPL and up to 52% of households in communities like Bennett and NCAT are ACP-eligible – and there is opportunity to increase ACP enrollment rates (28-46% of eligible households have not yet enrolled)

Up to 17% of the surrounding communities' populations could be a priority for digital literacy outreach – this includes those above the age of 25 with less than a high school degree and those with income at the poverty level

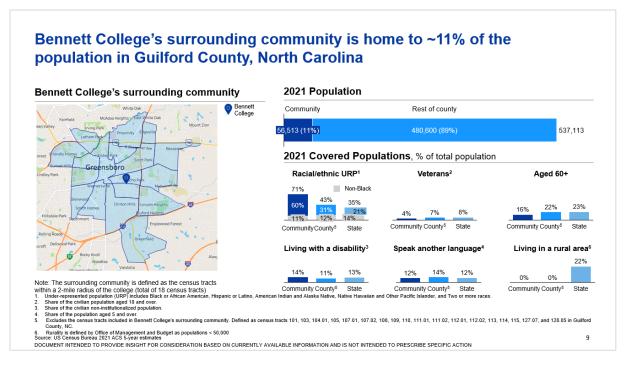
The HBCUs are in diverse surrounding communities, where a significantly higher share of their populations are Black - 60% and 62% in Bennett's and NCAT's surrounding communities, respectively - compared to the state (21%)

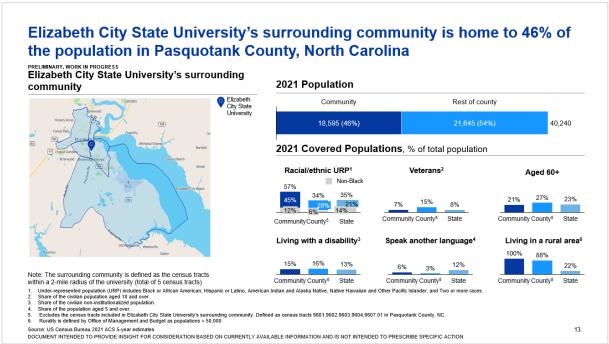
Source: US Census Bureau 2021 ACS 5-year estimates, US Census ACS Public Use Microdata Sample (PUMS), CostQuest, FCC DATA Maps May 2023, USAC, Education Superhighway ACP Enrollment Dashboard DOCUMENT INTENDED TO PROVIDE INSIGHT FOR CONSIDERATION BASED ON CURRENTLY AVAILABLE INFORMATION AND IS NOT INTENDED TO PRESCRIBE SPECIFIC ACTION

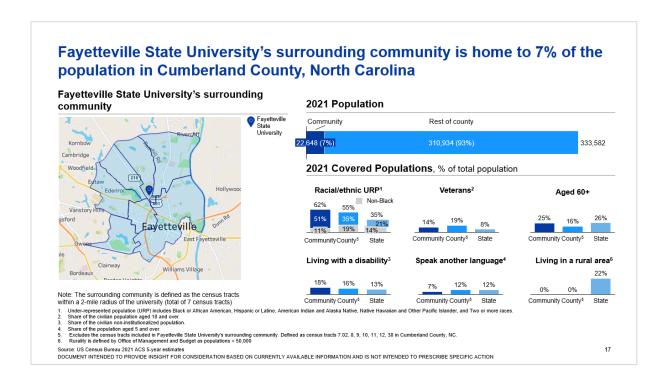
Current state of digital equity across SFI target HBCUs in North Carolina

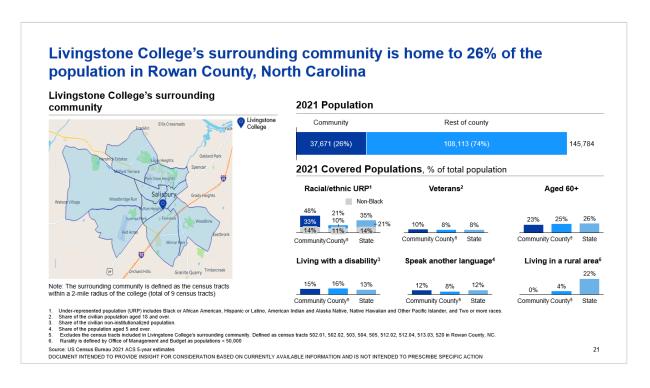
				Not compared to	o state	Lower than	ı state (>5pp in ne	egative direction)
As of October 20	023			On par with stat	e (within +/- 5pp)	Higher that	n state (>5pp in p	ositive direction)
Digital equity dimension	Metric	Bennett	Elizabeth City State	Fayetteville State	Livingstone	North Carolina A&T	State	National
Broadband	HHs with an internet subscription	74%	83%	78%	85%	73%	86%	87%
adoption	HHs with broadband ¹	61%	68%	63%	73%	58%	72%	72%
Infrastructure	Share of served locations	99.9%	99%	99.9%	99.4%	99.9%	88%	-
	Unserved and underserved locations unfunded by federal programs ²	99.9%	100%	100%	100%	100%	65%	-
	ISPs providing fiber technology ²	5	2	3	4	5	-	-
Device access	HHs with access to ≥1 device ³	85%	89%	82%	91%	84%	92%	93%
	HHs with a desktop or laptop	65%	69%	65%	72%	66%	77%	79%
Affordability	Families <150% FPL ⁴	44%	22%	24%	26%	42%	17%	16%
	ACP-eligible HHs	47%	43%	52%	50%	47%	43%	42%
	ACP-eligible HHs enrolled	54%	63%	72%	59%	54%	45%	36%
Digital literacy	Families 100-125% FPL	9%	3%	4%	5%	8%	4%	3%
	Aged 25+ without high school degree	16%	11%	10%	11%	17%	11%	11%
Demographics	Racial/ethnic URP ⁶	71%	57%	62%	48%	73%	35%	35%
	Black population	60%	45%	51%	33%	62%	21%	12%
	Living with a disability	14%	15%	18%	15%	14%	13%	13%
	Living in a rural areas ^{6,7}	0%	100%	0%	0%	0%	22%	15%

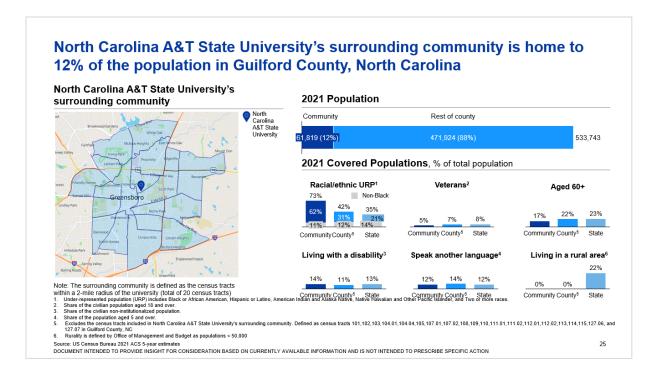
Source: US Census Bureau 2021 ACS 5-year estimates, US Census ACS Public Use Microdata Sample (PUMS), CostQuest, FCC DATA Maps May 2023, USAC, Education Superhighway ACP Enrollment Da DOCUMENT INTENDED TO PROVIDE INSIGHT FOR CONSIDERATION BASED ON CURRENTLY AVAILABLE INFORMATION AND IS NOT INTENDED TO PRESCRIBE SPECIFIC ACTION











APPENDIX J: PUBLIC COMMENT

Comment Number	Comment Provided	Written Responses and Actions Taken by State in Response
Comment #1	Residential facilities were not included-residential programs for individuals with disabilities, as well as aging and long-term care. Unfortunately, individuals, as well as staff and caregivers in these settings many times do not have access to internet or wi-fi and/or if they do, they do not have access to devices and/or the training necessary to use the devices effectively. This impacts access to assistive technology and products aiding with independent living and self-help skills, in addition to social interaction.	The division thanks the commenter for their comment and has included residential facilities and their needs in the Unique Needs and Barriers to Digital Equity section of the plan.
Comment #2	NTIA funds should be used to deploy future- proof technology with fiber optics versus inferior wireless technology. In this round of funding preference should ONLY be given to small local providers who can and should build the last mile and create local jobs throughout the supply chain in the U.S. and ensure no waivers on "Buy American."	The division thanks the commenter for their comment. This comment is out of scope for the Digital Equity plan which is not focused on the deployment of infrastructure. We do address specific infrastructure needs in the Barriers and Needs section in Strategy #1 as it relates to the BEAD plan. The Digital Equity team has sent the comment to the BEAD team for consideration.
Comment #3	Encourages the state to expand the definition of 'low income household' to at least 200% of the Federal Poverty rate. In order to make a real impact with the low income population, either the federal poverty level needs to be greatly revised to better account for inflation and the necessity of digital access, or the state eligibility requirements for coverage under the Digital Equity Plan need to be broadened to something like 200%.	The division thanks the commenter for their comment. The state cannot change the definition of a Covered Household since it was defined by NTIA. However, we acknowledge that the needs of low-income households don't always align with federal definitions. The BEAD Initial Proposal outlines a low-cost option (for ACP eligible households including those up to 200% of the federal poverty level) and Middle Class Affordability strategies. In Strategy #1 of the Digital Equity Plan, the division outlines activities to increase enrollment in the ACP and in the Sustainability Section the creation of a non-government digital equity fund that could fill gaps in government funding.
Comment #4	Was excited to see the Agricultural and Farmworker Community section of the draft Digital Equity Plan. Their research with NC farmworkers resonates with the feedback collected during listening sessions and with the assertions that farmworkers' access to the internet is important for accessing critical and life-saving information, as well as health services. In partnership with 21 community health workers, they have conducted a survey of 769 farmworkers across NC during the 2023 agricultural season. They included a data sheet highlighting preliminary findings from that survey. Farmworkers in the survey rarely had access to devices other than cell phones, and	The division thanks the commenter for their comment and has included the research in the Agriculture and Farmworker Community subsection in the Unique Needs and Barriers section.

Comment Number	Comment Provided	Written Responses and Actions Taken by State in Response
	87% of participants with internet access used cellular networks. Few participants had access to other sources of internet like cable, fiber optic, wired internet (6%) or satellite (3%).	
Comment #5	Would the youth population be considered a covered population?	The division thanks the commenter for their comment. While youth are not an official covered population as defined by NTIA they are included in almost all covered populations. The division addresses youth needs through many measurable goals and key partnerships with education systems and youth-serving organizations.
Comment #6	Funding that is usually allocated to local government or community colleges hasn't been as effective because individuals that would be considered the target audience tend to remain in trusted spaces, and anything dealing with government tends to not be a trusted space. I would like to see the funding be used to establish public computing spaces in areas where historically marginalized populations frequent (Barbershops, Salons, etc.). Also, can the funding be used to place accessible devices in areas that are highly populated by individuals with disabilities? My husband was paralyzed for three years and there are no services being offered in areas where large amounts of people with disabilities reside, and they also don't have accessibility devices to communicate, or participate in telehealth. For so many years, the funds have trickled down to local government and they have no idea what the needs are of their target population. Opportunities like this allow us to communicate what is needed, as well as what small local CBO's are doing to connect individuals.	The division thanks the commenter for their comment. Building the capacity of organizations with community trust to deliver digital inclusion programming is a key objective outlined in the Measurable Goals and Implementation Plan section. This comment underscores findings from the outreach and local coordination process.
Comment #7	Is there a map that reflects the digital equity and literacy needs of rural and urban Hispanic communities that categorizes the data by proficiency?	The division thanks the commenter for their comment. We are developing a dashboard based on digital equity survey data that will allow users to filter by demographic data. The dashboard will be included in the final version of the Digital Equity plan on the division's website.
Comment #8	Are K-12 programs that teach internet etiquette, or usage of artificial intelligence (AI) to develop products to become an entrepreneur eligible for this particular grant?	The division thanks the commenter for their comment. Specific grant eligibility criteria for State Capacity funds have not yet been developed. We will consider this comment in the development of those eligibility guidelines. All funding will need to address the specific needs of covered populations.

Comment Number	Comment Provided	Written Responses and Actions Taken by State in Response
Comment #9	What short term measures or checks and balances will the state use to hold themselves accountable as they are working towards the larger goals for this initiative?	The division thanks the commenter for their comment. The division will evaluate progress and publish annual reports describing progress made on key milestones. An overview of these milestones can be found in the Implementation Timeline section.
Comment #10	Its important that we have access to these training courses on how to learn how to use a computer (for older adults)	The division thanks the commenter for their comment. The Measurable Objectives and Implementation Plan outlines the need for individualized services that meet the needs of each covered population (including older adults), which was a key finding from our outreach efforts.
Comment #11	Digital instructors need to be patient with the elderly as they may need more assistance. Stressed the need to be kind to older populations trying to learn and that services need to come to them, not the other way around.	The division thanks the commenter for their comment. The Measurable Objectives and Implementation Plan outlines the need for individualized services that meet the needs of each covered population (including older adults), which was a key finding from our outreach efforts
Comment #12	How do you tailor technology for people who have low vision are their trainers who specialize in specific computer training	The division thanks the commenter for their comment. The Measurable Objectives and Implementation Plan outlines the need for individualized services that meet the needs of each covered population (including individuals with disabilities) and building the capacity of organizations serving those populations. The division also highlights in the Assets Section programs like the NC DHHS Assistive Technology program that serves the tech needs of individuals with disabilities. We also noted that more programs need to exist to meet the needs of this specific population.
Comment #13	Can these funds be used for improving technology for home schooling	The division thanks the commenter for their comment. Specific grant eligibility criteria for State Capacity funds have not yet been developed. We will consider this comment in the development of those eligibility guidelines. All funding will need to address the specific needs of covered populations.
Comment #14	Appreciated that the state was considering the needs of people who are returning to society (from being incarcerated).	The division thanks the commenter for their comments. As outlined throughout the plan, we are committed to meeting the digital inclusion needs of covered populations, including individuals who are currently incarcerated and in re-entry.
Comment #15	Will there be an opportunity to advertise digital equity and its advantages on buses and other places?	The division thanks the commenter for their comments. During implementation, we will develop outreach activities for many of the

Comment Number	Comment Provided	Written Responses and Actions Taken by State in Response
		strategies outlined in the Measurable Objectives and Implementation Plan, which could include advertising on buses. In the Measurable Objectives and Implementation plan, we added "diverse media outlets" to increase outreach.
Comment #16	There is a need for specific training for the elderly. This is a lot for us.	The division thanks the commenter for their comment. The Measurable Objectives and Implementation Plan outlines the need for individualized services that meet the needs of each covered population (including older adults), which was a key finding from our outreach efforts.
Comment #17	Participant shared their challenges in getting enrolled in the Affordable Connectivity Program and their bill actually increased! And when you call the number to get help, it's not 'user friendly'	The division thanks the commenter for their comment. We heard a lot about the challenges of the ACP during listening sessions and outreach events. We summarized some of these challenges and incorporated them into the Needs and Barriers Section of the plan.
Comment #18	Participant shared that they were 'given a free phone' from a local internet service provider who signed them up for mobile service, and then their internet was dropped because it turns out the ISP had enrolled them without their knowledge in the ACP but they were already enrolled in the ACP for home internet.	The division thanks the commenter for their comment. We heard a lot about the challenges of the ACP during listening sessions and outreach events. We summarized some of these challenges and incorporated them into the Needs and Barriers Section of the plan.
Comment #19	The links to the more detailed data in the section about barriers and needs was a fantastic way to incorporate that information without interrupting the flow of the document.	The division thanks the commenter for their comment.
Comment #20	One of the covered populations that was discussed throughout the document was individuals with "low literacy". I did not happen to see how literacy levels were measured in the study; it would be good to see how this was identified on the survey. (I imagine that the other populations had straightforward question/s that measured or identified them.)	The division thanks the commenter for their comment. Most of the data cited in this plan use "less than a high school education" as a proxy for low-literacy levels. In Appendix H, the division provides demographic maps of covered populations including a Literacy Score developed by the Institute of Education Sciences' (IES) National Center for Education Statistics (NCES). Neither of these data measures is perfect. Partnering with organizations supporting individuals with low levels of literacy will remain a key strategy to ensure programs are supporting their needs. We have added these data measures to the "Defining Covered Populations" section in the footnote.

Comment Number	Comment Provided	Written Responses and Actions Taken by State in Response
Comment #21	It seemed that the LGBTQ+ community was the least-discussed covered population in the document. It would be great to have a more detailed picture of the needs within that community. (With that said, given attitudes toward this population in certain areas of NC, it is understandable that data might be more difficult to collect.)	The division thanks the commenter for their comment. We updated the section to provide a more thorough analysis of some of the digital inclusion barriers faced by the LGBTQIA+ community.
Comment #22	For Strategy #2, it did not appear that the projected percentage of "[i]increase in confidence to access or apply online for government services" was identified for the long-term 2028 goal (pg. 68). Also for Strategy #2, both of the implementation activities were labeled as 2.1 (pg. 69).	The division thanks the commenter for their comment. This section has been updated and includes short and long-term goals.
Comment #23	In the conclusion section (pg. 91), it is noted that this plan is a living document that is meant to be revisited. About how often would it be reviewed and revised (2-year cycle, 5-year cycle, 10-year cycle, etc.)?	The division thanks the commenter for their comment. Evaluation and public reporting are outlined in the Implementation Timeline section. This section has been updated to highlight evaluation, data collection, and reporting activities.
Comment #24	Consider adopting a series of state-funded high-technology workforce development programs to address the additional workers needed per year to build infrastructure.	The division thanks the commenter for their comment. We prioritize embedding equity into workforce planning efforts. Additionally, the BEAD Initial proposal states its support for a diverse workforce for the broadband sector: "The division will partner with community-based organizations to recruit and support diverse populations to complete fiber technician training at the regional community college training hubs described earlier. In partnership with employers, community-based organizations will 1) use the communications assets created as part of the career pathway development process, recruit students from underrepresented groups, including Black, Latino and female residents, 2) as needed, provide training stipends, career readiness skills, and holistic supports such as child care vouchers, transportation, and emergency assistance, 3) offer case management services so that students have frequent and supportive connection to assistance from someone who can help them navigate supports they need in order to successfully complete their training."
Comment #25	. Consider replicating a series of state-funded digital literacy upskilling programs targeted towards incarcerated and previously incarcerated individuals.	The division thanks the commenter for their comment. We are currently partnering with the Department of Adult Correction to provide computers and digital literacy training to all correctional facilities in the state. Supporting incarcerated individuals and individuals in re-

Comment Number	Comment Provided	Written Responses and Actions Taken by State in Response
		entry also remains a key priority of the divisions Digital Champion Grant program. We anticipate Digital Equity Plan implementation to focus on the needs of this population (also a covered population).
Comment #26	Tailor state's objectives and associated key performance indicators to challenges disproportionately faced by the state's covered populations.	The division thanks the commenter for their comment. We agree that all activities and key performance indicators (KPIs) should prioritize the specific needs of each covered population and added language to highlight that each activity (and subsequent funding) will prioritize the needs as outlined in the Barriers and Needs section. Specific KPIs may differ depending on the project funded during implementation.
Comment #27	Consider expanding strategies to provide increased opportunities and/or awareness for affordable device use.	The division thanks the commenter for their comment. Strategy #5 specifically addresses the need for free and low-cost devices for covered populations both for public access and device ownership. We also added language about ensuring people are aware of public device programs. SFI's specific comment around free technical assistance in public spaces is noted. The division is partnering with the State Library to provide digital literacy training to rural library staff so they can provide this kind of support.
Comment #28	Prioritize high-need communities, such as Black and rural communities, in alignment with NC's program goals to maximize outcomes.	The division thanks the commenter for their comment and will prioritize the needs of covered populations throughout the implementation of the Digital Equity plan. We added language to highlight that each activity (and subsequent funding) will prioritize the needs as outlined in the Barriers and Needs section. Much of this full comment was related to the BEAD Initial Proposal and is out of scope for the Digital Equity plan. The comment has been shared with the BEAD planning team.

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Comment #29	Broaden collegiate partnerships beyond Elizabeth City State University to include HBCUs located in disproportionately impacted communities.	The division has strong relationships with HBCUs including the 8 HBCUs named in the Digital Equity plan that are Connecting Minority Community grant recipients. N.C. Central University was a key partner for the plan and the division hosted two listening sessions at HBCUs (Elizabeth City State and Fayetteville State University) and two townhalls with Student Freedom Initiative (to engage Bennett College, St. Augustine's University, and Shaw University. We added information about our partnership with Student Freedom Initiative to the Digital Equity plan and will continue to prioritize ways to partner and collaborate with HBCUs across the state.
Comment #30	Articulate workforce development as a priority to better enable career mobility for the state's disproportionately impacted communities. For example, the North Carolina Workforce Development Draft Plan highlights higher unemployment rates for Black and Hispanic workers—the estimated unemployment rate in 2021 for Black individuals was 7.7%, almost double the state average of 4.6%. By prioritizing workforce development for covered populations, NCDIT has the opportunity to significantly reduce economic disparities by providing pathways to essential occupational skills and opening new broadband-related career pathways for individuals in these communities.	Workforce Development remains a key priority. The BEAD Initial Proposal outlines key workforce development goals targeted at engaging covered populations. We added language in the Digital Equity plan around upskilling and reskilling to Strategy #3. In addition, the division has strong partnerships with the N.C. Community College System, N.C. Department of Commerce, and NC Works Commission. We are collaborating across departments on the state's draft Workforce Innovation and Opportunity Act (WIOA) plan, which includes: "Between 2024 and 2028, North Carolina will receive \$1.5 billion dollars from the federal government's Broadband Equity, Access, and Deployment (BEAD) program. Combined with American Rescue Plan Act funding of nearly \$1 billion dollars appropriated in 2021, this investment will provide access to broadband internet for more than 500,000 unserved or underserved homes and businesses across the state. A recent labor analysis estimates that these investments will generate approximately 6,000 new jobs in the broadband sector, and ensuring a qualified workforce to fill these jobs remains critically important to success. The WIOA system will support broadband workforce needs by helping the North Carolina Department of Information Technology's Division of Broadband and Digital Equity implement its BEAD workforce plan. For example, workforce boards are well positioned to convene employers, education, and community partners to develop career pathways for the broadband sector that demonstrate how individuals can enter into and advance their careers in the sector, which will generate more interest overall and attract a more diverse workforce. In addition, NCWorks career centers will connect

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		job seekers to broadband training opportunities through the NextGen training program and other appropriate funding resources."
Comment #31	Engage a broader group of higher education institutions, HBCUs, and community organizations for alignment and implementation on digital literacy. North Carolina should expand on and directly name the specific HBCUs that will be involved in the effort to expand digital skills credentialing and advanced IT certifications.	The division thanks the commenter for their comment. The division articulates strong partnerships with a diverse range of stakeholders to address digital literacy in the Digital Equity Plan. Based on SFI's recommendation, we added HBCUs as a key partner in Implementation Strategy #3. We do not name specific HBCUs (nor do we name specific other partners) since programs have yet to be developed.
Comment #32	Really like the break out of common barriers and then highlighting barriers specific to covered populations	The division thanks the commenter for their comment.
Comment #33	Glad that the digital equity survey will be continued!	The division thanks the commenter for their comment.
Comment #34	"North Star Vision" is a bit jargon-y and not defined. In the executive summary, the same idea is called "vision" and in the main document is called "North Star Vision". It is also similar to the digital literacy curriculum (NorthStar). I think the phrase might be confusing for the general public.	The division thanks the commenter for their comment. We have removed the term "North Star."
Comment #35	Page 14: There are a lot of places where there are next steps available for different priorities, one could be added here to share how the plan will continue to engage specifically with each tribe.	The division thanks the commenter for their comment. Our continued outreach efforts include tribes.
Comment #36	Code the Dream seems like the only asset in this table that could be considered very LGBTQIA+ specific. All libraries are for everyone and unless they offer a specific program for LGBTQIA+ people, it doesn't make sense to list it.	The division thanks the commenter for their comment. The division agrees and updated this portion of the assets section. We added a new asset and highlighted the lack of specific programs/resources for this community.
Comment #37	Recommendation: if there are not a lot of LGBTQIA+ specific assets, then name that explicitly	The division thanks the commenter for their comment. The assets section has been updated and highlights the lack of specific programs/resources for this community.

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Comment #38	Can this be its own subsection under "Current state of digital equity in NC"? Since it discusses assets, barriers, needs, and strategies, it is a little confusing that is under "asset inventory"	The division thanks the commenter for their comment. The section is no longer a sub-section and instead has its own section.
Comment #39	Pg. 32: "Common Barriers and Assets in Local Digital Inclusion Plans" and "Barriers to Digital Equity in Local Digital Inclusion Plans" read pretty similar - is there a way to be more specific in the headings?	The division thanks the commenter for their comment. We added "Other" to the heading.
Comment #40	Pg. 32: "When compiling North Carolina's statewide digital inclusion plan, it is important to honor the hard work of community leaders. Their efforts should be reflected in every section of the state plan to provide a path for further digital inclusion partnership." - this advocacy sentence needs to be re-worded to address how the plans were reflected in the statewide plan.	The division thanks the commenter for their comment. The sentence has been updated for clarity.
Comment #41	Pg. 32: Add space above "Common Objectives" etc.	The division thanks the commenter for their comment. The spacing has been updated.
Comment #42	While this plan uses "digital literacy" and others recommend "digital skills"- could there be a note that this is the term NCDIT will use going forward, or will be evaluated/decided at a later time?	The division thanks the commenter for their comment. As noted in the Measurable Objectives and Implementation Plan section, the division may ultimately adopt a term other than "digital literacy." We added language to the definition to acknowledge that this term may be changed. At the moment, the division is following NTIA's language and utilizing the term digital literacy.
Comment #43	Refugees are mentioned in terms of language barriers, but what about barriers in terms of rehousing, potential lack of devices, etc.? Is there data on this?	The division thanks the commenter for their comment. We added a section highlighting New Americans and Refugees in the Barriers and Needs section based on listening sessions.

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Comment #44	"Navigating the digital world can be particularly isolating for LGBTQIA+ individuals due to difficulties in accessing supportive resources." - unsure what this sentence means. In many cases, the internet is a place of connection and community for LGBTQIA+ individuals and where they do not feel isolated	The division thanks the commenter for their comment. The sentence has been removed. We updated the section to provide a more thorough analysis of some of the digital inclusion barriers faced by the LGBTQIA+ community.
Comment #45	The internet can be a safe place for LGBTQ people and necessary for accessing life-saving services and support, especially for youth and rural LGBTQIA folks https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7 430466/ https://www.jmir.org/2022/9/e38449/	The division thanks the commenter for their comment. We updated the section to provide a more thorough analysis of some of the digital inclusion barriers faced by the LGBTQIA+ community.
Comment #46	Page 69-70: Strategy implementation 2.1Encourage you all to adopt WCAG standards (there are three different levels). Not sure NCDIT needs to create all new standards.	The division thanks the commenter for their comment and made changes to Strategy #2 based on the feedback. WCAG is one part of the solution but does not encompass the full range of standards needed. The strategy is now focused on adherence to standards.
Comment #47	Suggestion for implementation activity: an audit of the accessibility of NC government websites in addition to training staff	The division thanks the commenter for their comment. The division is working with the Governor's Office of Outreach and Engagement on an audit of language access and will explore future accessibility audits, which have been added to the plan.
Comment #48	Activity 3.2: It would be valuable to either create or encourage community partners to assess and collect data about these programs to better understand the impacts and inform future projects - can this specifically be added to the peer network goals?	The division thanks the commenter for their comment. We added impact assessment as one of the goals of the digital navigation peer network.
Comment #49	"hub-and-spoke model" - define this or link out to a definition	The division thanks the commenter for their comment and added a definition of "hub and spoke".
Comment #50	Can the North Carolina Assistive Technology Program with DHHS added to this section?	The division thanks the commenter for their comment and the Assistive Technology Program has been added to the Aligning State Plans and Priorities Section.
Comment #51	change "men and woman" to "individuals" or "people"	The division thanks the commenter for their comment and made the suggested language change.

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Comment #52	"And because internet access and use are ubiquitous, people who don't have reliable access know that they're missing opportunities". Using the word ubiquitous is confusing here because the internet is not ubiquitous - it is perceived as ubiquitous. Maybe use omnipresent?	The division thanks the commenter for their comment and changed the sentence for clarity.
Comment #53	"What the state doesn't know is what is missing because some residents aren't connected?" Confusing wording	The division thanks the commenter for their comment and changed the sentence for clarity.
Comment #54	Would be interested to know the numbers on who filled out the survey online, by phone, and by paper	The division thanks the commenter for their comment. We added a breakdown by paper and online formats and more analysis will be available once the division publishes the online dashboard. Final total: 801 individuals took the survey via paper and 6,646 took the survey online.
Comment #55	Are there any lessons learned or changes expected in the survey methodology in the future?	The division thanks the commenter for their comment. Considerations for future survey deployments have been added to the Appendix.
Comment #56	STRATEGY #1 "All North Carolinians have access to high-speed internet and to affordable, low-cost internet services". It's important to align this work with the 2023 People's Policy Agenda goal of Affordable Broadband without compromising quality or speed by: Supporting an ongoing broadband subsidy for those least served, and Incentivizing competition for broadband opportunities across all populations	The division thanks the commenter for their comment. The Digital Equity Plan and BEAD Initial Proposal outline our commitment to ensuring all North Carolinians have affordable broadband without compromising quality or speed.
Comment #57	STRATEGY #1 "All North Carolinians have access to high-speed internet and to affordable, low-cost internet services". It's important to align this work with the 2023 People's Policy Agenda goal of Affordable Broadband without compromising quality or speed by: Supporting an ongoing broadband subsidy for those least served, and Incentivizing competition for broadband opportunities across all populations	The division thanks the commenter for their comment. The Digital Equity Plan and BEAD Initial Proposal outline our commitment to ensuring all North Carolinians have affordable broadband without compromising quality or speed.

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Comment #58	STRATEGY #3 "Ensure that North Carolinians can acquire the digital skills and understanding to meet their personal needs and the state's workforce needs". I want to highlight the importance of creating a Peer Education Program that builds sustainable relationships at the community/neighborhood level. Although activities under this strategy create opportunities; the 2023 People's Policy Agenda highlights a peer education model to successfully serve all populations at the local level.	The division thanks the commenter for their comment. We agree that peer education is a clear need and was a theme from listening sessions. We added language about peer learning into Implementation Activity 3.2.
Comment #59	STRATEGY #4 "Promote practices and leverage tools to ensure online privacy and security. I want to bring to attention the need for educating individuals about their rights regarding personal information, privacy settings, consent options. These three topics align with the 2023 People's Policy Agenda and could be implemented through the Plan's implementation activity 4.2; "Integrate cybersecurity and privacy training into curricula implemented by digital navigators and other digital literacy efforts across the state.	The division thanks the commenter for their comment. Based on the comment, we added the following language to Activity 4.1: "These standards must include online safety to keep personal data safe and secure and could include information about privacy settings, online consent options, and rights regarding sharing personal information."
Comment #60	STRATEGY #3 "Ensure that North Carolinians can acquire the digital skills and understanding to meet their personal needs and the state's workforce needs". I want to highlight the importance of creating a Peer Education Program that builds sustainable relationships at the community/neighborhood level. Although activities under this strategy create opportunities; the 2023 People's Policy Agenda highlights a peer education model to successfully serve all populations at the local level.	The division thanks the commenter for their comment. We agree that peer education is a clear need and was a theme from listening sessions. We added language about peer learning into Implementation Activity 3.2.
Comment #61	STRATEGY #4 "Promote practices and leverage tools to ensure online privacy and security. I want to bring to attention the need for educating individuals about their rights regarding personal information, privacy settings, consent options. These three topics align with the 2023 People's Policy Agenda and could be implemented through the Plan's implementation activity 4.2; "Integrate cybersecurity and privacy training into curricula implemented by digital navigators and other digital literacy efforts across the state.	The division thanks the commenter for their comment. Based on the comment, we added the following language to Activity 4.1: "These standards must include online safety to keep personal data safe and secure and could include information about privacy settings, online consent options, and rights regarding sharing personal information."

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Comment #62	Based on the success and learnings of our work together, EducationSuperHighway recommends NCDIT insert language about the ACP cohort strategy into the state's updated Digital Equity Plan, to codify the work already being undertaken in North Carolina and reflect the path forward	The division thanks the commenter for their comment and added the suggested model language, amended for clarity and length.
Comment #63	STRATEGY #5 "Ensure that North Carolinians have access to digital devices that meet their needs". I think it's important to highlight the importance of ensuring distribution programs meet the unique accessibility needs of people with disabilities.	The division thanks the commenter for their comment. Based on the comment, we added the following language to the description of Implementation Activity 5.4: [Deployment partners] can also ensure devices meet specific individual needs such as accessibility features for people with disabilities.
Comment #64	STRATEGY #5 "Ensure that North Carolinians have access to digital devices that meet their needs". I think it's important to highlight the importance of ensuring distribution programs meet the unique accessibility needs of people with disabilities.	The division thanks the commenter for their comment. Based on the comment, we've added the following language to the description of Implementation Activity 5.4: [Deployment partners] can also ensure devices meet specific individual needs such as accessibility features for people with disabilities.
Comment #65	STRATEGY #1 "All North Carolinians have access to high-speed internet and to affordable, low-cost internet services". It's important to align this work with the 2023 People's Policy Agenda goal of Affordable Broadband without compromising quality or speed by: Supporting an ongoing broadband subsidy for those least served, and Incentivizing competition for broadband opportunities across all populations	The division thanks the commenter for their comment. The Digital Equity Plan and BEAD Initial Proposal outline our commitment to ensuring all North Carolinians have affordable broadband without compromising quality or speed.
Comment #66	One pivotal aspect of the plan is its focus on infrastructure development. Additionally, the plan's emphasis on digital literacy and skills development is commendable. Furthermore, the plan's commitment to community engagement and collaboration is vital.	The division thanks the commenter for their comment.

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Comment #67	STRATEGY #3 "Ensure that North Carolinians can acquire the digital skills and understanding to meet their personal needs and the state's workforce needs". I want to highlight the importance of creating a Peer Education Program that builds sustainable relationships at the community/neighborhood level. Although activities under this strategy create opportunities; the 2023 People's Policy Agenda highlights a peer education model to successfully serve all populations at the local level.	The division thanks the commenter for their comment. We agree that peer education is a clear need and was a theme from listening sessions. We added language about peer learning into Implementation Activity 3.2.
Comment #68	STRATEGY #4 "Promote practices and leverage tools to ensure online privacy and security. I want to bring to attention the need for educating individuals about their rights regarding personal information, privacy settings, consent options. These three topics align with the 2023 People's Policy Agenda and could be implemented through the Plan's implementation activity 4.2; "Integrate cybersecurity and privacy training into curricula implemented by digital navigators and other digital literacy efforts across the state.	The division thanks the commenter for their comment. Based on the comment, we've added the following language to Activity 4.1: "These standards must include online safety to keep personal data safe and secure and could include information about privacy settings, online consent options, and rights regarding sharing personal information."
Comment #69	While the N C digital equity plan is an important step forward, it is crucial that it is implemented as effectively and efficiently as possible. Adequate funding, ongoing assessments and analysis, 2 and continuous adaptation based on community needs are essential to ensure the plan's long-term success.	The division thanks the commenter for their comment and is committed to continued evaluation and assessment as outlined in the Implementation Timeline section. We added more specific language to highlight our proposed evaluation timeline and strategies.
Comment #70	STRATEGY #5 "Ensure that North Carolinians have access to digital devices that meet their needs". I think it's important to highlight the importance of ensuring distribution programs meet the unique accessibility needs of people with disabilities.	The division thanks the commenter for their comment. Based on the comment, we added the following language to the description of Implementation Activity 5.4: [Deployment partners] can also ensure devices meet specific individual needs such as accessibility features for people with disabilities.

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Comment #71	We urge the State of North Carolina to collaborate with community-based organizations as they are best placed to connect within the communities which these funds are aimed and can maximize the opportunity provided by the current administration to ensure digital equity for all. These organizations understand community needs and culture and are committed to serving those with the greatest need. These organizations are important digital equity stakeholders that can serve as ambassadors for conducting outreach, delivering trainings, offering digital navigation and technical assistance to expand access to digital opportunities in Latino communities.	The division thanks the commenter for their comment. Collaborating and partnering with community-based organizations remains a key priority of the division. A theme from the listening sessions (and as outlined in the Measurable Objectives and Implementation Plan) was that people want to receive digital skills training and navigation from organizations they already trust (food banks, community centers, churches, and others). Building the capacity of organizations to provide these services is critical and remains a priority of the division.
Comment #72	I completely support NC's Digital Equity plan.	The division thanks the commenter for their comment.
Comment #73	Collaborative Process with Trusted Partners: Foster partnerships with community-based organizations (CBOs), local governments, educational entities, and other trusted stakeholders. Work together to identify and address digital inequities, leveraging collective expertise and resources to achieve more significant impact.	The division thanks the commenter for their comment. Collaborating and partnering with community-based organizations remains a key priority of the division. A key theme in the listening sessions (and as outlined in the Measurable Objectives and Implementation Plan) was that people want to receive digital skills training and navigation from organizations they already trust (food banks, community centers, churches, and others). Building the capacity of organizations to provide these services is critical and remains a priority of the division.
Comment #74	In-person and Remote Support through Various Communication Channels: Offer both in-person and remote support options to accommodate different circumstances and preferences. Utilize multiple communication channels, such as phone, email, chat, or video conferencing, to ensure accessibility and convenience for individuals seeking assistance.	The division thanks the commenter for their comment. We are partnering with NC 211 to pilot digital navigation phone support. Throughout implementation, we will work with partners to diversify service channels.
Comment #75	Providing broadband alone is not enough. We need to provide devices, digital literacy training, and technical support. It is not "if you build it, they will come." Without providing these critical wrap-around services, broadband will go unused and there will still be a significant portion of the population on the wrong side of the digital divide. Furthermore, as a technology refurbisher, we support programs that refurbish and redistribute existing devices.	The division thanks the commenter for their comment and agrees that internet access alone will not close the digital divide. The Digital Equity plan is meant to be holistic and address internet affordability, digital skills, cybersecurity, access to devices, and the online accessibility and inclusivity of public resources.

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Comment #76	STRATEGY #1 "All North Carolinians have access to high-speed internet and to affordable, low-cost internet services". It's important to align this work with the 2023 People's Policy Agenda goal of Affordable Broadband without compromising quality or speed by: Supporting an ongoing broadband subsidy for those least served, and Incentivizing competition for broadband opportunities across all populations	The division thanks the commenter for their comment. The Digital Equity Plan and BEAD Initial Proposal outline our commitment to ensuring all North Carolinians have affordable broadband without compromising quality or speed.
Comment #77	Holistic Digital Navigation: Focus on addressing all aspects of digital inclusion, including connectivity, access to devices, digital skills, and technical support. Provide comprehensive support to individuals or communities to ensure they have the necessary resources and knowledge to fully participate in the digital world.	The division thanks the commenter for their comment. We added language around the holistic nature of digital navigation programs in the description of Implementation Activity 3.2.
Comment #78	Assisted at Time of Call, Not 'Air Traffic Control': Be responsive and proactive in assisting individuals seeking support. Instead of acting as a controlling authority, aim to provide personalized assistance in real-time, addressing their specific needs and challenges, with solutions in-the-moment rather than pushing them to make additional phone calls or visit additional websites.	The division thanks the commenter for their comment. We believe this comment connects to the previous comment about holistic digital navigation. We also added more language about technical and help desk support in the description of Implementation Activity 5.4 with the intention of creating more streamlined, personalized assistance.
Comment #79	Culturally Competent Services: Recognize and respect the diverse cultural backgrounds and identities of the communities served. Tailor services to meet the unique needs and preferences of different cultural groups, ensuring that everyone feels included and valued.	The division thanks the commenter for their comment. Cultural competency is woven throughout the Measurable Objectives and Implementation Plan and the division prioritizes partnerships with trusted community-based organizations who serve covered populations. We added language to the description of Implementation Activity 5.4 to highlight cultural competency.
Comment #80	STRATEGY #3 "Ensure that North Carolinians can acquire the digital skills and understanding to meet their personal needs and the state's workforce needs". I want to highlight the importance of creating a Peer Education Program that builds sustainable relationships at the community/neighborhood level. Although activities under this strategy create opportunities; the 2023 People's Policy Agenda highlights a peer education model to successfully serve all populations at the local level.	The division thanks the commenter for their comment. We agree that peer education is a clear need and was a theme from listening sessions. We added language about peer learning into Implementation Activity 3.2.

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Comment #81	STRATEGY #3 "Ensure that North Carolinians can acquire the digital skills and understanding to meet their personal needs and the state's workforce needs". I want to highlight the importance of creating a Peer Education Program that builds sustainable relationships at the community/neighborhood level. Although activities under this strategy create opportunities; the 2023 People's Policy Agenda highlights a peer education model to successfully serve all populations at the local level.	The division thanks the commenter for their comment. Based on the comment, we added the following language to Activity 4.1: "These standards must include online safety to keep personal data safe and secure and could include information about privacy settings, online consent options, and rights regarding sharing personal information."
Comment #82	STRATEGY #4 "Promote practices and leverage tools to ensure online privacy and security. I want to bring to attention the need for educating individuals about their rights regarding personal information, privacy settings, consent options. These three topics align with the 2023 People's Policy Agenda and could be implemented through the Plan's implementation activity 4.2; "Integrate cybersecurity and privacy training into curricula implemented by digital navigators and other digital literacy efforts across the state.	The division thanks the commenter for their comment. Based on the comment, we've added the following language to the description of Implementation Activity 5.4: [Deployment partners] can also ensure devices meet specific individual needs such as accessibility features for people with disabilities.
Comment #83	Dissemination of information about the Digital Inclusion work of the State, opportunities to volunteer, participate in surveys or listening sessions are not getting through to many in Mecklenburg County (and likely others). One possible solution is to create opportunities for organizations and leaders who work with directly with covered populations to have a seat at the table so they get the information and have the motivation to share with others directly — particularly if they have other ways to reach people we are trying to serve. I know this was done partially, but I also know of many others left out who could have helped with this.	The division thanks the commenter for their comment. We are committed to continued outreach, engagement and partnership. We have strong partners representing all covered populations and we are committed to connecting with more partners as implementation begins to reach more North Carolinians. We welcome feedback on how to increase engagement.
Comment #84	I am charged with leading the strategy, tactics, and implementation of the City of Charlotte's digital inclusion effort (work includes creating and implementing the Learn2Earn strategy to provide digital upskilling hand in hand with computers that meet the needs of the target audience, developing a strategy to work with affordable housing partners to both provide high speed internet as a tool to start conversations around other digital inclusion needs, and working with residents to improve and develop new digital tools that facilitate their full	The division thanks the commenter for their comment and looks forward to learning more about Learn2Earn.

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	participation and equitable benefit of technology and online resources).	
Comment #85	- The Plan describes comprehensive and wide-reaching outreach, listening sessions, surveys, and modes of engagement throughout the state related to the Plan's development. AARP appreciated the opportunity to participate in the "Assets and Best Practices Working Group" as well as in the "Data and Barriers Working Group" (see Appendix B). - AARP commends the division's commitment "to release a report annually to update implementation progress," and to "continue to partner with listening session host sites and other partners engaged throughout the process to listen, learn and remain accountable." Transparency and accountability are two key elements of AARP high-speed internet advocacy.	The division thanks the commenter for their comment.
Comment #86	AARP appreciates the upfront definitions of covered populations, which, among other things, includes "individuals who identify as LGBTQIA+ (Individuals who identify as lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual and more)." Although the Digital Equity Act does not include this group among the covered populations, AARP agrees that the group's inclusion in North Carolina's Plan is appropriate.	The division thanks the commenter for their comment.
Comment #87	In AARP's view, to the extent that the quality of households' access varies significantly, digital equity has not yet been achieved. AARP appreciates the Plan's discussion of these various forms of internet access.	The division thanks the commenter for their comment.
Comment #88	The Plan's findings regarding affordability as a major barrier to digital equity resonate with AARP's experience and advocacy. Affordability as a barrier is further evidenced by current data that show 46.3% (over 400,000 households) of current Affordable Connectivity Program (ACP) enrollees in North Carolina are age 50 or older.	The division thanks the commenter for their comment.
Comment #89	In AARP's experience, a lack of digital skills is a major barrier to older adults' high-speed internet access adoption and use – the Plan appropriately identifies this barrier. AARP also appreciates the division's thoughtful discussion of how to conduct conversations around this issue	The division thanks the commenter for their comment

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Comment #90	The Plan recognizes the importance of cybersecurity and privacy training. In AARP's experience, digital know-how, comfort using new technologies and applications, and having the skills to protect one's privacy are critically important to aging individuals. Moreover, aging individuals are especially susceptible to scams and are concerned about their privacy being jeopardized. For example, a recent Pew Report states: "Two-thirds (67%) of adults say they understand little to nothing about what companies are doing with their personal data, up from 59%." The Report also states: About seven-in-ten Americans are overwhelmed by the number of passwords they have to remember. And nearly half (45%) report feeling anxious about whether their passwords are strong and secure. https://www.pewresearch.org/short-reads/2023/10/18/key-findings-about-americans-and-data-privacy/	The division thanks the commenter for their comment.
Comment #91	AARP concurs with the division that "[w]hile many of the barriers to digital equity and inclusion are similar and cross many covered populations, there are many unique barriers faced by these groups." The Plan describes clearly the major barriers to aging individuals' high-speed internet access adoption	The division thanks the commenter for their comment.
Comment #92	AARP supports the many important objectives and goals that the division has identified and established, all of which relate to the barriers discussed earlier in the Plan. AARP has been advocating for many years for reliable, available, and affordable high-speed internet access and devices, supported by digital literacy training and ongoing tech support, and so AARP fully supports the vision, objectives, and goals articulated in the Plan. AARP has also recently adopted sustainability as part of its digital equity advocacy because the need for digital equity programs and projects is not a one-time need but rather will continue for the indefinite future as individuals move in and out of covered populations (incomes change, people get older, etc.) – AARP therefore supports the Plan's emphasis on sustainability.	The division thanks the commenter for their comment.

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Comment #93	Strategy 1: AARP supports fully the division's intention that "[a]ffordability will be a primary criterion for selecting BEAD subgrantees." The extent to which BEAD recipients offer and publicize affordable low-income and middle-income high-speed internet access services is a critically important factor contributing to progress toward digital equity. In the same vein, AARP recommends that North Carolina consider the extent to which BEAD recipients, and indeed, all service providers offer unbundled high-speed internet access. By way of illustration, another state's draft digital equity plan states that as part of its BEAD middle-class affordability plan, it will "require prospective subgrantees to offer at least one unbundled broadband product with a transparent price (i.e., no hidden fees) and certify that it will continue to provide this option to middle-income households for six years."	The division thanks the commenter for their comment.
Comment #94	Strategy 1: AARP also supports fully the division's plan for: "Expanding awareness of and enrollment in the ACP or other subsidized internet programs is key to addressing affordable internet access for eligible covered population households. Increasing ACP enrollment is a core activity of the division and significant progress is underway to expand awareness and enrollment." The division could consider including data in its final Plan regarding baseline ACP enrollment as well as short-term and long-term goals for increasing participation levels. (Earlier, in the Plan, the division states that it "seeks to increase public awareness of the program and increase the number of eligible households enrolled to 1 million by December 2023."). AARP is actively engaged with seeking continuing funding for the ACP (or a successor program), and also welcomes the opportunity to work with the division on education and outreach for the ACP.	The division thanks the commenter for their comment. In the draft Digital Equity plan we included a baseline of the percentage of ACP enrollees as well as short- and long-term goals for low-cost options (which include ACP as well as BEAD subgrantees).

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Comment #95	Strategy 1: AARP recommends that the division also incorporate the following indicator of affordability: The role of municipally-owned (or regionally-owned) high-speed internet access networks, which typically offer service at more affordable prices than do commercially-owned networks.	The division thanks the commenter for their comment. This comment is out of scope for the Digital Equity plan but is addressed in the BEAD Initial Proposal as follows: In some states receiving federal funds, broadband infrastructure will be built, owned, and operated by local or state governments. In North Carolina however, the legislature has determined that primarily private internet service providers and cooperative organizations will build, own, and manage the network infrastructure and provide ongoing broadband service to consumers. N.C.G.S. § 143B-1373(a)(7) (state broadband grant program: defining an eligible recipient as "private providers of broadband services, including cooperatively organized entities"); N.C.G.S. § 143B-1373(g)(1)(amended by S.L. 2021-180 Section 38.4)(stating that "nothing in this subdivision shall be deemed to authorize a county to provide broadband service"); N.C.G.S. 153A-274-275 (setting out counties' authority to operate public enterprises, which omits broadband service); and N.C.G.S. § 66-58 (the North Carolina Umstead Act, prohibiting state agencies from providing services that are typically rendered by private enterprises). Municipalities are allowed to provide internet service subject to a variety of restrictions created in 2011. N.C.G.S. § 16A-340, et seq. For example, new municipal entrants must limit service to within the city's corporate limits and must solicit proposals from private providers and negotiate with at least two of the respondents. Several municipalities were grandfathered in and allowed to expand service within certain geographical restrictions. (N.C.G.S. §160A-340) The division will encourage participation in BEAD-funded projects by eligible municipalities to the greatest extent allowed by state law.
Comment #96	AARP is hopeful that during the implementation phase of the Plan, sufficient resources are provided to senior centers and to organizations that work with aging individuals so that North Carolina can successfully close age-based digital equity gaps. Also, it is important in some situations to bring digital equity solutions to where people live – not all aging individuals can travel, for example, to senior centers, libraries and community centers for digital literacy training.	The division thanks the commenter for their comments. We anticipate senior centers and other organizations serving older adults will be eligible for Digital Equity grant funding as a part of the Digital Equity Plan implementation. Transportation was a key barrier to accessing digital inclusion services across covered populations.

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Comment #97	High-speed internet access adoption and literacy training programs should also include caregivers so that they, in turn, can facilitate aging individuals' digital connections (videoconferencing with their grandchildren, getting remote health care, watching a movie, etc.) – not all aging individuals – even with training – will be able to navigate internet-based applications on their own yet they can still benefit from having access to internet-based applications, which, with adequate training, their caregivers can facilitate in real-time.	The division thanks the commenter for their comments. Families and caregivers are important support systems. Funding of specific programs (such as the example of programs targeted at caregivers) will be determined during the implementation phase.
Comment #98	AARP also encourages the division to commit to the continuing gathering, analysis, and reporting of data (see, for example, Appendix H). The division could continue to tap into the expertise in its educational institutions to bring GIS, statistical, digital literacy and other skills to North Carolina's efforts to identify and to close gaps in digital equity and to monitor its success in closing those gaps. Making this information readily available to all can help community-based organizations tailor programs and adopt best practices.	The division thanks the commenter for their comment. We will continue to collect and publish data including an interactive dashboard of the Digital Equity survey data.
Comment #99	Also, if needed, AARP urges North Carolina to seek legislative authority to require providers to submit data to assist with the implementation and assessment of the progress of the Digital Equity Plan (e.g., regarding deployment, prices, adoption, speeds, and technology). AARP has engaged in state legislative high-speed internet access advocacy in many jurisdictions throughout the country and is fully prepared to assist with legislative advocacy that would facilitate the division's achievement of digital equity.	The division thanks the commenter for their comment. The division will require BEAD subgrantees to provide progress reports of their BEAD implementation. This approach will involve analyzing progress and ensuring it fulfills objectives while consistently enhancing the procedure through information collection, stakeholder feedback, and industry trends. Among the reporting requirements with which BEAD subgrantees must comply is the disclosure of their broadband pricing options (inclusive of fees and other charges) at full price, excluding discounts. This requirement will promote transparency in pricing, which is critical to ensuring that broadband is affordable and accessible to all North Carolina residents. Furthermore, the division will seek reporting mechanisms and data collection alternatives to compile broadband pricing data from providers beyond BEAD subgrantees, ultimately enhancing transparency in broadband pricing throughout North Carolina. The proposed data will align with the information anticipated for collection through the FCC's forthcoming broadband consumer labels known as "nutrition labels." Even though these labels are not yet available, they may become an essential resource for consumers, by providing substantial information to support informed decisions and protect against concealed fees. By leveraging the potential of these labels and gathering

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		additional data, the division aims to gain a comprehensive understanding of the affordability challenges of broadband services in North Carolina, informing strategies to enhance digital equity across the state.
Comment #100	- AARP commends the division for its comprehensive engagement with stakeholders and representatives of covered populations from throughout North Carolina. AARP is hopeful this collaboration will provide a solid foundation for the successful implementation of the Plan in the years to come. -AARP appreciates that the division's website provides a link to the Executive Summary translated into Spanish and is hopeful that as North Carolina implements its Plan, the division continues to provide communication in languages other than English so that all can stay informed about and engaged with digital equity efforts throughout the state.	The division thanks the commenter for their comment and is committed to providing resources in various languages in addition to English.
Comment #101	What happens if ACP goes away? Can the State create it's own version of the program with the other work being done to create some resiliency?	The division thanks the commenter for their comment and continues to work with federal and state partners to advocate for the continuation of the ACP. We added language to Implementation Activity 1.1 from the BEAD Initial Proposal about subgrantee requirements if the ACP isn't renewed: "BEAD subgrantees are required to participate in the FCC's ACP and ensure that prospective customers are aware of ACP availability for the low-cost service option. BEAD subgrantees are required to participate in any successor broadband subsidy program if Congress ceases to fund the ACP or the program otherwise expires. Barring a successor program, subgrantees will be required to continue offering the low-cost service option to, at a minimum, customers who meet the ACP eligibility criteria. If Congress ceases to fund the ACP or the program otherwise expires, and the federal government does not create a successor program or issue new criteria for eligible households, the division will propose new criteria for determining eligible households and publish such criteria for public comment for no fewer than 30 days before issuance."
Comment #102	Strategy 2 activities in summary drop the specificity around serving people with disabilities or with a language barrier that is present in the need outline. Is it intentional it becomes a bit more vague? This strategy might become stronger with more pulled from the need identified including language access.	The division thanks the commenter for their comment and added language to increase specificity in Strategy #2 as it relates to individuals with disabilities and individuals with language barriers.

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Comment #103	Strategy 3 – Should one of the digital literacy skills/trainings be around accessing government services to compliment and strengthen the changes to those services create in the other strategies on the topic? Also, because digital skills seem like the first barrier to the other elements of connectivity, it might be helpful to connect the digital literacy courses with device ownership opportunities because the skills are hard to maintain without one. I know Strategy 5 gets into this a little but I wonder if the connection need to be stronger somewhere, similar to the mention in Strategy 1 where BEAD subgrantees in the future should outline how they will not only connect people to internet but also digital literacy.	The division thanks the commenter for their comment and added language to Implementation Activity 3.3 to align with the need for digital skills for government services and address the interconnection of Implementation Activities 3 (digital literacy) and 5 (devices).
Comment #104	Strategy 4 – Local government should also be a partner for two reasons. 1) as local government deploys digital tools and technologies in public spaces, it can do more to inform the community about the data collected and how it is used and facilitate conversation around common language (see digital trust for places and routines as an example), 2) Local government, particularly the larger ones, have I&T departments and skilled staff who can help with training and sharing information around online safety and data privacy. It's also out in the community with information and running surveys so there are plenty of opportunities to share information.	The division thanks the commenter for their comment and added local governments as a potential partner on Strategy #4.
Comment #105	Edits on section for Mecklenburg County Digital Inclusion Plan/CDE 5-Year Plan Profile: - Draft Plan Adopted in 2022 (not 2020) - The Advisory Board, made up of leadership representatives from Mecklenburg County, City of Charlotte, Charlotte Mecklenburg Library, Charlotte Mecklenburg Schools, key philanthropy partners, local for-profit companies, academic partners, state and national digital inclusion leadership, provides the strategic approach and partners with the CDE for opportunities for funding and other necessary resources Funding used to Create the Plan: Queens University of Charlotte and the Knight Foundation	The division thanks the commenter for their comment. The edits have been sent to the Institute for Emerging Issues who developed the profiles of local digital inclusion plans. A link to the profiles has been removed from the plan.
Comment #106	AARP supports this vision and recommends that it also refer to <i>reliable and affordable</i> highspeed internet.	The division thanks the commenter for their comment and adjusted the vision to include "reliable and affordable."

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Comment #107	AARP encourages North Carolina caution in creating an ecosystem of used and refurbished devices as an avenue for getting devices to people. Used devices can often provide a subpar experience and can be a detriment to overall digital skill adoption as they may require additional maintenance or no longer offer updates/security patches.	The division thanks the commenter for their comment. Our strategy must include both new and refurbished devices. We added language to highlight the need for new devices in Strategy #5. Refurbished devices can often provide as good an experience as a new device if the refurbished device is received from a well-trained refurbisher that has specified refurbishment standards. It is the division's intention to partner and fund refurbishers who meet the highest standards. Refurbished devices may also require a lower financial barrier for the consumer, which is a clear need for many covered populations.
Comment #108	Strategy 1: AARP also recommends that the division commit to monitoring ACP participants' form of high-speed internet access. USAC reports data on a national level regarding participants' platform – it would be helpful to have that data provided on a statewide level. AARP raises this issue because wireless internet service is distinctly inferior to wireline access. Even where wireline access is an option, residents may nonetheless rely on wireless access (for example, many low-income residents cannot afford both a cell phone and a separate wireline connection to the internet).	The division thanks the commenter for their comment. We added a Key Component under Implementation Activity 1.3 to advocate for better data.
Comment #109	AARP recommends that the Plan include a commitment to track ACP participation, and, to the extent feasible, to track the participation by geography, age, and any other attribute for which data are available. It would of course be useful if the USAC age categories coincided with the Digital Equity Act's definition of older adults: The final Plan could also point out that it would be helpful, if USAC's age brackets aligned with the Digital Equity Act's definition of older adults (aged 60 and over).	The division thanks the commenter for their comment. The division tracks all available data on ACP and commits to doing so in the future. We added a Key Component under Implementation Activity 1.3 to advocate for better data so we can design data-informed interventions to increase ACP enrollment.

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Comment #110	- Overall, the Plan's inventory of assets is comprehensive and clearly presented, and, as such, will provide a valuable tool for guiding the Plan's successful implementation. - We appreciate the inclusion of Older Adults Technology Services (OATS) from AARP's technology program for older adults, "Senior Planet from AARP" as part of North Carolina's asset inventory. Senior Planet is designed to help older adults aged 60 and older thrive in the digital world, and harnesses technology to change the way we age. Senior Planet operates virtually via SeniorPlanet.org and hosts a National Tech Hotline: 888-713-3495 which is monitored by Senior Planet Trainers from 9am – 5pm EDT, Monday through Friday. - Senior Planet also has a licensing program that equips local organizations across the country with the tools and curriculum to help older adults access technology and use it to enhance their lives. Licensing partners within North Carolina include Caldwell Senior Center Inc, New Hanover County Senior Resource Center, Durham Center for Senior Life, Davidson County Senior Services, The Enrichment Center of Lee County, Craven County Senior Services, Fill My Cup!, Orange County Literacy Council (Orange Literacy), Dress for Success Triangle NC, Rebuild Durham Inc, Goldsboro Housing Authority, Shaw University, Freshlife, Inc., Charlotte Mecklenburg Library, and Pathways NC Inc.	The division thanks the commenter for their comment and will include the programs mentioned in the asset inventory.
Comment #111	Affordable online internet access is not just an optional luxury for NC senior adults. It can significantly improve the quality of their lives. It makes possible such online services as online banking (including BillPay), ordering medical prescriptions online and scheduling home delivery, ordering groceries online and scheduling home delivery, online participation in their church services when they are unable to attend in person, and the ability to maintain regular online video contact with their friends and family, which greatly enhances their mental health.	The division thanks the commenter for their comment. We agree that the internet is not a luxury and is necessary to access opportunities for full participation in our society, democracy, and economy. The plan highlights many of these needs for aging adults.

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Comment #112	Consumer and Family Advisory Committee (CFAC) represents Medicaid connected people with mental health, substance use, intellectual and developmental disabilities and those with traumatic brain injuries. I'm part of a six county (Johnston, Cumberland, Wake, Durham, Orange & Mecklenburg Counties) region directly under Alliance Health managed care organization (MCO). There are currently six MCOs across the state that coordinate services to members across all 100 counties. Our collective CFACs have identified the lack of internet/broadband as detrimental to access to telemedicine that would ease a sister problem, transportation to maintenance medical care. This critical issue affects those aged 50+ along with the many that provide care for their adult children & grandchildren with the medical challenges I mentioned above. It is a fact that one in five experience brain health disorders that include our "senior" population. Access to telemedicine will be a way to reach those living in rural pockets of a digital desert. My hope is that this report will generate immediate action by our legislative leaders. Thank you!	The division thanks the commenter for their comment.

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Comment #113	The plan needs to better leverage existing resources and assets to accomplish the following: -Laptop, hot spot, smartphone device checkout programs -Free/low cost 3.5 mm audio devices (headset, earbuds with mics) -Reservable privacy booths (for telehealth and other applications) -One-on-one mentoring -Expanded hours, 7-day week availability -NC DIT digital literacy resources for (similar to Goodwill GCF Global) Chrome, Microsoft, and iOS operating systems Productivity applications Privacy and security -Upskilling of digital knowledge for improved employability Justice involved, displaced workers, veterans, disability, adult workers (including 50+community of experienced workers) -Preparation for Artificial Intelligence's influence on the future of knowledge workers -Video conferencing communication basics with Zoom, Meet, Teams, etc24/7/52 phone, email support of digital security questions, device messages Leverage of the NC Public Broadcast System (PBS) resources Internet Service Providers that 'turn-on' significant broadband speed resources for new/upgraded homes (optional ISP user agreement - get broadband, get help from your community)	The division thanks the commenter for their comment. It is our priority to leverage existing locations and build the capacity of existing organizations to better meet digital inclusion needs of their communities as outlined in the Measurable Objectives and Implementation Plan section. The asset inventory highlights many of the organizations mentioned and we expanded potential partners identified in the Measurable Objectives and Implementation plan to include other organizations suggested (such as lifelong learning centers). Many of the specific resources you mention are included throughout the plan (privacy and security, upskilling, video conferencing basics and other digital literacy needs, and individualized support) and the rest will be considered during implementation as the division finalizes grantee guidelines and priorities.
Comment #114	This plan may be appropriate for some people, but have been challenging for other seniors. Seniors are concerned about the cost of computers or other equipment. Some seniors are also concerned about auto pay as required by some of the providers. Also, there are some concerns regarding sharing of personal financial information for auto pay. Providing training for seniors may also be challenging especially in rural areas. Digital technology is needed, but a less stressful plan would benefit our seniors.	The division thanks the commenter for their comment. We tried to create a comprehensive plan that outlined digital inclusion needs across the state and strategies to meet those needs. Ensuring that aging adults have access to technology and skills and have access to online safety training is outlined throughout the plan.

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Comment #115	Section: Barrier 3: Access to Digital Devices and Technical Support; Thrive Mobile directly addresses the digital divide with our comprehensive mobile solution to minimize health disparities for underserved populations. Our primary goal is to eliminate utilization gaps, simplifying actions that promote overall wellbeing. We streamline access to healthcare services by providing customers with a free, high-quality large screen mobile device preloaded with essential apps for telemedicine, government health resources, and healthcare provider connectivity. Additionally, we offer ondemand digital navigation support and incentives to encourage proactive health management.	The division thanks the commenter for their comment.
Comment #116	I echo the mentions of digital equity to increase access to healthcare providers, particularly in rural communities.	The division thanks the commenter for their comment.
Comment #117	Barriers to Digital Equity in Local Digital Inclusion Plans – p. 32 Discrimination – Very important to recognize as a root cause to the digital divide. Transportation – Extreme barrier in rural counties, only compounded when looking at increasing access for historically marginalized populations.	The division thanks the commenter for their comment.
Comment #118	Digital Equity is key to providing high quality healthcare. A focus on Civic and Social Engagement is also an exciting opportunity to measure social connection, which is important to physical and mental health and affects community success at a time when 1 in 5 people report feeling lonely or socially isolate in the US per NCQA.	The division thanks the commenter for their comment. The division partners with many community-based organizations including community centers, senior centers, and faith-based institutions that are key to social connection. We welcome partnership to explore the intersection of social connection, civic engagement, and digital equity.
Comment #119	Strategy #3: We would like to see the following changes implemented to support digital navigators: Support the development of a standardized digital navigator curriculum and assessments Expand the capacity of digital navigators with added funding Support knowledge sharing between digital navigators that are existing and new digital navigators Develop & provide increased financial support for outreach campaigns	The division thanks the commenter for their comment. We partner with the N.C. Community College System on a pilot standard curriculum for digital navigation, which will be available in early 2024 and is referenced in Strategy #3, which also includes increased funding for digital navigators and a peer network of digital navigator programs to share best practices. We are also committed to increasing knowledge about existing programs, which could include outreach campaigns.

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Comment #120	Upon a thorough review of the plan, it is recommended an intergovernmental Digital Equity Policy Agenda be created. Fully recognizing the need to offer assistance to members of identified "covered populations"; NCDIT should begin collaborating with various agencies and representatives in the development and consistent review of a policy agenda at the federal, state and local government levels that aligns with the plan's digital equity goals articulated. Further, such an agenda will be important once Broadband access funding concludes in order to continue addressing North Carolina's digital equity needs.	The division thanks the commenter for their comment. We have intentionally worked across state government to align digital equity and broadband priorities as outlined in the Aligning State Plans and Priorities section (essentially a policy agenda) and will continue to engage state government partners throughout implementation including through the Digital Equity and Inclusion Collaborative and the Online Accessibility and Inclusivity Working Group. We appreciate the suggestion of an Interagency Digital Equity Policy Agenda and may consider creating one during plan implementation.
Comment #121	We propose that news outlets be eligible to receive grants for increasing digital news and information functions in critical areas, such as rural areas and "double deserts", and for covered communities outlined in your plan. Increasing the amount of local digital news available to residents who will be using the internet more and more to access information will help increase digital activity and skills.	The division thanks the commenter for their comment. Eligibility criteria for grant funding will be determined during implementation.
Comment #122	 We support the barriers and needs identified, as well as the strategies laid out to address them. We certainly support access for all people and in particular for senior citizens because it gives them access to health, business, continuing education and more. Our office would like to continue helping to facilitate this topic and answering questions as needed. We welcome the opportunity to work with DIT and the public further to work towards the goal of digital equity for all. 	The division thanks the commenter for their comment and we look forward to continued collaboration.
Comment #123	Ensure that geographically, communities have access to tutorials and knowledgeable customer support which will help individuals develop the skills to make the most of a digital product.	The division thanks the commenter for their comment. Increasing access to and the geographic diversity and reach of programs and resources is a key priority as indicated throughout the Measurable Objectives and Implementation Plan section.
Comment #124	Encourage regions to establish a culture of inclusion in digital spaces by maintaining safe and welcoming online environments. From comment sections to online communities, ensure that all digital spaces be moderated to help promote diversity and inclusivity and diminish any potential discrimination or harassment.	The division thanks the commenter for their comment. This suggestion is beyond the scope of the digital equity plan.

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Comment #125	When developing measures to assess progress toward digital literacy goals, the NCHBC recommends that the Plan go beyond basic digital literacy to assess digital literacy for some key online applications like farming or healthcare. With regards to healthcare in particular, measures that would assess patient's ability to adopt different telehealth devices and related applications like smart phones and remote patient monitoring tools, someone's ability to research health information, evaluating the authority and authenticity of the information, and patients' ability to engage in their own care with patient portals and remote consultations, would all be domains, among others, that would benefit from evaluation measures.	The division thanks the commenter for their comment. One of the overall measurable objectives is confidence in connecting with a healthcare provider online (through a portal). More specific digital literacy measures related to healthcare and farming could be developed by digital equity grant subgrantees as part of individual projects funded during implementation.
Comment #126	Shared resources the Benton Institute has put together to help states develop equitable visions to achieve digital equity. "Upon review, we offer 10 Principles for Digital Equity Visions (see https://www.benton.org/sites/default/files/Vision sDigitalEquity.pdf). We hope these principles help the people of North Carolina evaluate both the draft State of North Carolina Digital Equity Plan and the North Carolina North Carolina's revision of the plan. To that end, we also offer A Checklist for Evaluating Digital Equity Visions (see https://www.benton.org/sites/default/files/DEV_checklist.pdf)"	The division thanks the commenter for their comment. We utilized Benton Institute materials throughout the plan development process and look forward to continued use of resources.
Comment #127	The Division should thinking strategically about protecting the existing local news ecosystem in North Carolina including: Funding statewide nonprofits or public broadcasters that will dedicate reporting resources to double deserts - areas that lack both local news and are un- or underserved by broadband services	The division thanks the commenter for their comment. Grant guidelines will be developed during implementation of the plan.
Comment #128	Chart on page 40 - It might be good to double-check the overall results for "Internet is not available" against the breakdown by covered population. The response on this item is consistently lower than "Internet is too expensive" except for the Veterans and LGBTQ populations, where nearly half respond that internet is not available (which seems unreasonably high).	The division thanks the commenter for their comments. This question was only asked of individuals that did not subscribe to home internet service at their residence. There were fewer LGBTQIA+ and veteran individuals that said they do not have that service. For example, of the 7,447 responses only 940 said they didn't have home access to the internet.

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Comment #129	Implementation Timeline (p.83) - Is this timeline intended to represent all key components of implementation strategy activities listed in the previous section? Also note the subheading for 2025 activities appears twice for Implementation Activity 1.2 components on p. 66.	The division thanks the commenter for their comment. The timeline is a high-level overview that includes Implementation Activities and summaries of the key components by implementation year.
Comment #130	Please make sure that elderly and/or low-income households have proper access to these services. Too many of these households don't have the financial resources to benefit from expanded digital Internet services. They don't have the equipment or the training. Unless there is a plan in place to provide inexpensive quality equipment for these households they are still going to be left behind. The cost of the services must also be within their reach. Likewise proper training must be provided. consider providing as a mandatory service for EVERY senior center to provide training and transportation for the residents to get to the senior centers for the training.	The division thanks the commenter for their comment. Your comments resonate with what we heard throughout listening sessions. Aging adults face many barriers to digital access and meeting their digital needs is a priority. Senior Centers are listed as potential partners throughout the Measurable Objectives and Implementation Plan.
Comment #131	We appreciate the inclusion of Strategy 3 in the North Carolina Digital Equity Plan, which aims to ensure that residents acquire the digital skills needed for personal and workforce requirements. I would like to highlight the significance of extending this strategy to specifically address the needs of Spanish immigrants in the Charlotte area and across the state. By tailoring digital skill-building initiatives, and working alongside non-profit organizations, to accommodate linguistic and cultural diversity, we can empower Spanish-speaking immigrants to integrate more effectively into the digital landscape, fostering a stronger and more inclusive community.	The division thanks the commenter for their comment. Strategy #3 integrates building capacity of trusted organizations (like immigrant-serving organizations) as well as encouraging culturally competent and peer-led programs like the examples you mention. This comment resonates with what we heard from many Spanish-speaking immigrants (and many other groups) across the state. We carefully crafted strategies to meet the unique needs for each covered population and will partner with covered populations and organizations that serve them. Additionally, we added the need for peer learning (such as Spanish speakers teaching other Spanish speakers in a culturally competent way) as part of Strategy #3.
Comment #132	In addition to supporting Strategy 5 of the North Carolina Digital Equity Plan, I would like to highlight the importance of incorporating incentives, such as rewards, for individuals completing coursework and participating in ongoing classes. Introducing incentives can serve as a motivating factor, especially for immigrants in the Charlotte area and across the state, encouraging them to actively engage with digital services and educational opportunities. This approach not only enhances accessibility but also fosters a sense of accomplishment and community involvement.	The division thanks the commenter for their comment. We agree that incentives (like receiving a device) can be a powerful motivator. These kinds of program specifics will be addressed during implementation when the division creates guidelines for grantees.

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Comment #133	Implementation Activity 1.1: Support the state's BEAD program plan objectives and implementation to ensure alignment with North Carolina Digital Equity Plan Goals • We strongly support embedding equity into workforce planning related to broadband infrastructure deployment through enforceable commitments by BEAD grantees (p. 64). We recommend the plan include more details on the types of commitments expected from grantees, such as project labor agreements, local hire provisions, and recruitment plans for women, people of color, and other historically marginalized communities. These suggestions come from the NTIA Workforce Planning Guide for BEAD Program Eligible Entities.	The division thanks the commenter for their comments. This comment relates to the BEAD Workforce Development plan. As highlighted in the BEAD Initial Proposal, the division prioritizes applicants that do not have a documented violation of labor and employment laws within the last three years in North Carolina. The division will require subgrantees to follow all applicable state and federal labor and employment laws and regulations and align with associated BEAD NOFO guidelines. The division will make compliance with applicable labor and employment laws part of the binding legal commitment with the subgrantee. The division will incentive applicants by offering points to those that commit to one or more of the optional labor practices described in the Initial Proposal. More details are available in the Labor Standards and Protection (Requirement 11) section of the BEAD Initial Proposal.
Comment #134	Implementation Activity 1.3: Increase awareness of and enrollment in low-cost and subsidized broadband internet programs like the Affordable Connectivity program (ACP). • We strongly support aligning ACP enrollment with other public benefits programs and are excited to learn about the results of partnerships with NC DHHS through the division's FCC ACP Outreach grant (p. 67). We believe the results of this pilot project could help inform ways to align public benefits enrollment more broadly and urge you to make any information learned from these pilot projects widely available. We also strongly support continuing to partner with state and local DHHS offices to further align ACP enrollment and other digital inclusion activities with existing public benefits programs.	The division thanks the commenter for their comment.
Comment #135	Implementation Activity 3.1: Partner with workforce and education agencies at the state and local levels to identify and adopt high quality digital skills standards, including digital privacy and cybersecurity standards and digital health literacy. • As part of the division's adoption of skills standards, we recommend that the division establish guardrails for what constituents a quality non-degree credential and require program providers to meet those general guidelines. As documented by the nonprofit Credential Engine, there are tens of thousands of different types of certifications, certificates,	The division thanks the commenter for their comment. We believe this comment is outside the scope of the Digital Equity plan but will share the identified need with our workforce partners.

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	badges, and other credentials in existence, including many that are focused on digital skills. While it is impractical for the division to review every credential, identifying guidelines for quality is an important role for the division to play.	
Comment #136	Implementation Activity 3.3: Leverage digital navigator and digital literacy programs to expand partnerships with organizations serving covered populations to meet their specific digital literacy needs. We recommend the division support contextualized and integrated program models that help individuals build digital skills in the context of the real-world settings in which those skills will be used. For example, a healthcare program that prepares entry-level workers to use mobile apps for patient care and timekeeping, or a basic digital skills class that allows participants to become comfortable using technology to support their own and their children's education, navigate job-application and payroll software, or access telehealth services.	The division thanks the commenter for their comment. Contextualized and integrated program models could help individuals build digital skills. These kinds of program specifics will be addressed during implementation when the division creates guidelines for grantees.
Comment #137	Implementation Activity 3.3: As noted in the plan (p. 56), undocumented immigrants and immigrant communities specifically face significant barriers to accessing digital inclusion services. We recommend that the plan include guidance that the division and community-based organization partners follow best practices used in the public health and education fields and ensure that individuals born outside the United States are not required to demonstrate a specific immigration status to participate in digital equity programs. This flexibility has already been adopted for the Affordable Connectivity Program by major Internet Service Providers.	The division thanks the commenter for their comment. Subgrantee guidelines will be determined during implementation.

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Comment #138	In addition to the above comments regarding implementation strategies, we support the plan's inclusion of measurable outcomes for tracking digital equity goals and recommend adopting additional measures focused specifically on digital skills and workforce development. These could be developed and collected in collaboration with workforce development partners, including but not limited to the Department of Commerce. These could include: 1)Establish a simple, standardized set of measures that all digital skill-building programs will report on. 2) Include measures of outcomes (they also provided examples of outcomes), 3) Provide flexibility within the common measures. 4) Collect additional qualitative data from a subset of programs. 5) Collect basic demographic data without adding unnecessary burdens.	The division thanks the commenter for their comment and outcome examples. Measurable outputs and outcomes will be developed during implementation as will subgrantee guidelines. As noted in Strategy #3, subgrantees will likely be required to integrate digital literacy standards into their programs. Reporting measures tied to these standards will be important.
Comment #139	Strategy #1: Infrastructure is important. We appreciate that through this plan the state has included access to infrastructure as part of digital inclusion, not separate as an individual's ability to connect at home is a foundational part of digital equity. While we wait for the deployment of broadband infrastructure growing our ability to connect through public Wi-Fi remains a high priority. We appreciate the state recognizing the importance of public WIFI in CAIs.	The division thanks the commenter for their comment.
Comment #140	We strongly support working with trusted community organizations to build their capacity to provide digital skills and digital navigation services to most effectively reach covered populations (p. 74)	The division thanks the commenter for their comment.
Comment #141	The Division should thinking strategically about protecting the existing local news ecosystem in North Carolina including: Supporting a statewide news hub that would bring statehouse reporting to areas that lack strong local news networks, such as the one outlined the North Carolina Local News Workshop	The division thanks the commenter for their comment. Funding guidelines and eligibility will be determined during implementation.
Comment #142	The North Carolina Division of Broadband and Digital Equity should consider supporting civic initiatives such as: ● Programs like the Documenters network, which teaches residents to vet information, access online government meetings, attend government meetings in person and share that information with their community. Other components of digital citizenship could be added to these trainings and scaled across covered populations.	The division thanks the commenter for their comment. We look forward to learning more about these programs and engaging in potential partnerships throughout the implementation process. We are in the process of updating the asset inventory to include local news organizations.

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	 Programs that educate communities on local elections. Local newsrooms routinely facilitate candidate events, voter guides, events that dispel election disinformation and teach residents how to participate in their local elections. 	
Comment #143	The Plan outlines a strong network of digital inclusion assets. To that list I'd add local news intermediaries in the state including the North Carolina Press Association, the North Carolina Local News Workshop, the North Carolina Local News Lab Fund and the Charlotte News Collaborative as well as public broadcaster networks within the state.	The division thanks the commenter for their comment. We look forward to learning more about these programs and engaging in potential partnerships throughout the implementation process. We are in the process of updating the asset inventory to include local news organizations.
Comment f144	Strategy #1: The high cost of living in our region and the value of how broadband can help support thriving has a special place in Western North Carolina. WestNGN appreciates the plan's priority of affordability, but the strategies for implementation don't close the gaps ACP may leave behind. Given the concerns around the future of ACP, it would be good for the state to make a specific strategy around the deployment of affordability services if ACP does not continue.	The division thanks the commenter for their comment and continues to work with federal and state partners to advocate for the continuation of the ACP. We added language to Implementation Activity 1.1 from the BEAD Initial Proposal about subgrantee requirements if the ACP is not renewed: "BEAD subgrantees are required to participate in the FCC's ACP and ensure that prospective customers are aware of ACP availability for the low-cost service option. BEAD Subgrantees are required to participate in any successor broadband subsidy program if Congress ceases to fund the ACP or the program otherwise expires. Barring a successor program, subgrantees will be required to continue offering the low-cost service option to, at a minimum, customers who meet the ACP eligibility criteria. If Congress ceases to fund the ACP or the program otherwise expires, and the federal government does not create a successor program or issue new criteria for eligible households, the division will propose new criteria for determining eligible households and publish such criteria for public comment for no fewer than 30 days before issuance."

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Comment #145	Strategy 3 is about making sure that North Carolinians have the digital skills needed. In addition to the strategies listed, we will also have to make sure that there is an adequate and appropriate population of people who are willing to do that work and train. We appreciate the state listening to the responses from the community regarding the growing capacity of people doing this work who can deliver at places people are already going, in native languages, and made accessible.	The division thanks the commenter for their comment. We agree that creating more workforce pathways into the digital navigation field is essential to expanding programs and services. We added a key component around career pathways for digital navigators to Implementation Activity 3.2.
Comment #146	The maps at the end refer to "Underlying Counties" and often those appear to be more urban areas. It is unclear what the definition of "Underlying Counties" is. We recommend adding this definition or more context somewhere to the plan.	The division thanks the commenter for their comment. Underlying Counties indicate where the clusters are. Each map indicates the differences between shares and clusters. We added a definition to Appendix H.
Comment #147	American Indian Population – p. 59 Very important to let Tribal Leadership drive the conversations and interventions. Kudos!	The division thanks the commenter for their comment.
Comment #148	Implementation Activity 1.2: CAIs I believe this could be a great solution in urban areas with public transportation access. However, in rural eastern NC for example, I know transportation would remain a significant barrier with this solution.	The division thanks the commenter for their comment. Transportation remains a barrier to public Wi-Fi, device access, and digital literacy training. The division has an expanded definition of community anchor institutions that could include community or faith-based organizations that are often the center of community in rural areas. Additionally, digital equity grant funding could provide support for wrap-around services such as transportation to access digital inclusion programs. We added language to highlight that funding could be available to support these kinds of wrap-around services.
Comment #149	Implementation Activity 5.2 and 5.3: Increase the Supply of Devices and High-Volume Refurbishment and Distribution System Exciting opportunity to provide access and make an impact through public-private-community partnerships!	The division thanks the commenter for their comment.
Comment #150	North Carolina's digital equity plan does not currently express the need for increasing capacity through the use of volunteers, interns and AmeriCorps members. We would like to see the following changes implemented to support capacity building Support the development digital navigators by providing funding for local boots-on-the-ground support	The division thanks the commenter for their comment. Based on the comment we added AmeriCorps and other volunteer and national service programs to the Sustaining Digital Equity section (which could include digital navigation).

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Comment #151	NCMS appreciates the plan's dedication to inclusion of digital health literacy and increased access to internet/technology within the plan for implementation as this need grows, especially in rural and unserved areas. NCMS also supports the training of providers at the individual and institutional level to understand the importance of digital healthy equity and how it may impact the care of their patients.	The division thanks the commenter for their comment. We added healthcare providers as partners for Implementation Activity 3.2 and agree they can be a great resource to expand digital health literacy.
Comment #152	It is recommended, the Digital Equity Plan mention leveraging funds from the FCC's E-Rate Program (47 USC Sec. § 254) in order to increase access at our state's elementary and secondary schools, school residential facilities, and libraries. An Eligible Services List for FY 2024 providing guidance on the eligibility of products and services under the Schools and Libraries Program has been provided.	The division thanks the commenter for their comment. We added E-Rate as a funding option in the Sustaining Digital Equity section. E-Rate is also mentioned in the BEAD Five-Year Action Plan as a source of ongoing federal funding. At this time the state is fully utilizing and leveraging E-Rate funds and the state's School Connectivity Fund to provide fully subsidized high-speed internet services to all of NC's K-12 schools.
Comment #153	Where possible throughout the plan, we recommend acknowledging or highlighting the importance of local news and information organizations as having key roles in closing the digital divide. We would also welcome mentioning the NC Local News Workshop as a partner in connecting the Digital Equity Plan to the information and news plans across the state.	The division thanks the commenter for their comment. We added local news organizations as a potential partner throughout the Measurable Objectives and Implementation plan sections and modified Strategy #3 to include media literacy.
Comment #154	Consider adding a sixth strategy or revising Strategy 3 to address the information needs of covered populations in your Digital Equity Plan that would establish credible and accessible news and information content as vital for an equitable digital future. We recommend one of the following: Adding Strategy 6 that states: "Ensure North Carolinians can easily access local information and news from trusted digital sources." Implementation activities can include a) partnering with local news organizations to increase community listening and outreach about digital news sources; b) expand partnerships between news and information outlets and digital navigator or literacy programs; c) foster partnerships with Spanishlanguage community groups and news organizations to promote increased access to information Or, Revising Strategy 3 to: "Ensure that North Carolinians can acquire the digital and information-gathering skills and understanding to meet their personal needs and to meet the	The division thanks the commenter for their comment. We revised Strategy 3 to include: "Ensure that North Carolinians can acquire the digital and information-gathering skills and understanding to meet their personal needs and to meet the workforce needs of the state," and named local news organizations as potential partners. We also added digital citizenship and media and information literacy to the description of Implementation Activity 3.1.

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	workforce needs of the state." For implementation tactics, we recommend adding: "Expand opportunities for local news and information organizations to increase service to covered populations."	
Comment #155	For Strategy 5, we also see an opportunity for local news organizations to partner with organizations that will provide digital devices to meet their needs. As no-cost and low-cost supply is increased, news partners can help ensure residents gain the skills and knowledge to utilize devices to access critical information.	The division thanks the commenter for their comment. We added local news organizations as potential partners for Strategy #5 and for increasing awareness of existing programs and services.
Comment #156	For Strategy 1, Implementation Activity 1.3, consider how local news can play a role in helping to increase awareness of programs by promoting options to their communities through advertisements or other content.	The division thanks the commenter for their comment. We added local news organizations to help increase awareness as part of Implementation Activity 1.3.
Comment #157	Connect Home USA (CHUSA) - Ensure an intentional inclusion of NC CHUSA members to ensure HUD-assisted residents access affordable, in-home internet service, devices, and training.	The division thanks the commenter for their comment. CHUSA has been added in the Aligning State Plans and Priorities section, under the sub-heading "Other Essential Services."
Comment #158	NCHBC recommends that efforts to promote basic digital literacy and more specifically digital health literacy include a public/private partnership between the NCDHHS and private (for profit and nonprofit) healthcare providers. The providers could include representatives from health systems, community health centers, and health departments, medical and public health schools, and/or affiliated organizations like allied health programs at community colleges and AHEC. The partnership would work on digital literacy trainings, health literacy trainings, including training standards and materials for different general and condition-specific applications, training implementation and distribution, and training evaluations.	The division thanks the commenter for their comment and agrees that healthcare providers play an integral role in promoting digital literacy and in particular digital health literacy. We added healthcare providers as potential partners throughout the Measurable Objectives and Implementation Plan Section and integrated healthcare providers under Implementation Activity 3.2.
Comment #159	The Online Accessibility and Inclusivity working group would benefit from the participation of healthcare specialists as it develops a toolkit for state, local, and community partners and healthcare providers on how to design and implement online accessibility and inclusivity standards. Example specialists could include gerontologists, orthopedists, occupational therapists, and chronic disease management (e.g. diabetes) case managers. These and other specialists work closely with disabled patients and have a hands-on understanding of their	The division thanks the commenter for their comment. We included healthcare providers as potential partners in Strategy #2 and the Online Accessibility and Inclusivity Working Group. We agree they can provide a unique perspective and expertise and serve all covered populations.

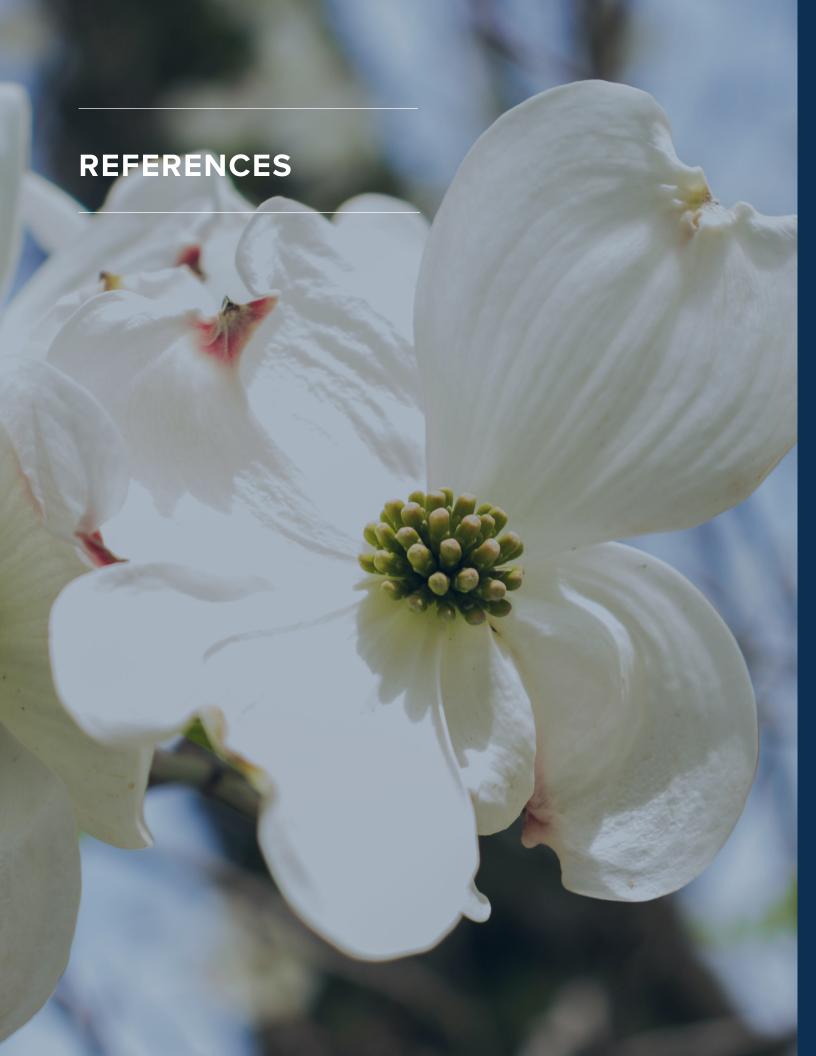
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	challenges and possible online solutions to these challenges.	
Comment #160	Bottom of p. 5 in Cybersecurity and privacy bullet: Keep data and identity safe, not just data. ISTE Standards, which are mentioned in the plan, differentiate between data and identity. "ISTE Standard for Educators - 3d Model and promote management of personal data and digital identity and protect student data privacy."	The division thanks the commenter for their comment and made the requested language change.
Comment #161	p.72 ISTE acronym is transposed to ITSE	The division thanks the commenter for their comment and made the requested language change.
Comment #162	The Division should thinking strategically about protecting the existing local news ecosystem in North Carolina including: Investing in the digital skills and infrastructure within newsrooms. Local newsrooms often suffer from the same poor connectivity as their communities, limiting their ability to develop crucial digital skills and revenue streams. The Division could consider one-time grants to upgrade or create websites, ensuring that previously unconnected residents will have credible local information waiting for them online.	The division thanks the commenter for their comment. We added local news as a potential partner throughout the Measurable Objectives and Implementation Plan. Grant guidelines for program eligibility will be developed during Implementation.
Comment #163	Without having further context, I question the accuracy of the statement "almost every individual identifies within more than one covered population" [Page 5: Introduction - Digital Equity Barriers and Needs - 2nd sentence; and page 36: Barriers and Needs - 1st sentence]. This might be true for those who responded to the survey - which was targeted towards those in covered populations - but can it be said for the NC population as a whole? I agree that covered populations are intertwined and that "individuals often belong to more than one group" (p. 13).	The division thanks the commenter for their comments. We updated the statement for better accuracy.
Comment #164	Appendix H, Aging Individuals (p. 107) - The first sentence under "Shares" looks right: approximately 20% of the population in NC is over the age of 65. The third sentence under "Shares" for Aging Individuals doesn't make sense. The data points for the counties with the highest % aging individuals should be greater than 30%. Also, the population aged 65+ in Hoke County is probably 11.8% rather than 18.8%.	The division thanks the commenter for their comment. The section has been updated with the appropriate data. The section now reads: "According to the 5-Year estimates (2017-2021) ACS data, Clay County has the highest share of its population that is 60 years old or older at 43.2%. Brunswick County has the second highest share at 41.9%. Onslow County has the smallest share at 13.1%, while Hoke County has the second smallest share at 15.3%.

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Comment #165	We applaud the inclusion of Strategy 4 in the North Carolina Digital Equity Plan, emphasizing practices and tools to ensure online privacy and security. This is a crucial step in today's digital age.	The division thanks the commenter for their comment. We agree that culturally competent programs in various languages in addition to English will ensure better access and knowledge of digital safety. We have content in Strategy #4 to address cultural competency and language access.
	To better serve the Spanish-speaking immigrant community in the Charlotte area and across the state, it's essential to consider culturally sensitive approaches in promoting online privacy. Providing resources, guidance, and educational materials in Spanish will enhance accessibility, empowering this population to navigate the digital space securely and confidently.	
Comment #166	We appreciate the emphasis on Strategy 5 in the North Carolina Digital Equity Plan, striving to ensure that residents have access to digital services that meet their needs. To enhance inclusivity for immigrants, particularly in the Charlotte region and across the state, it's crucial to develop and promote digital services in multiple languages. Tailoring services to accommodate linguistic and cultural diversity will empower immigrants to access essential digital resources, fostering a more connected and supportive community.	The division thanks the commenter for their comment. We agree that culturally competent programs in various languages in addition to English will ensure better access to computers and devices. We have content in Strategy #5 to address cultural competency and language access.
Comment #167	While we are very supportive of the ACP and increasing enrollment in general, we know the division shares our concerns that federal funding for this program is expected to be exhausted by spring 2024. We recommend that the plan address how the state will respond if the federal government does not continue to fund the ACP and benefits expire, including the potential for subsidizing home internet costs with state funds.	The division thanks the commenter for their comment and continues to work with federal and state partners to advocate for the continuation of the ACP. We also added language to Implementation Activity 1.1 from the BEAD Initial Proposal about subgrantee requirements if the ACP is not renewed: "BEAD subgrantees are required to participate in the FCC's ACP and ensure that prospective customers are aware of ACP availability for the low-cost service option. BEAD Subgrantees are required to participate in any successor broadband subsidy program if Congress ceases to fund the ACP or the program otherwise expires. Barring a successor program, subgrantees will be required to continue offering the low-cost service option to, at a minimum, customers who meet the ACP eligibility criteria. If Congress ceases to fund the ACP or the program otherwise expires, and the federal government does not create a successor program or issue new criteria for eligible households, the division will propose new criteria for determining eligible households and publish such criteria for public comment for no fewer than 30 days before issuance."

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Comment #168	Implementation Activity 3.2: Build on lessons learned from existing digital navigator programs to expand services across the state • We strongly support using digital equity funds to expand the holistic support services, such as transportation and childcare, that make it possible for people to participate in digital skills training (p. 73). We recommend emphasizing this throughout the implementation activities for Strategy 3. Not every organization needs to offer every type of service, but digital skill-building programs should at a minimum have strong referral relationships with partners who can support other needs, both through direct financial assistance and program staff who can support navigation and connection to resources.	The division thanks the commenter for their comment and added additional language to Strategy 3 to include wrap-around services.
Comment #169	Foster Care – p. 56 With brief mention, I think that this is an area that absolutely needs more research and interventions to ensure children (both English learners and English as a first language youth) to ensure children in care have access to digital technologies.	The division thanks the commenter for their comment. We added more information about foster youth and some of their digital needs to the Unique Barriers by Covered Population section and recognize that more research and information is needed.
Comment #170	Also, not mentioned is the potential importance of new businesses coming into North Carolina. In particular, mega-sites announced in the past several years will have major impacts not just economically, but also with our internet infrastructure to support the sites. At least in Chatham County where I live, the two announced sites will have a large impact on internet access in areas where currently it is less than desirable.	The division thanks the commenter for their comment, but the suggestion is beyond the scope of the digital equity plan.
Comment #171	There is reference to North Carolina being a leader in digitization. It would be good to have an outside source document to support this.	The division thanks the commenter for their comment. The comment appears to be in reference to the state being a leader in the development of local digital inclusion plans. While no official research has reviewed this work as far as we are aware, North Carolina is well known in the digital equity field for supporting the development of county and regional digital inclusion plans even before the Digital Equity Act became law. North Carolina was also the first state in the nation to create an Office of Digital Equity and Literacy and prior to that was one of only a handful of states with a position focused on digital inclusion.

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Comment #172	I was pleasantly surprised to see on page 39 that 98% of North Carolina population can access the internet as it appears very high. If people do not have access to the internet, how would they know about the survey or how to complete it? Also, the percentage of aging individuals that have enough working devices is 90% on page 47. This also is a pleasant surprise.	The division thanks the commenter for their comment. The Digital Equity Survey was available online and in paper format. We worked closely with community-based organizations across the state to distribute the survey and support residents who participated. In future survey deployments, we expect to expand community-based support to help people participate in the survey.
Comment #173	There also was not any assumption on technology. With 5G and no doubt future enhancements, it should highly likely that internet access will continue to improve just by system technology enhancements.	The division thanks the commenter for their comment. The comment is beyond the scope of the Digital Equity Plan, but we shared it with the team leading the BEAD planning effort.
Comment #174	Somewhere in the document there was reference to "best practices." However, there was never any description of what they were. I agree though that this is an important area.	The division thanks the commenter for their comment. In many cases, best practices will need to be identified. In other cases, best practices are highlighted through the asset inventory and throughout the Measurable Objectives and Implementation plan. We removed the word "best practices" from the executive summary to reduce confusion.
Comment #175	Although there is a table of goals and dates at the end of the document, there doesn't appear to be specific ownership for achievement of the goals.	The division thanks the commenter for their comment. In most cases, the division is the driver of the goals and activities though it will take significant partnership and collaboration with the identified potential partners and others. We have worked to strengthen the language of this section and will add specificity once Digital Equity State Capacity Building funding totals (and the notice of funding opportunity) is released.
Comment #176	On page 54-55, it indicates that non-English speaking individuals feel that internet searches meet their needs and English speaking. Would like to understand this a bit better.	The division thanks the commenter for their comment. We updated the language and noted that only 8% of survey respondents were nonnative English speakers (n=616) which may help explain why their numbers are different.

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Comment #177	It would be good to know of the \$1B+ funding that is available, how much is spent already and at least with current information, how this money may be spent by year.	The division thanks the commenter for their comment. We added more information about infrastructure spending under the Current Division Programs and Initiatives section. As of December 2023, the division had awarded \$372 million of American Rescue Plan Act State and Local Fiscal Recovery Funds for infrastructure projects. The division plans to award more than \$560 million in American Rescue Plan Act State and Local Fiscal Recovery Funds and Capital Projects Funds for infrastructure projects in calendar year 2024. These funds must be expended by December 2026.
Comment #178	The Glossary of Terms probably should be expanded to include more acronyms. As an example ACS is not on the list.	The division thanks the commenter for their comment. We added the American Communities Survey (ACS) to the glossary of terms and will continue to add as needed.
Comment #179	I am not sure if there is a consistent assumption at the starting age is for the classification of "aging individuals." It would be good to see that across the various surveys that the classification is the same.	The division thanks the commenter for their comment. NTIA defines aging individuals as age 60 and over. We updated the Digital Equity survey analysis to include that definition and updated the data accordingly.
Comment #180	I did not see much if any reference to the importance of volunteers in an effort such as this. Although there is the \$1B+ funding out there, long term action and sustainability will require an engaged volunteer population.	The division thanks the commenter for their comments. Increasing volunteer capacity has been added to the Sustaining Digital Equity section.



- American Library Association. Digital Literacy Task Force (2011). What is Digital Literacy? https://alair.ala.org/bitstream/handle/11213/16260/Digilit%20definition_one%20pager_Marijke%20Visser.pdf.
- Bergson-Shilcock, A. (2020). The new landscape of digital literacy: How workers' uneven digital skills affect economic mobility and business competitiveness, and what policymakers can do about lt. National Skills Coalition.
- Craig, S., Shen, A., Wallis, K., Pak-Gorstein, S., Yun, K., & Dalembert, G. (2021). How health systems can help address language barriers to achieve digital health equity. Penn Leonard Davis Institute of Health Economics Blog.
- Dang, S., Muralidhar, K., Li, S., Tang, F., Mintzer, M., Ruiz, J., & Willy, M. V. (2022). Gap in willingness and access to video visit use among older high-risk veterans: Cross-sectional study. Journal of Medical Internet Research, 24(4), 1-15. https://doi.org/10.2196/32570.
- Davis, R., Huggins, E., Ogbo, E., Yalincaya, A., Duke, S., Adrines, V., Gragson, A. & Ferdous, T. (2023). Digital literacy and equity: A synthesis of findings for covered populations. Friday Institute for Educational Innovation, Raleigh, NC.
- Davis, J. G., Kuan, K. K., & Poon, S. (2020). Digital exclusion and divide in the United States: Exploratory empirical analysis of contributing factors.
- ECU-NCSU Internet Survey Project Team. (2023). Preliminary Results of ECU-NC State Farmworker Internet Survey. [PDF file]. East Carolina University. https://lib.ecu.edu/sites/farmworker-digital-equity/
- Federal Communications Commission. (n.d.). FCC Broadband Data Collection. https://www.fcc.gov/BroadbandData.
- Fernández-Muñoz, J., Kiptaş, D., & Lozano, J. (2021). How to Close the Digital Divide in the U.S. Harvard Business Review. https://hbr.org/2021/07/how-to-close-the-digital-divide-in-the-u-s.
- Finn, J., Kerman, B., & LeCornec, J. (2005). Reducing the Digital Divide for Children in Foster Care: First-Year Evaluation of the Building Skills-Building Futures Program. Research on Social Work Practice, 15(6), 470-480. https://doi-org.prox.lib.ncsu.edu/10.1177/1049731505278026
- Horrigan, J. B. (2010). Broadband adoption and use in America. OBI Working Paper Series No. 1. https://docs.fcc.gov/public/attachments/DOC-296442A1.pdf
- iFoster. (n.d.). Bridging the Digital Divide. https://www.ifoster.org/bridging-the-digital-divide/
- Johnson, Kristen. (2021, February 11). WISE Project connects generations of LGBTQ community in North Carolina. The Fayetteville Observer. https://www.fayobserver.com/story/news/2021/02/11/wise-project-connects-lgbtq-people-north-carolina/4290282001/
- Katz, V. S., Moran, M. B., & Dinyanova, K. (2017). Contextualizing connectivity: How internet connection type and parental factors influence technology use among lower-income children. Information, Communication & Society, 22(3), 313–335. https://doi.org/10.1080/1369118x.2017.1379551

- Katz, V. S., & Levine, M. H. (2015). Connecting to learn: Promoting Digital Equity for America's Hispanic families. https://joanganzcooneycenter.org/wp-content/uploads/2015/03/jgcc_connectingtolearn.pdf
- Khanlou, N., Khan, A., Vazquez, L. M., & Zangeneh, M. (2020). Digital Literacy, access to technology and inclusion for young adults with developmental disabilities. Journal of Developmental and Physical Disabilities, 33(1), 1–25. https://doi.org/10.1007/s10882-020-09738-w
- Lai, J., & Widmar, N. O. (2021). Revisiting the digital divide in the COVID-19 era. Applied economic perspectives and policy, 43(1), 458-464.
- Layton, Robin. (2023, May 23). LGBTQ youth resources: Bridging the digital divide. https://www.allconnect.com/blog/lgbtq-youth-online-resources.
- Lee, O. E.-K., & Kim, D.-H. (2019). Bridging the digital divide for older adults via Intergenerational Mentor-Up. Research on Social Work Practice, 29(7), 786–795. https://doi.org/10.1177/1049731518810798
- Livingstone, S., Mascheroni, G., & Stoilova, M. (2023). The outcomes of gaining digital skills for young people's lives and wellbeing: A Systematic Evidence Review. New Media & Society, 14614448211043189.
- Lyons, A. C., Zucchetti, A., Kass-Hanna, J., & Cobo, C. (2019). Bridging the gap between digital skills and employability for vulnerable populations. IN THE DIGITAL AGE.

National Digital Inclusion Alliance. (n.d.). Home. Retrieved from https://www.digitalinclusion.org/

North Carolina Broadband (n.d.). Home. www.ncbroadband.gov





