



**Digital Opportunities  
For the  
High Country:**  
Connection and  
Engagement for all

# Acknowledgements

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## **National Digital Inclusion Alliance**

### **Alleghany**

Town of Sparta

### **Ashe**

Town of Lansing

### **Avery**

Town of Banner Elk, Town of Beech Mountain, Town of Crossnore,  
Town of Elk Park, Town of Seven Devils, Village of Sugar Mountain

### **Mitchell**

Town of Bakersville & Town of Spruce Pine

### **Watauga**

Town of Beech Mountain, Town of Blowing Rock, Town of Boone, Town of Seven Devils

### **Wilkes**

Town of North Wilkesboro, Town of Ronda, Town of Wilkesboro

### **Yancey**

Town of Burnsville

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# Acknowledgements

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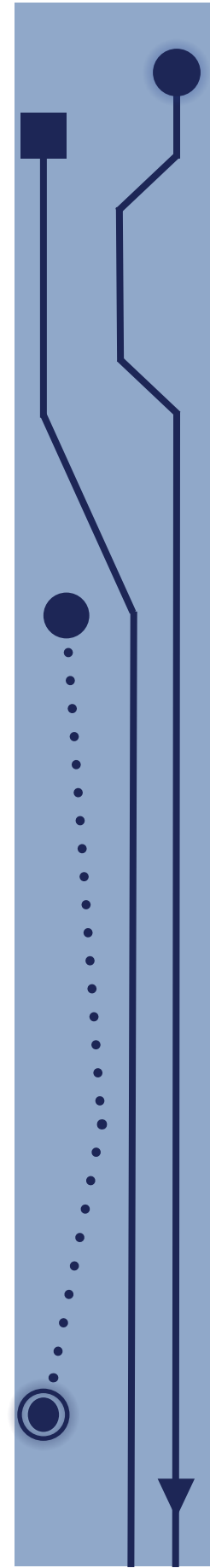
## References

128

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## Vision

Eliminate the digital divide for all residents in Ashe, Alleghany, Avery, Mitchell, Watauga, Wilkes, and Yancey Counties by ensuring:

- Access to affordable high-performance, long-lasting, and easily upgradeable broadband internet service at home.
- At least one unrestricted low or no-cost device per household that accommodates the person's needs.
- Opportunities for those without homes, in transitional housing, or in facilities to have access to digital devices and internet services that meets their needs.
- Necessary digital skills, training, and quality technical support for each person's particular goals (communication, education, health care access, economic participation, democratic participation, and beyond).



## Goals

To begin digital opportunity conversations at the intersections of local governments, community organizations, and communities to create a framework on which to build upon a digital environment for all.



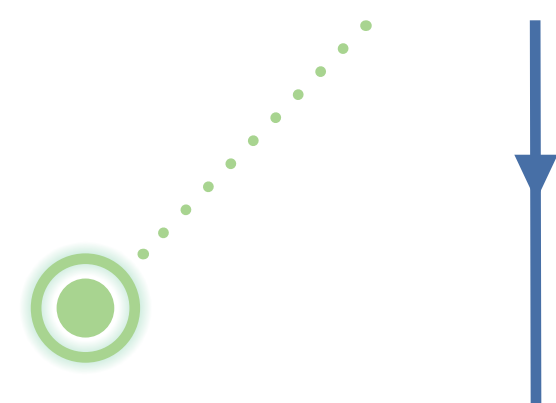
## Mission

To facilitate conversations, begin partnerships, and gather comprehensive asset and needs information to support community members, local governments, organizations, Internet Service Providers (ISPs), and other stakeholders to eliminate the digital divide within the High Country region.



## Objectives

- To serve as the **framework for digital opportunity advancements** for each county within the High Country region. Each county can administer, further develop, or alter their respective profile as they and their stakeholders are inclined to.
- To include varying organizations as stakeholders to provide a **detailed assets and needs** list for each County, as well as to **continue conversations and partnerships** with said organizations
- To help **guide** local governments, non-profits, and organizations in the High Country **when applying to funding opportunities** addressing digital opportunity and serve as a support when such projects directly align and/or are discussed within this Plan.
- To provide a **foundation** for which stakeholders and local governments alike can **create their own digital opportunity programs** and partnerships.



# High Country

## Planning Process

Throughout the planning process, the High Country Council of Governments (HCCOG) has strived towards highlighting the unique assets, resources, and goals of each of its seven counties. This Digital Opportunities Plan aims to serve as a comprehensive resource for the High Country region regarding the fundamentals of digital opportunity, identified stakeholders, and region-wide goals. Additionally, this Plan contains individual and distinctive subsections for each of the seven counties and their stakeholders, assets, resources, and identified next steps and recommendations. Both large and small scale lenses are essential in researching and discussing digital opportunity. Though each county has its own set of resources, stakeholders, projects, and areas of interest, not all matters end or shift at a county's boundary.

HCCOG was contracted by NC State's Institute of Emerging Issues (IEI) to undertake and complete the planning process for the entire High Country region. Two kick-off meetings were held with every Town and County elected official, Town Manager, County Manager, HCCOG Executive Board Member, School Principal, School Superintendent, and key community organization having been invited. These kick-off meetings were held with the goal of creating a foundation for collaboration with and between stakeholders to better understand the state of high speed internet. These kick off meetings were also, for many, an introduction to digital opportunity, its fundamentals, and examples of past projects funded by BAND-NC (a program through the Institute of Emerging Issues). The agenda for the kick off meetings included:

### Welcome and Introduction

#### Basics and Planning

- Samantha Graham: IEI
- Colin Fox: IEI

#### Previous Efforts

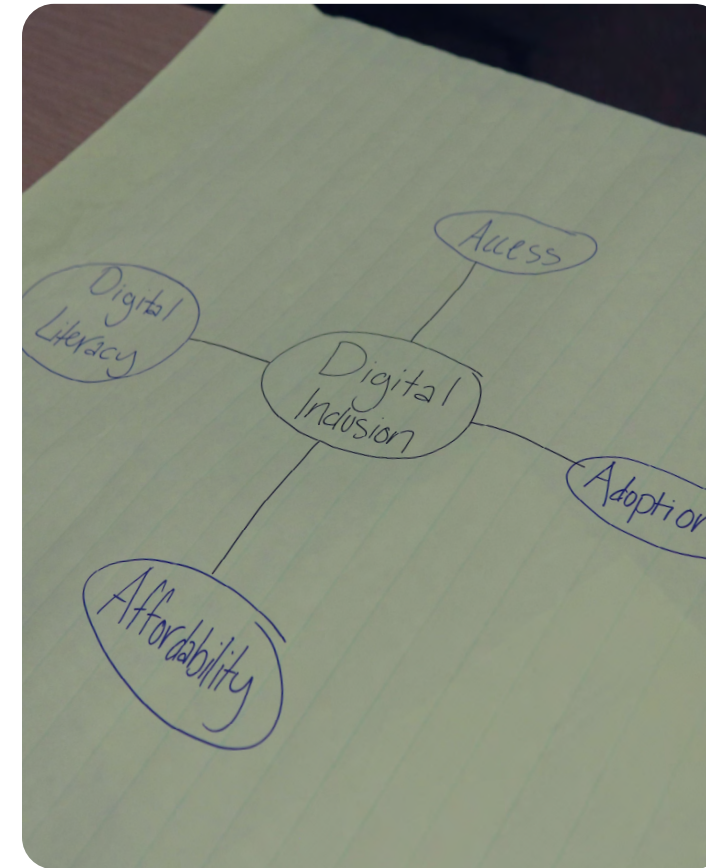
- Other COGs
- Immigrant Justice Coalition (IJC)
  - Received BAND-NC Funding
  - Sarah Donovan & Shanan Fitts
- NC Fine Wines
  - Received BAND-NC Funding
  - Dan McLaughlin
- E2D
  - Device Refurbisher
  - Pat Millen - Founder
  - Shaunta Davis - Director of Impact
  - Ashley Robbins - Director of Technology

#### Asset Activity Mind Mapping Technique

- Access, Adoption, Affordability, and Digital Literacy
- Who do we need to go talk to?
- What is going on in your area?
- What ideas or partnerships come to mind?
- What opportunities do you see for each or some of the fundamentals?
- What resources and/or assets can you and your organizations provide to support and promote digital opportunities?

#### Questions, Comments, and Feedback

#### Path Forward and Next Steps



The mind mapping activity at the kick off meeting was done to begin the asset and needs inventory, as well as the creation of a contact list of who to speak with that was not present at the meeting. This contact list included nonprofits, Agricultural Extension Agents, institutions of higher learning, Internet Service Providers (ISP), and more. After the kick off meetings, the planning process was centered around having one on one conversations with these identified stakeholders. All were contacted to schedule either an in-person, virtual, or over-the-phone meeting, but not all were spoken with. Everyone invited to the kick-off meetings received a follow-up email with the agenda, presentations, and major themes as well as information regarding the NC Broadband Survey, Affordable Connectivity Program, and E2D. This correspondence continued as additional resources were discussed in the interview process which resulted in technological assistance hotlines, tutorials, and webinars being distributed to the kick-off meeting contact list.



The process above was done in order to compile a comprehensive Regional Digital Opportunity Plan that introduces, defines, and addresses major components of digital opportunity in addition to providing individual and unique sections for each of the seven High Country counties when addressing assets, needs, and recommendations. Appendices include mind mapping activity conclusions, a resource list, and supporting documentation.





# Current State of Digital Opportunity

## Keywords

In addition to the vision, mission, and goals outlined above, this Plan is intended to serve as a resource in and of itself for Town and County staff and officials, stakeholders, and beyond within the High Country region. To understand the current state of digital opportunity and the digital divide one must understand what these, and other, terms mean.

**Digital Opportunity:** The pursuit to ensure that all persons and communities regardless of their socioeconomic status, demographic, or geographic area have unrestricted access to affordable high-speed internet, an adequate and unrestricted device to use it, and the appropriate and applicable technological support to troubleshoot and learn. This pursuit is grounded in the belief that high-speed broadband is essential for all, just as other utilities, to be fully active and more self-sufficient participants in society and the workforce. Digital opportunity rests on five major principals within this Plan:

**Digital Divide:** The structural (the culture and social structure of a society), systemic (issues in the overall system), and sometimes geographic gap between those who attain the principals of digital opportunity and those who do or cannot. These obstacles and issues not only result in a digital divide, but in different realities where a person not only lacks digital opportunity, but also lacks access to healthcare, housing, higher education, and beyond.

**Broadband:** A type of "always on" internet connection, in contrast to dial-up. In 2015 the Federal Communications Commission (FCC) set the minimum speed for broadband at 25 download/3 upload Mbps, or megabits per second, but on July 12, 2022, FCC Chairwoman Jessica Rosenworcel proposed raising the limits to 100 download/20 upload Mbps. *So, what's the difference between broadband and Wi-Fi?* Wi-Fi is not a type of internet itself. Wi-Fi is the radio signal that is sent from a router to wireless devices (laptops, tablets, smartphones, etc.). The cable that is plugged into a router is called broadband. Broadband is not exclusive to Wi-Fi; it can also include DSL (direct connection via copper phone lines) and fiber (direct connection using ultra-thin glass strands that carry light instead of electricity).

**Access:** the ability for individuals and organizations to connect to the internet using compatible devices and the presence of at least one internet provider at an address.

**Adoption:** individuals who are actively subscribed to an internet service.

**Affordability:** the cost and viability for individuals with any income to subscribe to an internet service provider (ISP) in addition to the cost and viability for individuals to purchase or receive an adequate device that can connect to the internet.

**Digital Literacy:** the necessary skills and appropriate technical support to properly navigate the digital ecosystem (devices, webpages, applications, etc.) in addition to more particular aspects when concerning education, medical care, virtual meetings, governmental assistance programs, personal endeavors, and beyond.

**Device Access:** the availability of an unrestricted and internet-enabled device; this does not include restricted homework devices.

**Dark Fiber:** Unused optical fiber cables. Dark fiber is constructed largely through overestimating the amount of cable required for a project. Overestimation is common practice due to goals of meeting growing demand, potential savings in purchasing materials in large quantities, and acquiring permits in large areas rather than single streets.

**Dark Fiber Leasing:** Dark fiber leasing is when a network/service provider leases its “unlit” dark fiber to a customer (primarily a large company or organization) that then maintains and operates the equipment required to “light” the fiber. Dark fiber is of interest to large companies and organizations that have high demands for internet speeds and security as well as those who send and receive many files.



**Affordable Connectivity Program (ACP):**

A federal benefit program offered through the Federal Communications Commission (FCC) that provides a discount of up to \$30 a month for internet service subscriptions for eligible households (or up to \$75 on qualifying Tribal lands) and a one-time discount of up to \$100 to purchase a device from participating providers if more than \$10 and less than \$50 is contributed towards the purchase. Households with an income at or below 200% of the Federal Poverty Guidelines are eligible, in addition to households where a member is a recipient of at least one of the following: Federal Pell Grant, SNAP, Medicaid, Free and Reduced-Price Lunch Program, Federal Housing Assistance, Supplemental Security Income, WIC, Veterans Pension or Survivor Benefits, Lifeline, Bureau of Indian Affairs General Assistance, Tribal TANF, Food Distribution Program on Indian Reservation, Tribal Head Start. Additional information and outreach materials can be found in the Resources section of this Plan.

**Download/Upload Speeds:** Mbps, or megabits per second, is the unit of measurement for internet bandwidth. Bandwidth is the maximum speed that data can be downloaded and uploaded and is rarely at 100% since it reflects the maximum speeds and not the average speeds. Speeds can fluctuate based on what users are downloading/uploading, how many devices are connected and using a network, and more. The FCC’s Household Broadband Guide can be seen below (broadband is defined as a minimum of 25 Mbps for downloads):

	<b>Light Use</b> (Basic functions: email, browsing, basic video, VoIP, Internet radio)	<b>Moderate Use</b> (Basic functions plus <i>one</i> high-demand application: streaming HD video, multiparty video conferencing, online gaming, telecommuting)	<b>High Use</b> (Basic functions plus <i>more than one</i> high-demand application running at the same time)
1 user on 1 device	Basic	Basic	Medium
2 users or devices at a time	Basic	Medium	Medium/Advanced
3 users or devices at a time	Medium	Medium	Advanced
4 users or devices at a time	Medium	Advanced	Advanced

Basic Service = 3 to 8 Mbps\*

Medium Service = 12 to 25 Mbps

Advanced Service = More than 25 Mbps

**Hotspots:** Can be built into most new smartphones or be their own portable device. Hotspots rely on cell service to function. They do not work without cell service, which makes their coverage in certain geographic areas (including the High Country) spotty. Hotspots rely on wireless data from cellular providers to provide internet access for devices. Portable hotspots have a related subscription charge, like a monthly cell phone bill, to be able to access wireless data from cellular providers. Built-in hotspot features for smartphones and tablets rely on the device plan’s data.

**Public Wi-Fi Areas:** A physical space or place that offers a public Wi-Fi connection often at no cost, but in some instances for a fee. These spaces include downtown and recreational areas as well as public transit. Some places that offer public Wi-Fi include coffee shops, restaurants, and retail stores which often comes a no cost but with the stipulation and/or pressure to purchase something from these businesses. This highlights the need for public Wi-Fi areas that are no-cost with no expectation of one being a patron to a business.



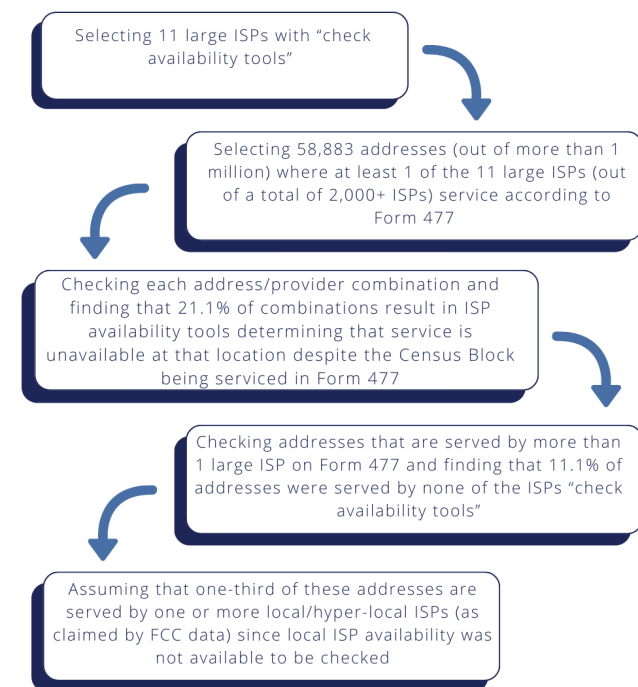
# Overview

High-speed internet connectivity, or broadband, is fundamental to the society that we live in today and is key for individuals and groups, both small and large, to be fully active participants in any sector and geographic area. Internet connectivity has become intertwined and ingrained in all corners of our personal, professional, educational, and recreational lives. This results in broadband needing to be considered a utility. Much like electricity and water, broadband is essential, and this belief has been acknowledged at both the Federal and State level. Most notably, but not limited to, in reaction to the COVID-19 pandemic that began in 2020.

The view of broadband as a utility is also widely held by the public with this belief only becoming more prevalent with time. Americans who considered broadband as a necessity, like electricity and water, increased from 61% in 2017 to 76% in February 2021 (Rassool, 2021). Broadband is a general purpose technology, meaning that it has the ability and potential to transform society extensively and positively on many levels. Yet this transformation has not been distributed evenly across the United States, nor has it benefited each area equally. To effectively decrease the digital divide, community leadership, local governments, stakeholders, ISPs, and Councils of Government must communicate, coordinate, and act effectively and efficiently. This is critical in striving towards digital opportunity in all areas, but especially in rural areas that are lacking access, adoption, affordability, devices, and/or digital literacy.



When it comes to internet access and availability coverage maps, available data does not paint the most accurate picture. This is because the data is not small scale. Rather, it is based on Census Blocks which vary in size and population. So, where does much of this course resolution data come from? The data comes from Form 477 offered through the FCC, which ISPs complete on a biannual basis. Form 477 collects Census Block level data of broadband deployment and accessibility, but there is a largely acknowledged flaw in the form. ISPs can claim "coverage" of an entire Census Block with only one home being served within the Census Block. This allows broadband availability to be overstated and broadband availability maps to not fully show un and underserved areas. BroadbandNow, an independent research group founded in 2015 that has been cited by the FCC, U.S. Senate Banking Committee, Federal Reserve Bank, and more, has been conducting studies on broadband availability by manually checking internet availability at the address-level. The workflow for this study involved:



In total, this study has found that roughly 42 million Americans do not have access to broadband. This is 6.5% more than FCC estimates with North Carolina having an estimated 24% error rate (Busby et al., 2022). Overreporting can be combated with smaller-scale address-level data. This type of data is currently being collected by the North Carolina Department of Information Technology (NC DIT) Broadband Infrastructure Office and the Friday Institute for Educational Innovation at NC State University via the NC Broadband Survey. The NC Broadband Survey is accessible online and over the phone (both call and text options) and provides address-level accuracy of internet accessibility, adoption, affordability, device access, and download/upload speeds. Data from this survey is critical in accurately understanding the state of digital opportunity in order to best distribute and use funding. With broadband being a general purpose technology, increased broadband accessibility and adoptions comes with positive impacts that can be felt by all and transcend sectors.



To access the survey

# Search

In the following section, digital opportunity is broken down into the following fundamentals: access, adoption, affordability, digital literacy, and device access. These principles are not independent from each other; they are interconnected and the presence or absence of one impacts the overall state of digital opportunity. The fulfillment of one of these fundamentals does not solve the issue of digital opportunity. For example, an unrestricted and internet-enabled device available to each person does not result in digital opportunity, because it does not consider a person's skills in how to navigate that device and the internet. It does not consider if they are able to afford an internet subscription nor if they can subscribe to an internet subscription at their home or work. Additionally, these are not the only factors that play a role in digital opportunity. Systemic issues related to transportation, housing, education, and more do as well. Though all people in this fictional scenario have access to a device, one cannot assume that everyone will have access to internet at their home. As a result, internet affordability is out of the equation since its affordability does not play a role if its access does not exist. This introduces the need for them to travel elsewhere, whether it be a public Wi-Fi area or friend's home. Now transportation access is added to the equation. Social issues such as transportation, housing, education, and more are key players in digital opportunity and must not be disregarded when discussing its fundamentals, but for the purpose of this Plan, digital opportunity will be narrowed down to the major principles of access, adoption, affordability, digital literacy, and device access.

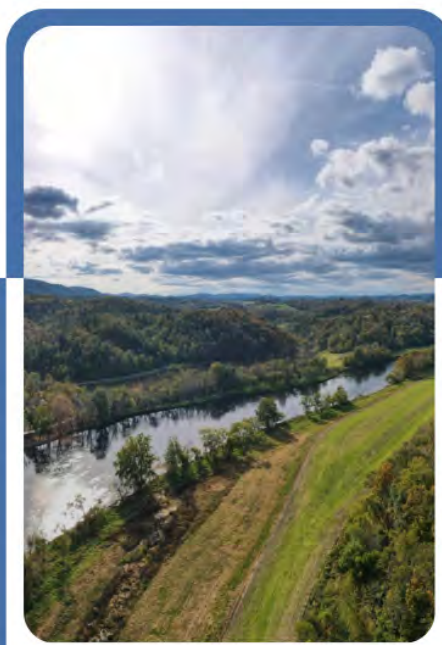


## Asset Inventory

This Plan aims to introduce, define, and address major components of digital opportunity at a regional scale while also providing individual and unique sections for each of the seven High Country counties when addressing assets, needs, and recommendations. Previous sections of this Plan (Vision for Digital Opportunity, Key Words Breakdown, and Overview) were written at a regional scale because such information is relevant across all counties regardless of political boundaries.



# Alleghany



2020 Population:  
10,867  
NC Office of State Budget and Management

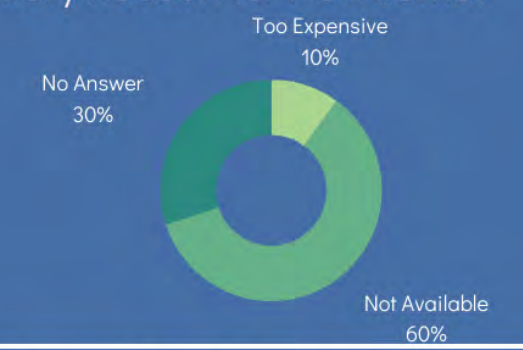
NC GREAT Grant  
Awarded in 2022  
**0**  
Photo Credit: Alleghany Chamber of Commerce

## Alleghany

Data retrieved from Broadband Survey Data (General, Phone, and Farm) in January 2023

NC DIT Broadband Survey Respondents  
**76** — 17.11% without internet (13)  
82.89% with internet (63)  
**13** out of 76 with speeds under 25/3 mbps

### Primary Reason for No Internet



Number Without Access to Cellular Service  
**0** out of 74

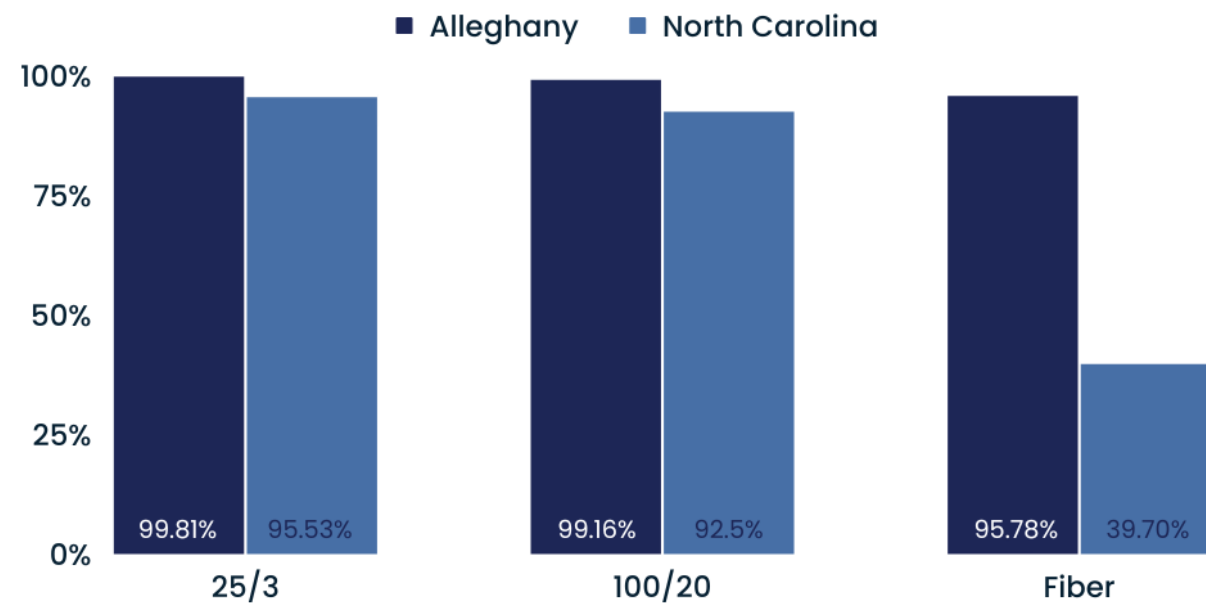


# Access

As discussed in the Overview section, data reported by ISPs via the FCC's Form 477 is known to be overreported. Therefore, there is room for improved accuracy in the data below when discussing internet accessibility.

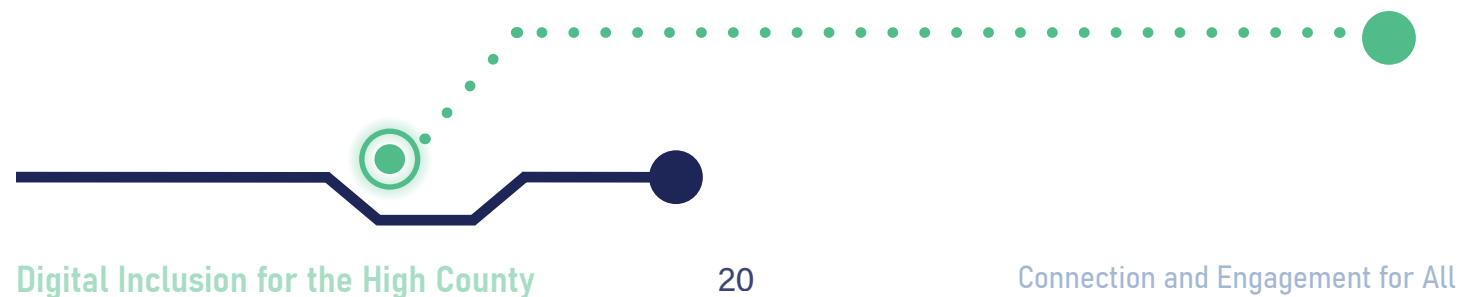
## ALLEGHANY INTERNET AVAILABILITY

Data retrieved from NC Broadband Availability Index



### Free Public Wi-Fi Locations

- Wilkes Community College
- Alleghany County Public Library
- NCWorks

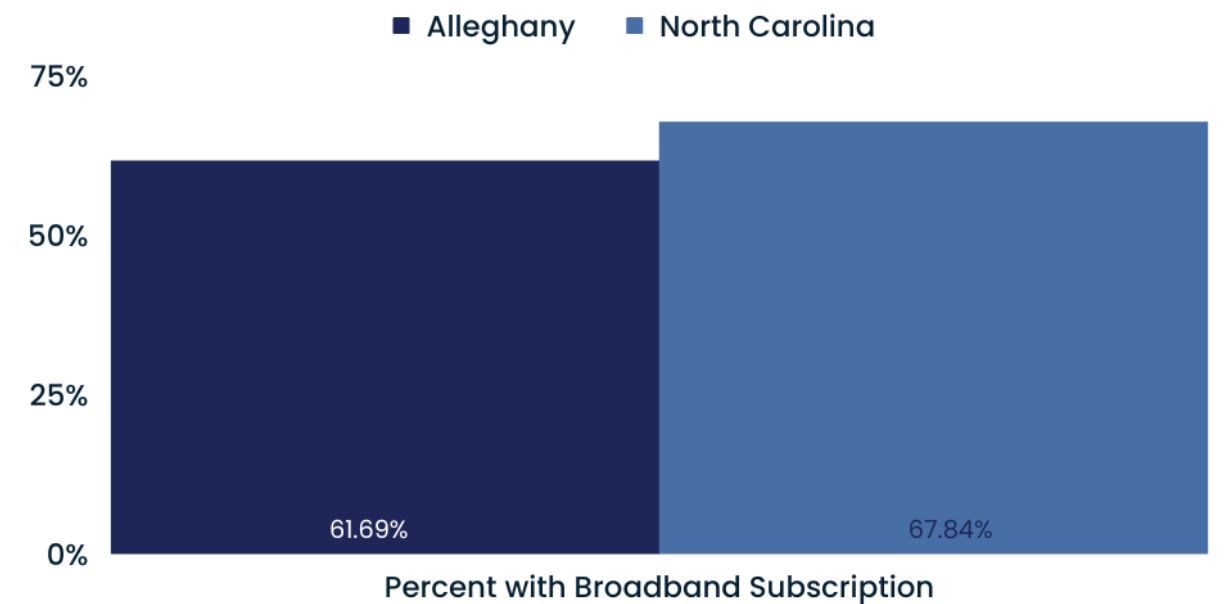


# Adoption

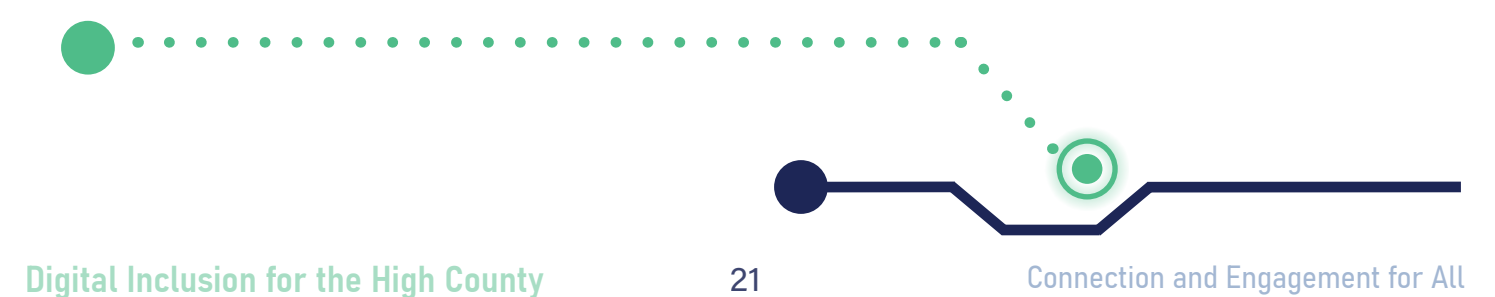
Adoption can largely be broken down into two categories, affordability, and access, yet relevancy still plays a role. Adoption obstacles for older adults largely manifests in the form of having a limited budget where a monthly internet subscription is considered best spent elsewhere (i.e., medications, etc.) or encountering application and confirmation issues when applying for ACP.

## ALLEGHANY INTERNET ADOPTION

Data retrieved from NC Broadband Adoption Index



- Resources from the Agricultural Extension to address the relevancy of broadband for the agricultural community (refer to "Why Broadband Matters to Farmers" in the Resources section).



# Afordability

## The Affordable Connectivity Program

- A federal benefit program offered through the Federal Communications Commission (FCC) that provides a discount of up to \$30 a month for internet service subscriptions for eligible households (or up to \$75 on qualifying Tribal lands) and a one-time discount of up to \$100 to purchase a device from participating providers if more than \$10 and less than \$50 is contributed towards the purchase. Households with an income at or below 200% of the Federal Poverty Guidelines are eligible, in addition to households where a member is a recipient of at least one of the following: Federal Pell Grant, SNAP, Medicaid, Free and Reduced-Price Lunch Program, Federal Housing Assistance, Supplemental Security Income, WIC, Veterans Pension or Survivor Benefits, Lifeline, Bureau of Indian Affairs General Assistance, Tribal TANF, Food Distribution Program on Indian Reservation, Tribal Head Start. Additional information and outreach materials can be found in the Resources section of this Plan.
- **Online** and paper application in English and Spanish
- **Outreach materials** for marketing
- Free online ACP Program **Certification**.

# Digital Literacy

- GCF Global Resources for Anyone
  - English, Spanish, and Portuguese
  - **Technology-focused topics**
  - **Wide range of topics**
- Cyber Seniors
  - cyberseniors.org
  - Hotline: 1-844-217-3057
  - **Previous webinars**
- Senior Planet
  - eniorplanet.org
  - Hotline: 888-713-3495
  - **Tech Tip Videos**
  - **1 on 1 Tech Tutoring**
  - **How to use Zoom**
- Wilkes Community College Small Business Center assists local businesses with digital literacy.
- Wilkes Community College hosts occasional seminars and classes on digital literacy.
- App Health Care has begun a telehealth initiative for those with hypertension to check their vitals at home and to be able to receive calls and support without requiring them to travel to the clinic.
- Allegheny Public Library and Allegheny Council on Aging host occasional education events that have covered digital literacy topics.

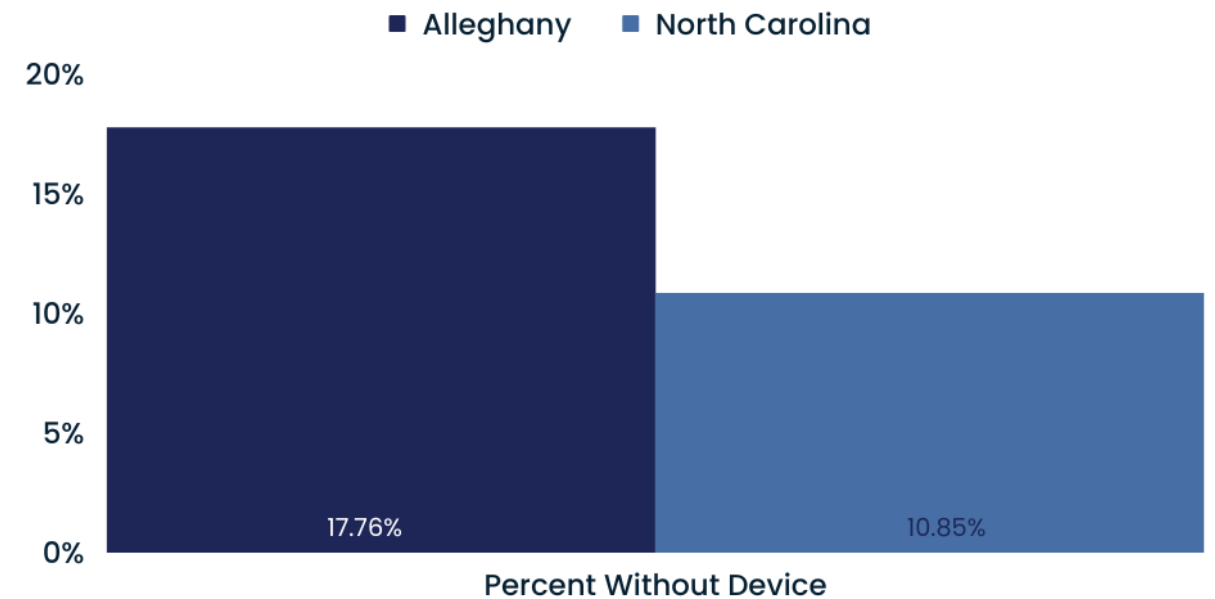


# Device Acces



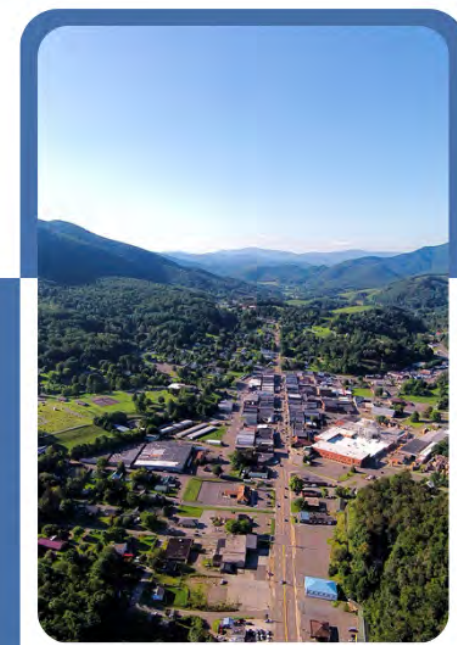
## ALLEGHANY DEVICE ACCESS

*Data retrieved from NC Broadband Adoption Index*



- E2D is a Davidson-based device refurbisher that collects used laptops from generous corporations and refurbishes them in student-led technology labs. They are welcoming conversations with Towns, Counties, and Organizations in the High Country to discuss corporate device donations and outlets to distribute devices.
- Allegheny County Library and Wilkes Community College offer computer labs.
- Allegheny County Library offers a laptop and hotspot rental program.
  - 4 chromebooks and 4 hotspots
- Allegheny County School System has 1:1 device to student program.
- Wilkes Community College has a laptop lending program for students.
- Western Youth Network (WYN) helps provide laptops to clients for health assessments, form filling, homework, and survey taking.

# Ashe



## Ashe

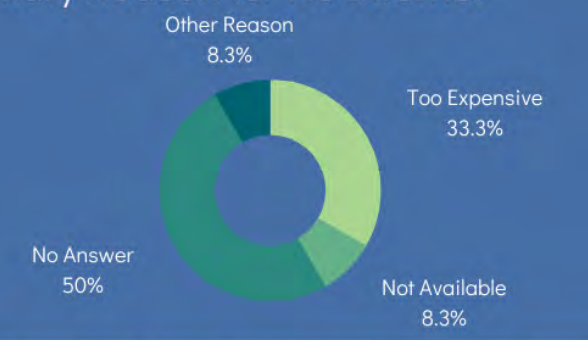
Data retrieved from Broadband Survey Data (General, Phone, and Farm) in January 2023

NC DIT Broadband Survey Respondents

**213** — 4.23% without internet (9)  
95.77% with internet (204)

**30** out of 154 with speeds under 25/3 mbps

Primary Reason for No Internet



Number Without Access to Cellular Service

**9** out of 213

2020 Population:  
**26,533**  
NC Office of State Budget and Management

NC GREAT Grant  
Awarded in 2022

**9** 7 households  
2 businesses

**\$128.5k** grant amount

**\$105.2k** match amount

Photo Credit: Ashe Chamber of Commerce

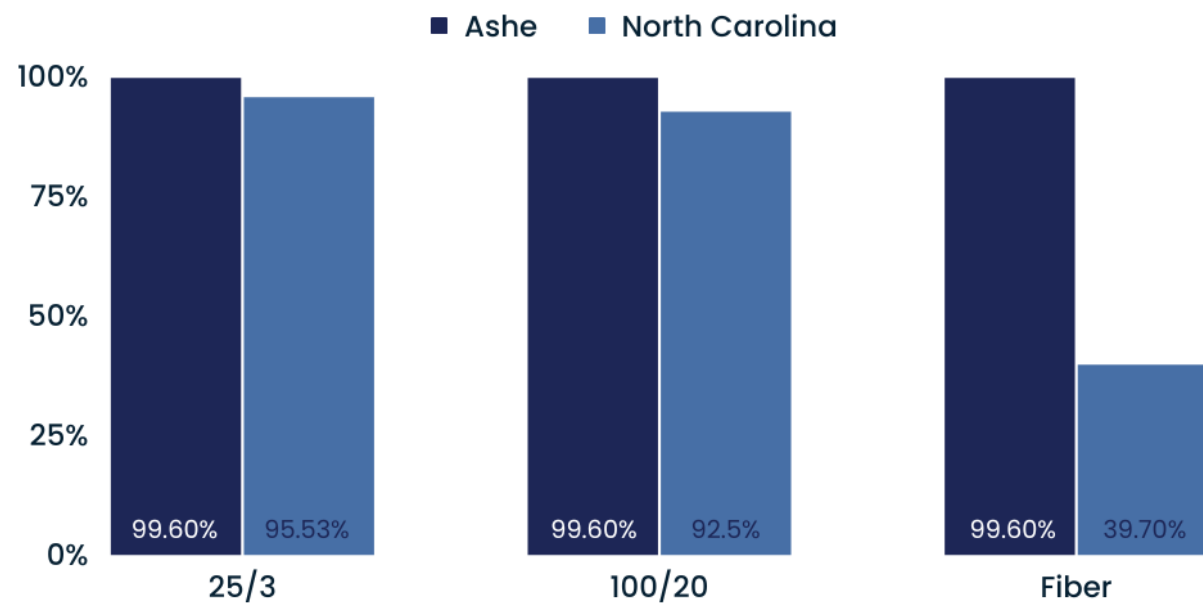


# Access

As discussed in the Overview section, data reported by ISPs via the FCC's Form 477 is known to be overreported. Therefore, there is room for improved accuracy in the data below when discussing internet accessibility.

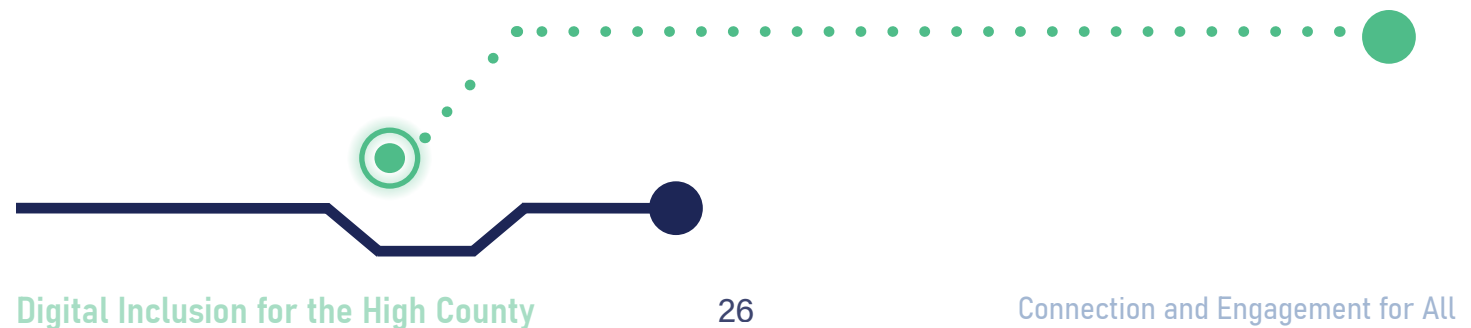
## ASHE INTERNET AVAILABILITY

Data retrieved from NC Broadband Availability Index



### Free Public Wi-Fi Locations

- Downtown West Jefferson
- Downtown Lansing
- Ashe County Public Library
- Ashe County Park
- Wilkes Community College
- NCWorks

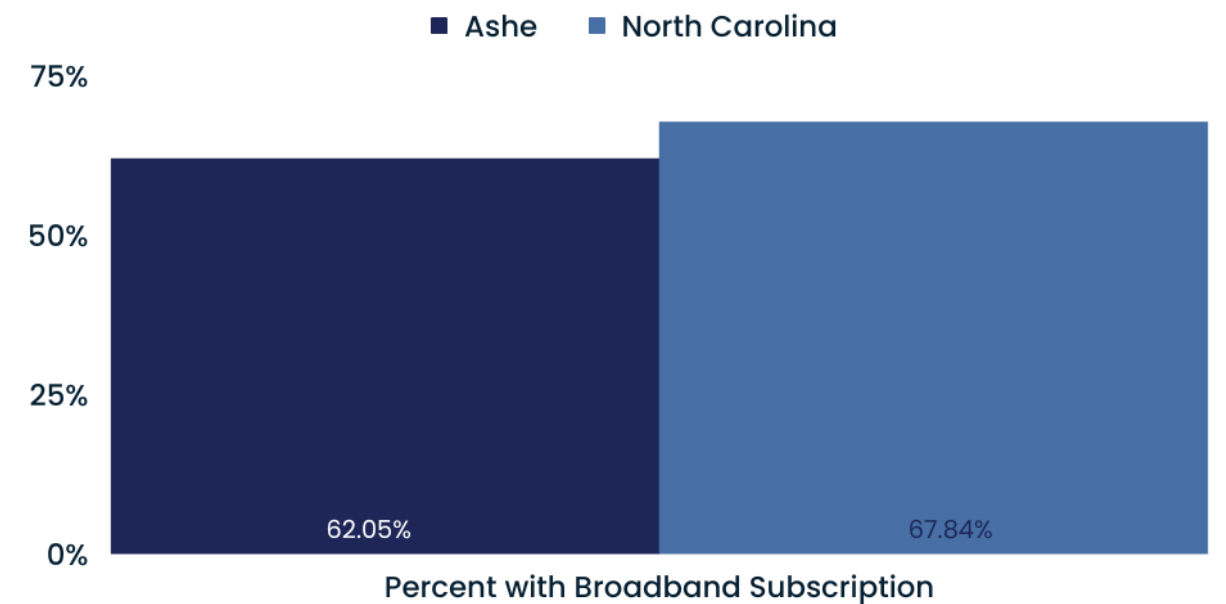


# Adoption

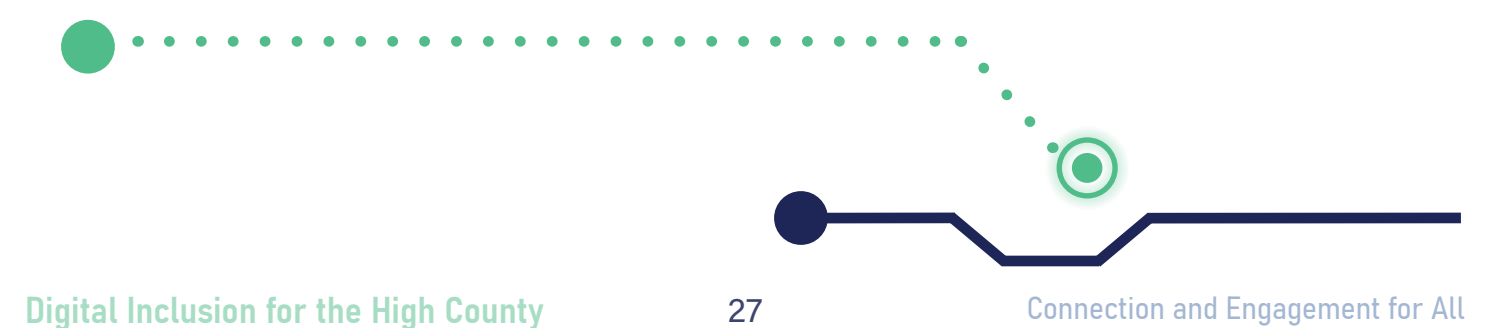
Adoption can largely be broken down into two categories, affordability, and access, yet relevancy still plays a role. Adoption obstacles for older adults largely manifests in the form of having a limited budget where a monthly internet subscription is considered best spent elsewhere (i.e., medications, etc.) or encountering application and confirmation issues when applying for ACP.

## ASHE INTERNET ADOPTION

Data retrieved from NC Broadband Adoption Index



- Resources from the Agricultural Extension to address the relevancy of broadband for the agricultural community (refer to "Why Broadband Matters to Farmers" in the Resources section).



# Afordability

## The Affordable Connectivity Program

- A federal benefit program offered through the Federal Communications Commission (FCC) that provides a discount of up to \$30 a month for internet service subscriptions for eligible households (or up to \$75 on qualifying Tribal lands) and a one-time discount of up to \$100 to purchase a device from participating providers if more than \$10 and less than \$50 is contributed towards the purchase. Households with an income at or below 200% of the Federal Poverty Guidelines are eligible, in addition to households where a member is a recipient of at least one of the following: Federal Pell Grant, SNAP, Medicaid, Free and Reduced-Price Lunch Program, Federal Housing Assistance, Supplemental Security Income, WIC, Veterans Pension or Survivor Benefits, Lifeline, Bureau of Indian Affairs General Assistance, Tribal TANF, Food Distribution Program on Indian Reservation, Tribal Head Start. Additional information and outreach materials can be found in the Resources section of this Plan.
- **Online** and paper application in English and Spanish
- **Outreach materials** for marketing
- Free online ACP Program **Certification.**

# Digital Literacy

- GCF Global Resources for Anyone
  - English, Spanish, and Portuguese
  - **Technology-focused topics**
  - **Wide range of topics**
- Cyber Seniors
  - cyberseniors.org
  - Hotline: 1-844-217-3057
  - **Previous webinars**
- Senior Planet
  - seniorplanet.org
  - Hotline: 888-713-3495
  - **Tech Tip Videos**
  - **1 on 1 Tech Tutoring**
  - **How to use Zoom**
- "Book a Tech Librarian" services offered by Appalachian Regional Library
  - Tech Help Sessions
  - 336-846-2041 x111
  - ashreference@arlibrary.org
- Generations Ashe offers computer classes at their Senior Center
  - 336-246-4347
- Riverview Community Center is an integral community resource that offers and hosts an array of courses
- Ashe County agricultural extension maintains the Visit NC Farms App for the entire High Country region
  - This App is often used as a landing page and website for farmers, growers, and producers either without a website or those who do not regularly update their website
- Wilkes Community College Ashe Campus offers a Small Business Center to assist with an entrepreneurial focus

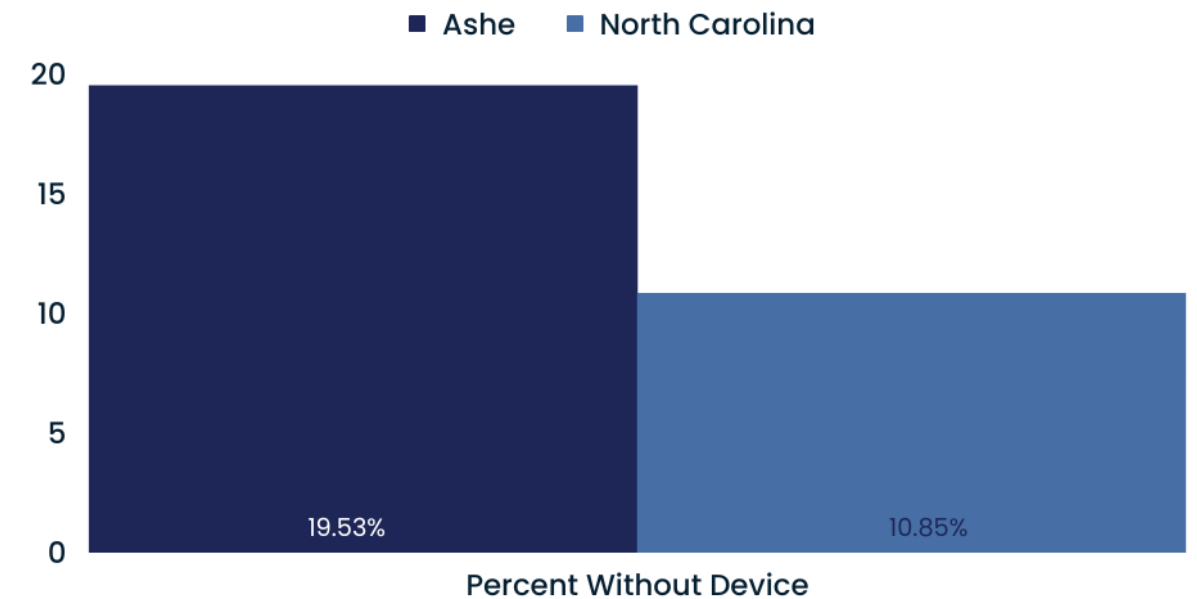


# Device Acces



## ASHE DEVICE ACCESS

Data retrieved from NC Broadband Adoption Index



- E2D is a Davidson-based device refurbisher that collects used laptops from generous corporations and refurbishes them in student-led technology labs. They are welcoming conversations with Towns, Counties, and Organizations in the High Country to discuss corporate device donations and outlets to distribute devices.
- Ashe County Library offers:
  - Computer lab with 15 desktops
  - 7 laptops for in-library use only
  - Printers, copiers, and scanners
- Western Youth Network (WYN) helps provide laptops to clients for health assessments, form filling, homework, and survey taking.
- Ashe County School System has 1:1 device to student program.

# Avery



2020 Population:  
17,807  
NC Office of State Budget and Management

NC GREAT Grant  
Awarded in 2022  
**234** 222 households  
12 businesses  
**\$2.2M** grant  
amount  
**\$397K** match  
amount

Photo Credit: Banner Elk Chamber of Commerce

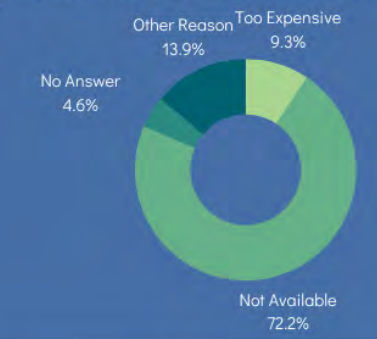
## Avery

Data retrieved from Broadband Survey Data (General, Phone, and Farm) in January 2023

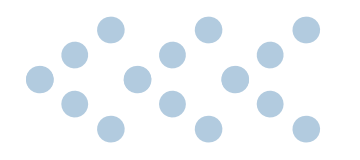
NC DIT Broadband Survey Respondents  
**696** — 56.61% without internet (394)  
43.39% with internet (302)

**65** out of 422 with speeds under 25/3 mbps

### Primary Reason for No Internet



Number Without Access to Cellular Service  
**58** out of 699

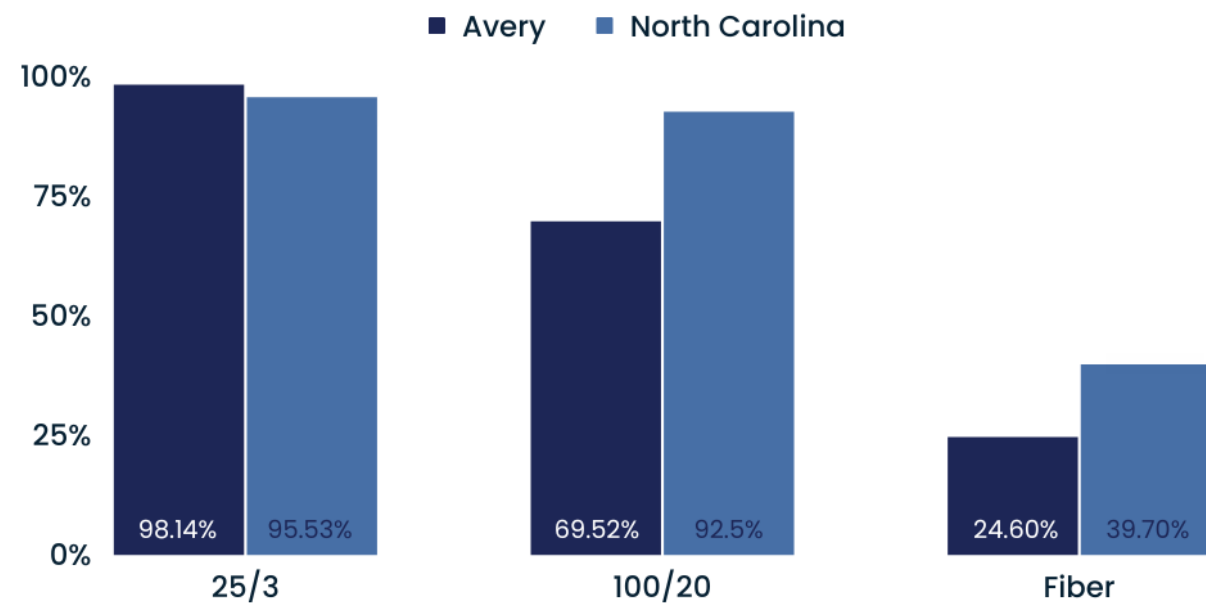


# Access

As discussed in the Overview section, data reported by ISPs via the FCC's Form 477 is known to be overreported. Therefore, there is room for improved accuracy in the data below when discussing internet accessibility.

## AVERY INTERNET AVAILABILITY

Data retrieved from NC Broadband Availability Index



### Free Public Wi-Fi Locations

- Avery County Morrison Public Library
- AMY Regional Library's Bookmobile serves as a traveling Wi-Fi access point
- Avery Family YMCA
- Downtown Banner Elk
- Hardees\*
- McDonalds, Newland\*
- High Country Community Health (HCCH) - offered inside and outside the building
  - HCCH has also provided hotspots for patients from State funding in the past

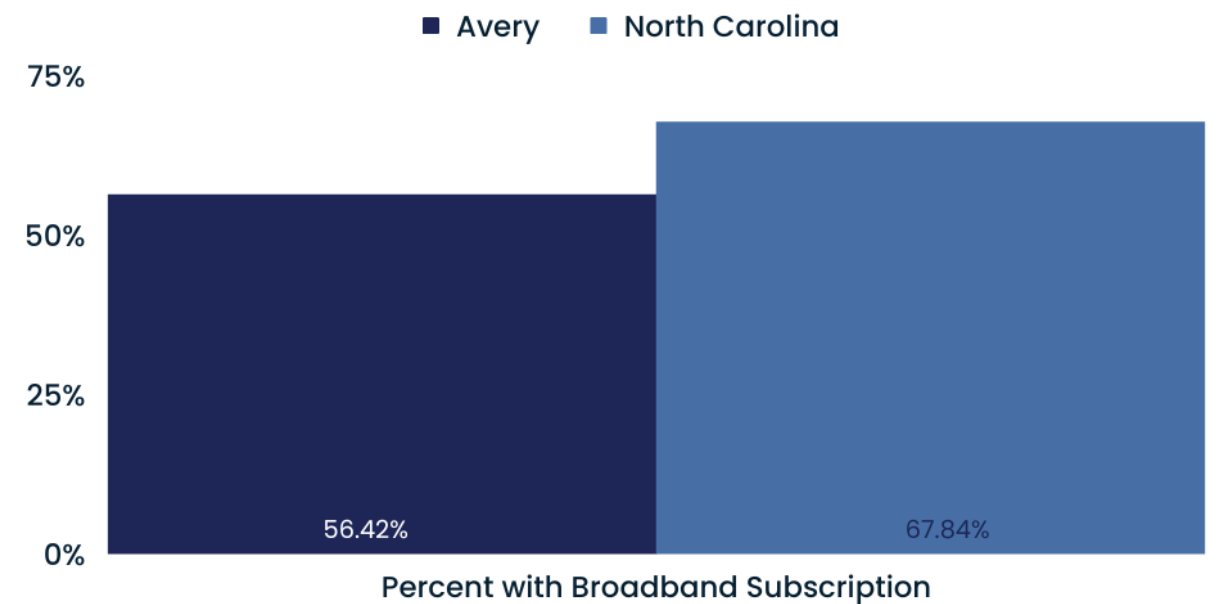
\*listed as a Community WiFi Location by Mayland Community College.

# Adoption

Adoption can largely be broken down into two categories, affordability, and access, yet relevancy still plays a role. Adoption obstacles for older adults largely manifests in the form of having a limited budget where a monthly internet subscription is considered best spent elsewhere (i.e., medications, etc.) or encountering application and confirmation issues when applying for ACP.

## AVERY INTERNET ADOPTION

Data retrieved from NC Broadband Adoption Index



- Resources from the Agricultural Extension to address the relevancy of broadband for the agricultural community (refer to "Why Broadband Matters to Farmers" in the Resources section).
- High Country Community Health has provided telehealth sign-up assistance to patients and older adults, and, in turn, as advocated for its adoption in each household when possible.

# Afordability

## The Affordable Connectivity Program

- A federal benefit program offered through the Federal Communications Commission (FCC) that provides a discount of up to \$30 a month for internet service subscriptions for eligible households (or up to \$75 on qualifying Tribal lands) and a one-time discount of up to \$100 to purchase a device from participating providers if more than \$10 and less than \$50 is contributed towards the purchase. Households with an income at or below 200% of the Federal Poverty Guidelines are eligible, in addition to households where a member is a recipient of at least one of the following: Federal Pell Grant, SNAP, Medicaid, Free and Reduced-Price Lunch Program, Federal Housing Assistance, Supplemental Security Income, WIC, Veterans Pension or Survivor Benefits, Lifeline, Bureau of Indian Affairs General Assistance, Tribal TANF, Food Distribution Program on Indian Reservation, Tribal Head Start. Additional information and outreach materials can be found in the Resources section of this Plan.
- Online and paper application in English and Spanish
- Outreach materials for marketing
- Free online ACP Program Certification.

**W.A.M.Y. Community Action** has previously distributed internet subscription subsidies (funding provided by the CARES act) and has the network and ability to continue with the proper funding.

# Digital Literacy

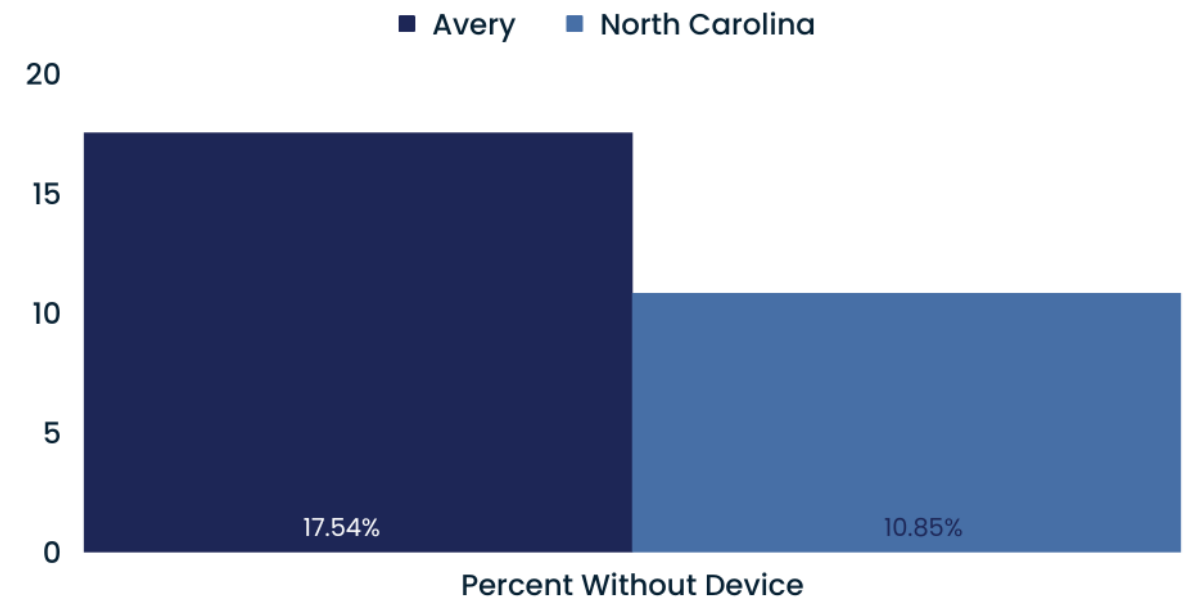
- GCF Global Resources for Anyone
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  - Technology-focused topics
  - Wide range of topics
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  - cyberseniors.org
  - Hotline: 1-844-217-3057
  - Previous webinars
- Senior Planet
  - seniorplanet.org
  - Hotline: 888-713-3495
  - Tech Tip Videos
  - 1 on 1 Tech Tutoring
  - How to use Zoom
- Avery County Public Library offers technological assistance
  - 828.733.9393
- Mayland Community College Small Business Center
  - Entrepreneurial focus
- High Country Community Health has provided clients and patients with telehealth sign-up assistance



# Device Acces

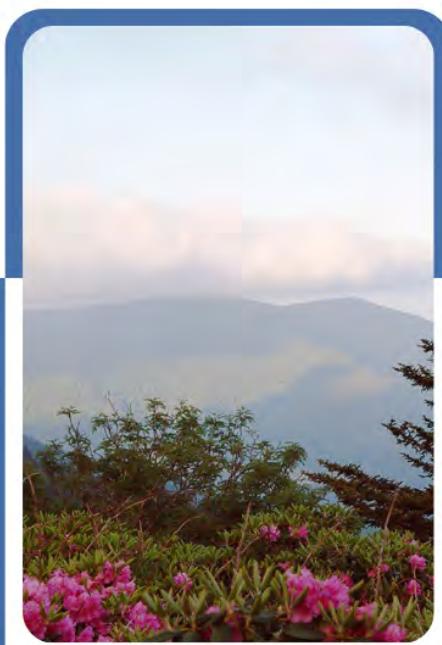
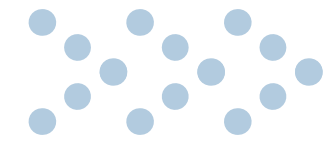
## AVERY DEVICE ACCESS

*Data retrieved from NC Broadband Adoption Index*



- E2D is a Davidson-based device refurbisher that collects used laptops from generous corporations and refurbishes them in student-led technology labs. They are welcoming conversations with Towns, Counties, and Organizations in the High Country to discuss corporate device donations and outlets to distribute devices.
- Avery County Library offers:
  - Hotspots and laptops available for checkout
  - A Bookmobile that serves as a Wi-Fi Hotspot
  - Print, Fax, Scan, and Copy capabilities
  - Public computers
- Western Youth Network (WYN) helps provide laptops to clients for health assessments, form filling, homework, and survey taking.
- Avery County School System has 1:1 device to student program.

# Mitchell



2020 Population:  
14,902  
NC Office of State Budget and Management

NC GREAT Grant  
Awarded in 2022  
1,921 1,883 households  
38 businesses  
\$2.6M grant amount  
\$1.1M match amount

Photo Credit: Banner Elk Chamber of Commerce

## Mitchell

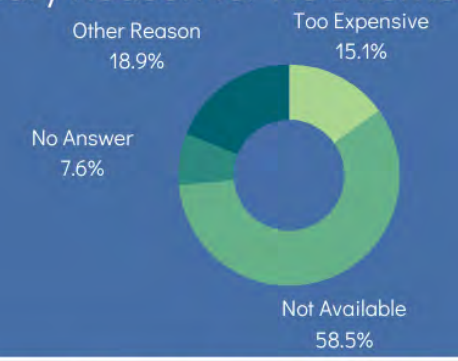
Data retrieved from Broadband Survey Data (General, Phone, and Farm) in January 2023

NC DIT Broadband Survey Respondents

**834** — 20.38% without internet (170)  
79.62% with internet (664)

**121** out of 609 with speeds under 25/3 mbps

Primary Reason for No Internet



Number Without Access to Cellular Service

**43** out of 834

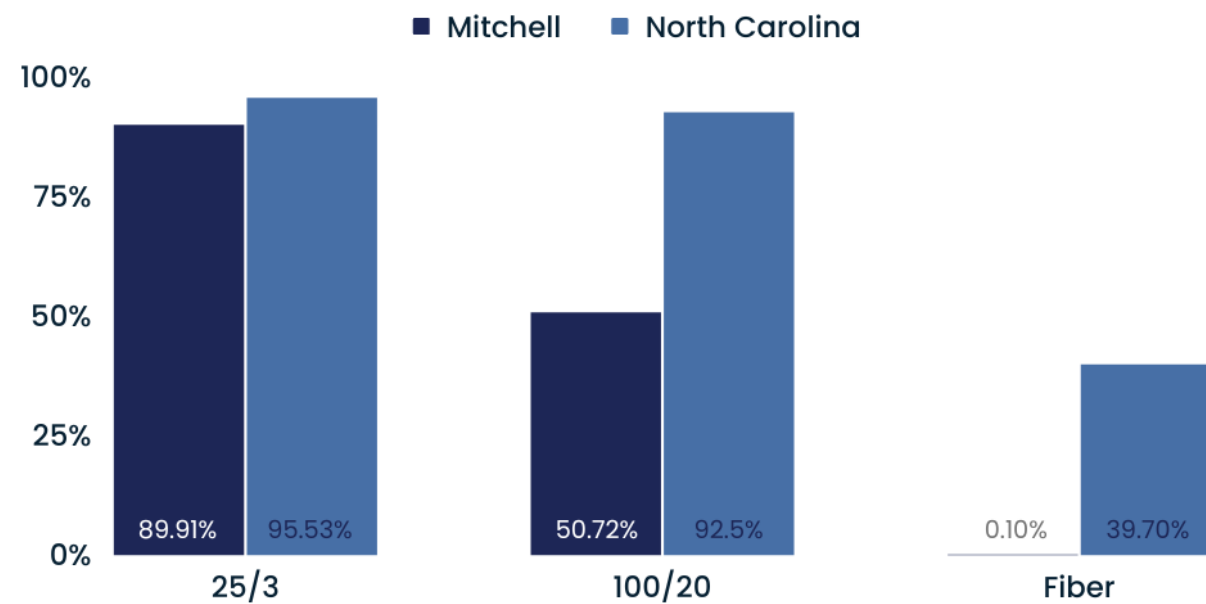


# Access

As discussed in the Overview section, data reported by ISPs via the FCC's Form 477 is known to be overreported. Therefore, there is room for improved accuracy in the data below when discussing internet accessibility.

## MITCHELL INTERNET AVAILABILITY

Data retrieved from NC Broadband Availability Index



### Free Public Wi-Fi Locations

- AMY Regional Library Bookmobile serves as a traveling Wi-Fi connection point
- Mitchell Historic Court House
- Mitchell County Public Library
  - Offers outdoor seating
  - Offers private study areas
- Downtown Spruce Pine
- Downtown Bakersville
- Bakersville Town Hall
- Spruce Pine Library
- McDonalds
- Bear Creek Baptist Church\*
- Elite Shine Detail\*
- Little Switzerland Books and Beans\*
- Miller Insurance\*
- Spring Creek Baptist Church\*
- Tipton Hill Community Center\*

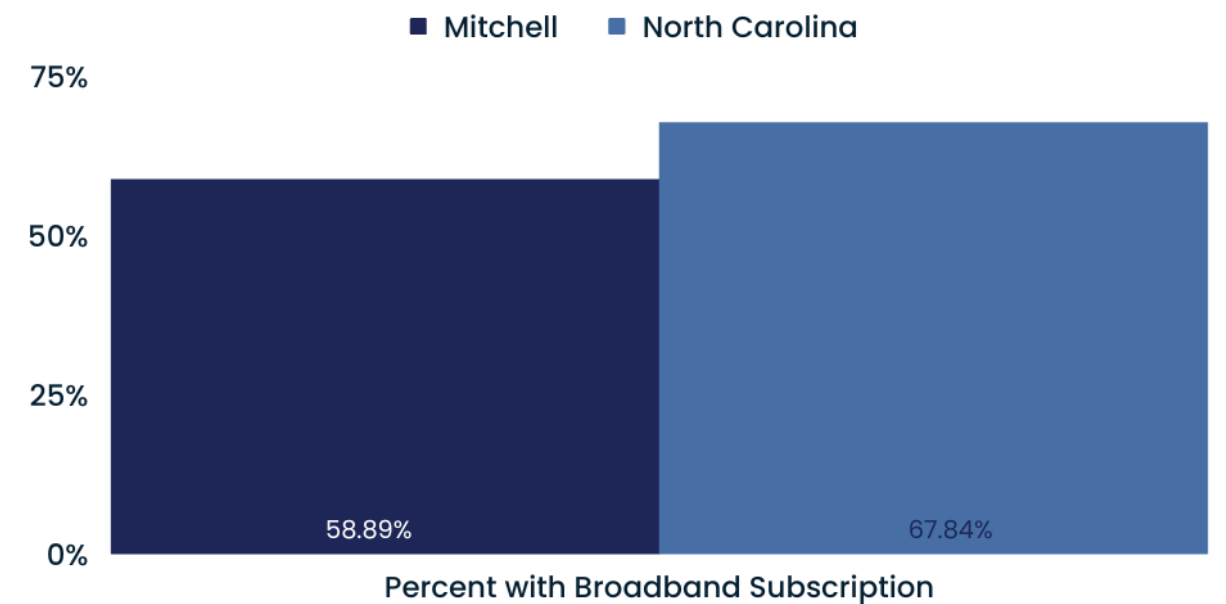
\*listed as a Community WiFi Location by Mayland Community College.

# Adoption

Adoption can largely be broken down into two categories, affordability, and access, yet relevancy still plays a role. Adoption obstacles for older adults largely manifests in the form of having a limited budget where a monthly internet subscription is considered best spent elsewhere (i.e., medications, etc.) or encountering application and confirmation issues when applying for ACP.

## MITCHELL INTERNET ADOPTION

Data retrieved from NC Broadband Adoption Index



- Resources from the Agricultural Extension to address the relevancy of broadband for the agricultural community (refer to "Why Broadband Matters to Farmers" in the Resources section).

# Afordability

## The Affordable Connectivity Program

- A federal benefit program offered through the Federal Communications Commission (FCC) that provides a discount of up to \$30 a month for internet service subscriptions for eligible households (or up to \$75 on qualifying Tribal lands) and a one-time discount of up to \$100 to purchase a device from participating providers if more than \$10 and less than \$50 is contributed towards the purchase. Households with an income at or below 200% of the Federal Poverty Guidelines are eligible, in addition to households where a member is a recipient of at least one of the following: Federal Pell Grant, SNAP, Medicaid, Free and Reduced-Price Lunch Program, Federal Housing Assistance, Supplemental Security Income, WIC, Veterans Pension or Survivor Benefits, Lifeline, Bureau of Indian Affairs General Assistance, Tribal TANF, Food Distribution Program on Indian Reservation, Tribal Head Start. Additional information and outreach materials can be found in the Resources section of this Plan.
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- **Outreach materials** for marketing
- Free online ACP Program **Certification**.

**W.A.M.Y. Community Action** has previously distributed internet subscription subsidies (funding provided by the CARES act) and has the network and interest to continue with the proper funding.

# Digital Literacy

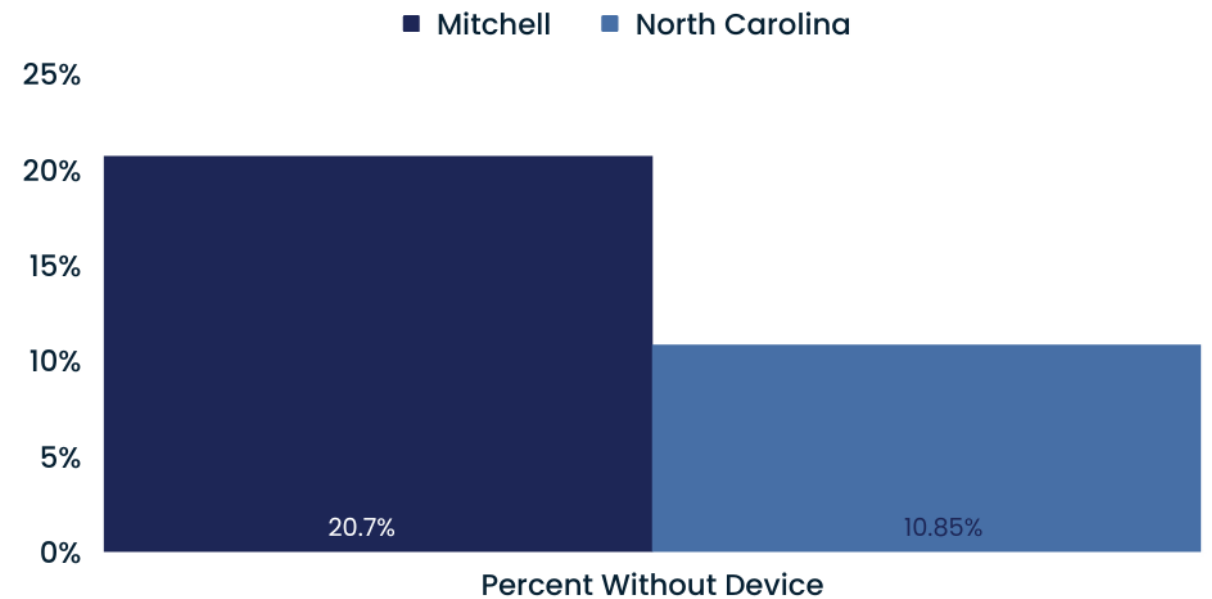
- GCF Global Resources for Anyone
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  - [Wide range of topics](#)
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  - cyberseniors.org
  - Hotline: 1-844-217-3057
  - [Previous webinars](#)
- Senior Planet
  - seniorplanet.org
  - Hotline: 888-713-3495
  - [Tech Tip Videos](#)
  - [1 on 1 Tech Tutoring](#)
  - [How to use Zoom](#)
- Mitchell County Public Library offers technological assistance
  - 828.688.2511
- Spruce Pine Public Library offers technological assistance
  - 828.765.4673
- Mayland Community College Small Business Center
  - Entrepreneurial focus



# Device Acces

## MITCHELL DEVICE ACCESS

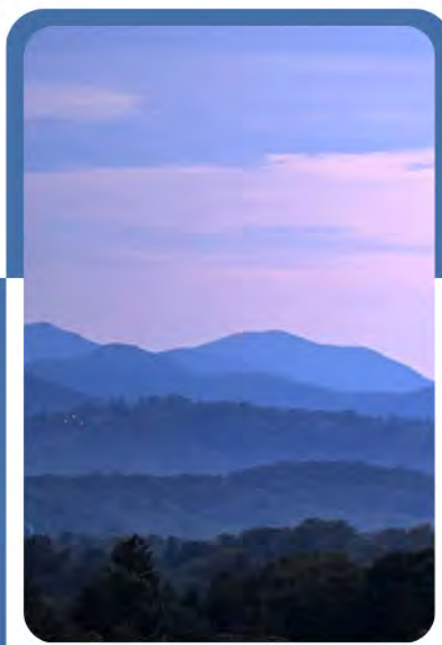
Data retrieved from NC Broadband Adoption Index



- E2D is a Davidson-based device refurbisher that collects used laptops from generous corporations and refurbishes them in student-led technology labs. They are welcoming conversations with Towns, Counties, and Organizations in the High Country to discuss corporate device donations and outlets to distribute devices.
- Mitchell County and Spruce Pine Public Library's offer:
  - Hotspots and laptops available for checkout
  - A Bookmobile that serves as a Wi-Fi Hotspot
  - Print, Fax, Scan, and Copy capabilities
  - Public computers
- Western Youth Network (WYN) helps provide laptops to clients for health assessments, form filling, homework, and survey taking.
- Mitchell County School System has 1:1 device to student program.



# Watauga



2020 Population:  
53,909

NC Office of State Budget and Management

NC GREAT Grant  
Awarded in 2022

0

Photo Credit: Boone Area Chamber of Commerce

## Watauga

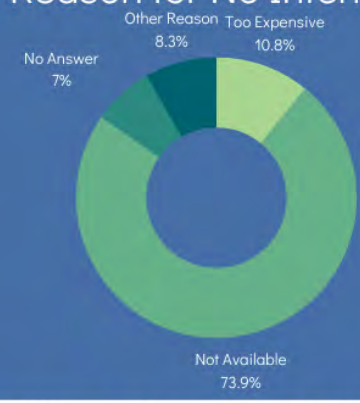
Data retrieved from Broadband Survey Data (General, Phone, and Farm) in January 2023

NC DIT Broadband Survey Respondents

**977** — 38.387% without internet (375)  
61.62% with internet (602)

**104** out of 620 with speeds under 25/3 mbps

Primary Reason for No Internet



Number Without Access to Cellular Service

**111** out of 977

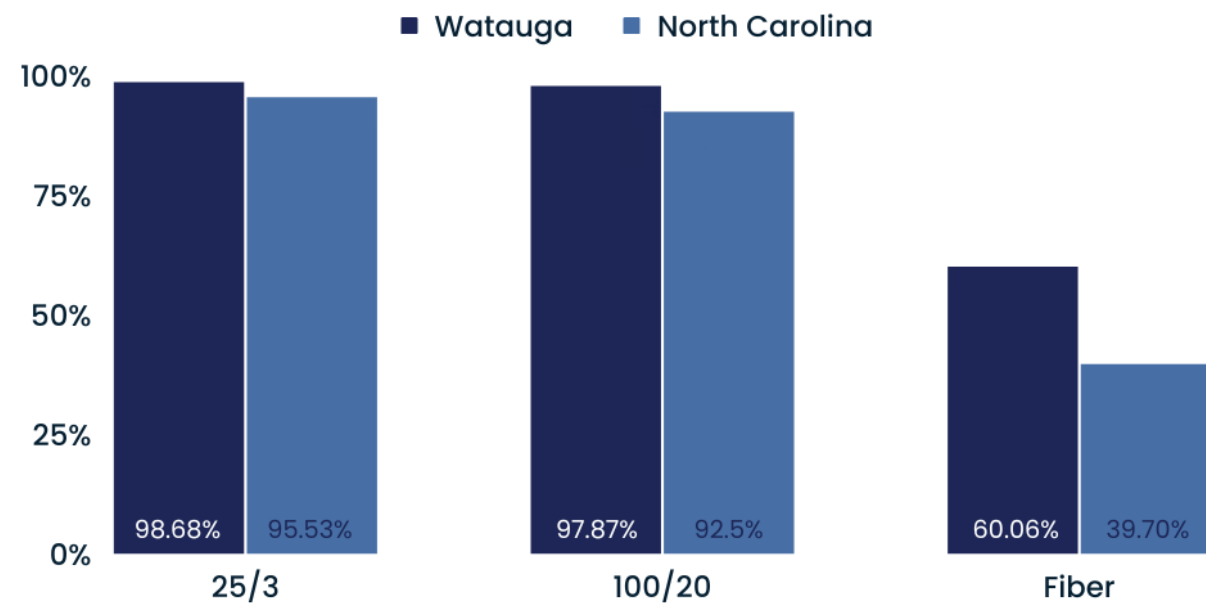


# Access

As discussed in the Overview section, data reported by ISPs via the FCC's Form 477 is known to be overreported. Therefore, there is room for improved accuracy in the data below when discussing internet accessibility.

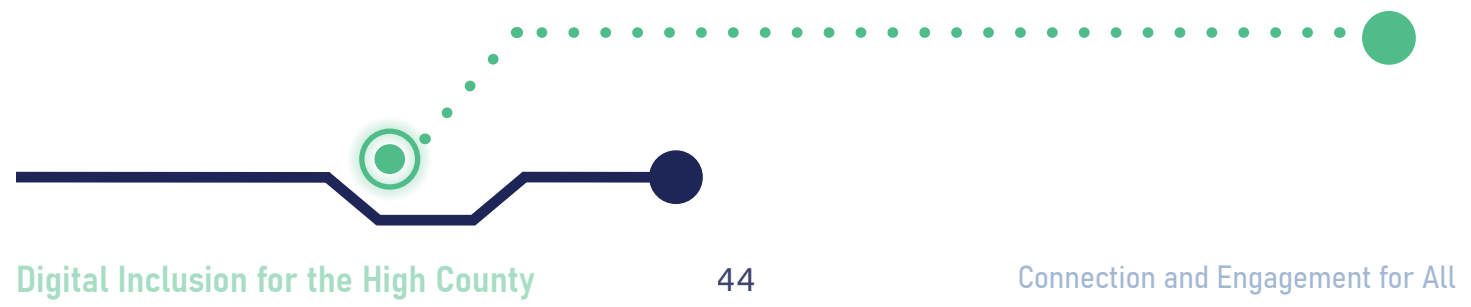
## WATAUGA INTERNET AVAILABILITY

Data retrieved from NC Broadband Availability Index



### Free Public Wi-Fi Locations

- Watauga County Public Library
- Western Watauga Branch Library
- Caldwell Community College and Technical Institute
- W.A.M.Y.
- Watauga County Project on Aging
- Daymark Recovery Services

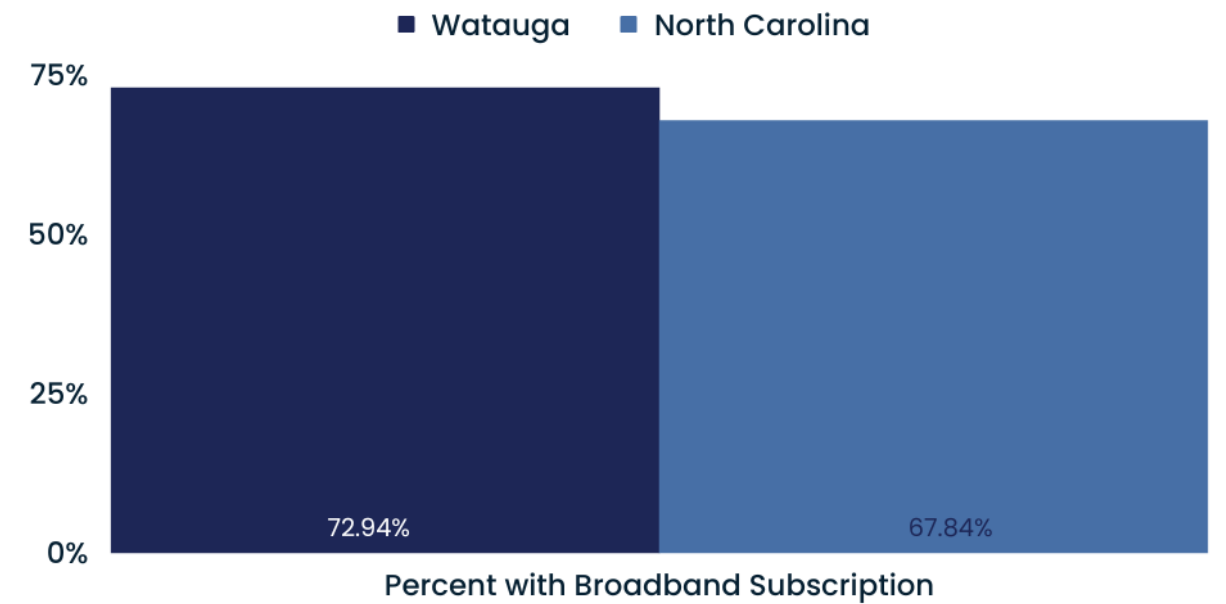


# Adoption

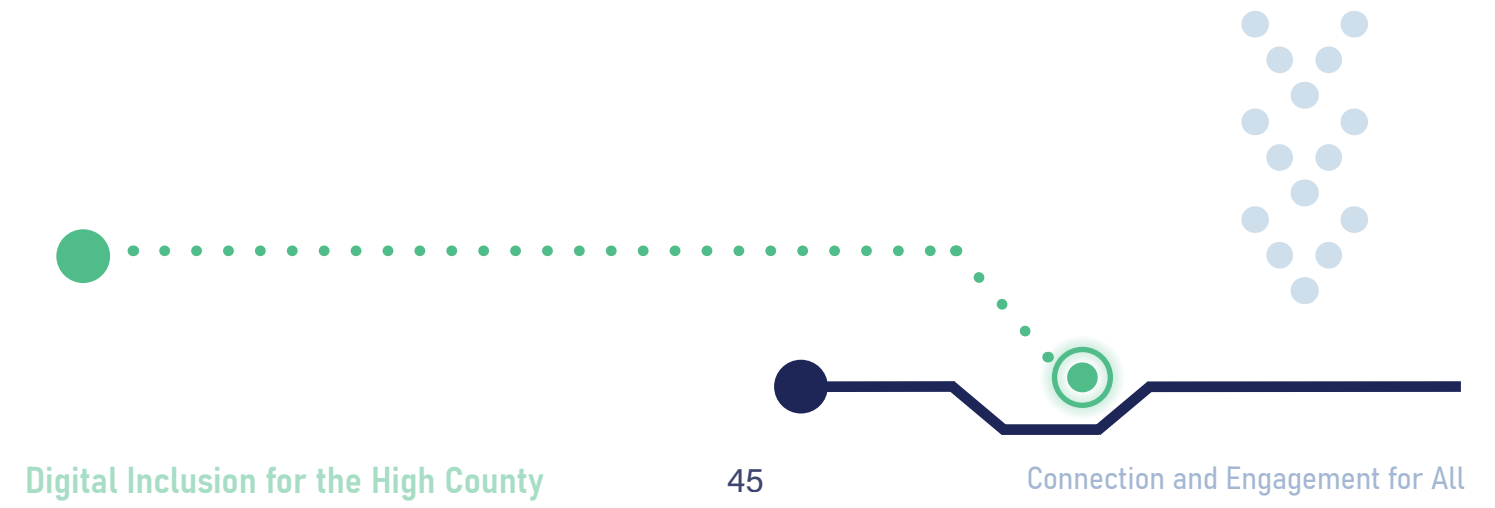
Adoption can largely be broken down into two categories, affordability, and access, yet relevancy still plays a role. Adoption obstacles for older adults largely manifests in the form of having a limited budget where a monthly internet subscription is considered best spent elsewhere (i.e., medications, etc.) or encountering application and confirmation issues when applying for ACP.

## WATAUGA INTERNET ADOPTION

Data retrieved from NC Broadband Adoption Index



- Resources from the Agricultural Extension to address the relevancy of broadband for the agricultural community (refer to "Why Broadband Matters to Farmers" in the Resources section).



# Afordability

## The Affordable Connectivity Program

- A federal benefit program offered through the Federal Communications Commission (FCC) that provides a discount of up to \$30 a month for internet service subscriptions for eligible households (or up to \$75 on qualifying Tribal lands) and a one-time discount of up to \$100 to purchase a device from participating providers if more than \$10 and less than \$50 is contributed towards the purchase. Households with an income at or below 200% of the Federal Poverty Guidelines are eligible, in addition to households where a member is a recipient of at least one of the following: Federal Pell Grant, SNAP, Medicaid, Free and Reduced-Price Lunch Program, Federal Housing Assistance, Supplemental Security Income, WIC, Veterans Pension or Survivor Benefits, Lifeline, Bureau of Indian Affairs General Assistance, Tribal TANF, Food Distribution Program on Indian Reservation, Tribal Head Start. Additional information and outreach materials can be found in the Resources section of this Plan.
- Online and paper application in English and Spanish
- Outreach materials for marketing
- Free online ACP Program Certification.

**W.A.M.Y. Community Action** has previously distributed internet subscription subsidies (funding provided by the CARES act) and has the network and ability to continue with the proper funding.

# Digital Literacy

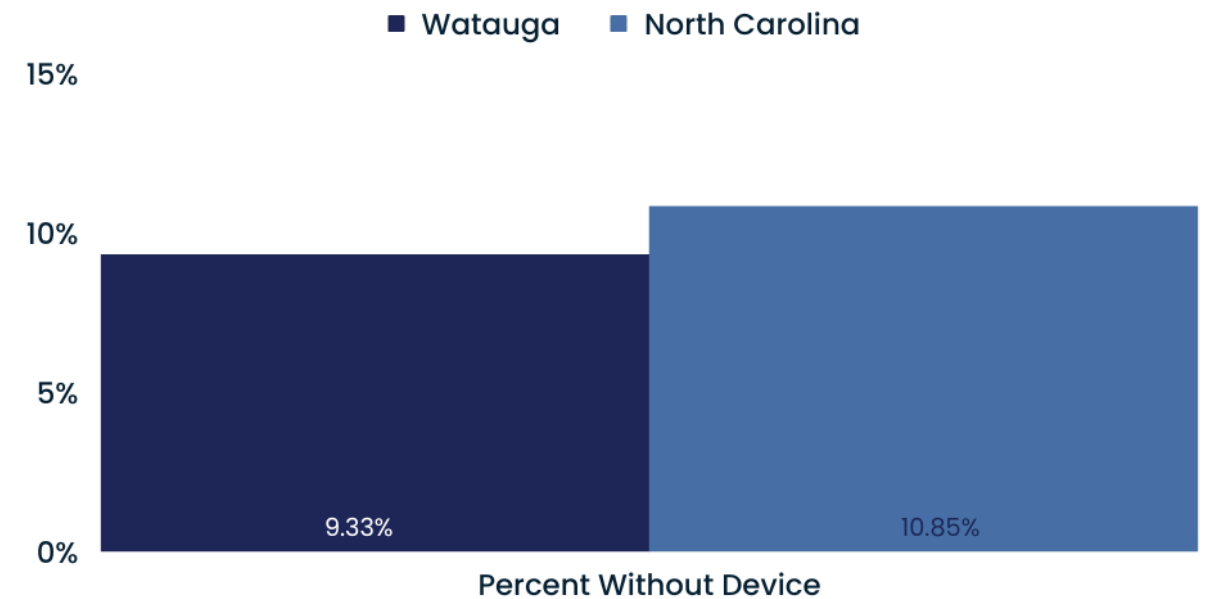
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  - Previous webinars
- Senior Planet
  - seniorplanet.org
  - Hotline: 888-713-3495
  - Tech Tip Videos
  - 1 on 1 Tech Tutoring
  - How to use Zoom
- Appalachian Regional Library
  - Book a Tech Librarian
  - 828.264.8784 ext. 2
  - Has the physical space to host digital literacy courses and events
- High Country Community Health has assisted clients in navigating how to create and attend telehealth appointments.
- Caldwell Community College Small Business Center
  - Entrepreneurial focus



# Device Acces

## WATAUGA DEVICE ACCESS

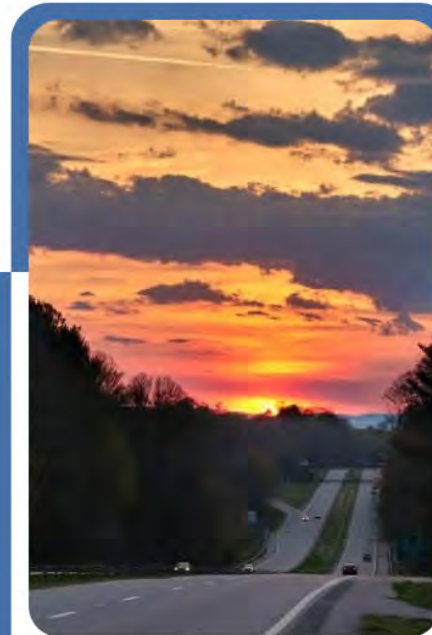
*Data retrieved from NC Broadband Adoption Index*



- E2D is a Davidson-based device refurbisher that collects used laptops from generous corporations and refurbishes them in student-led technology labs. They are welcoming conversations with Towns, Counties, and Organizations in the High Country to discuss corporate device donations and outlets to distribute devices.
- Watauga County and Western Watauga Branch Public Library's offer:
  - Hotspots and laptops available for checkout
  - Print, Fax, Scan, and Copy capabilities
  - Public computers
- Western Youth Network (WYN) helps provide laptops to clients for health assessments, form filling, homework, and survey taking.
- Watauga County School System has 1:1 device to student program.



# Wilkes



2020 Population:  
65,827  
NC Office of State Budget and Management

NC GREAT Grant  
Awarded in 2022  
134 132 households  
2 businesses

\$556.3k grant amount  
\$238.4k match amount

Photo Credit: Wilkes Chamber of Commerce

## Wilkes

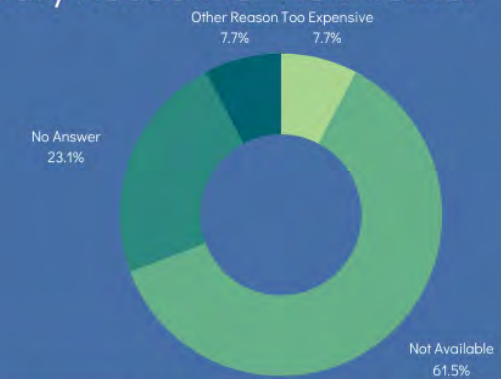
Data retrieved from Broadband Survey Data (General, Phone, and Farm) in January 2023

NC DIT Broadband Survey Respondents

**293** — 15.36% without internet (45)  
84.64% with internet (248)

**32** out of 200 with speeds under 25/3 mbps

Primary Reason for No Internet



Number Without Access to Cellular Service

**7** out of 293

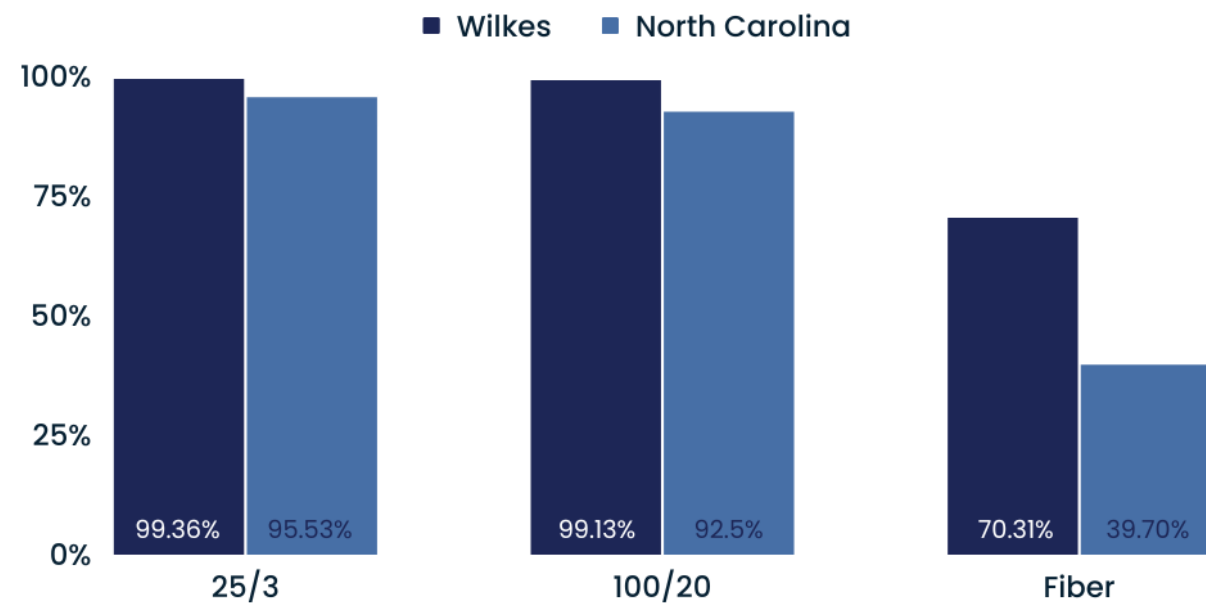


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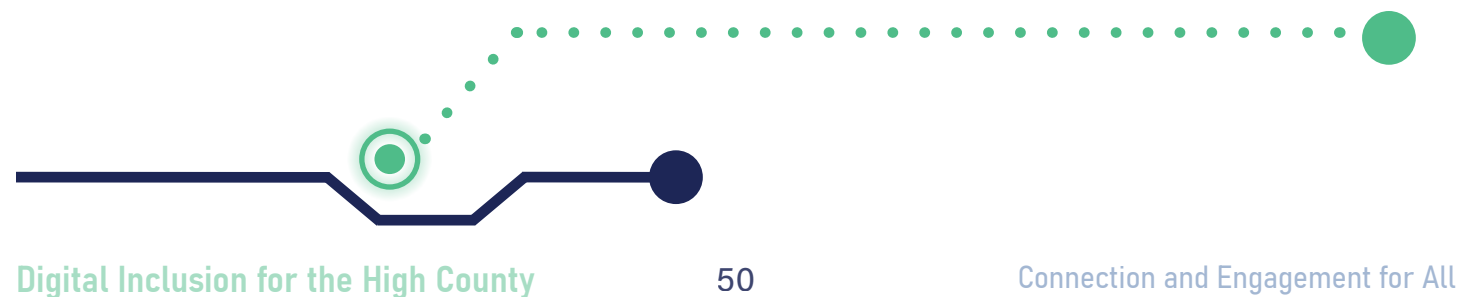
## WILKES INTERNET AVAILABILITY

Data retrieved from NC Broadband Availability Index



### Free Public Wi-Fi Locations

- Downtown Wilkesboro
- Downtown North Wilkesboro
- Wilkes County Public Library
- Traphill Branch Library

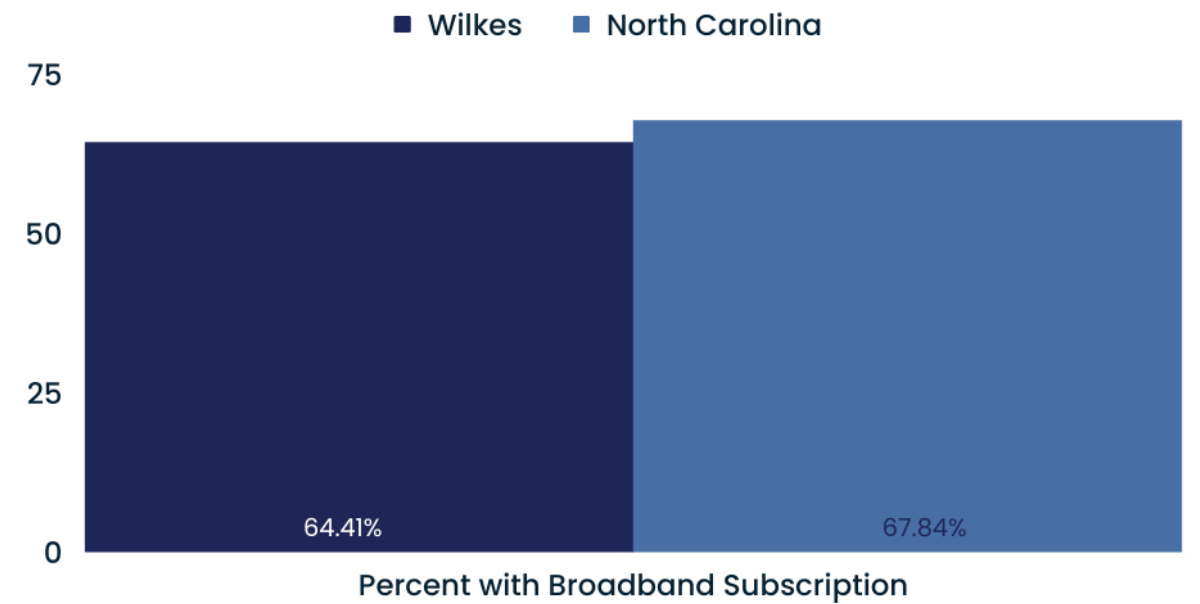


# Adoption

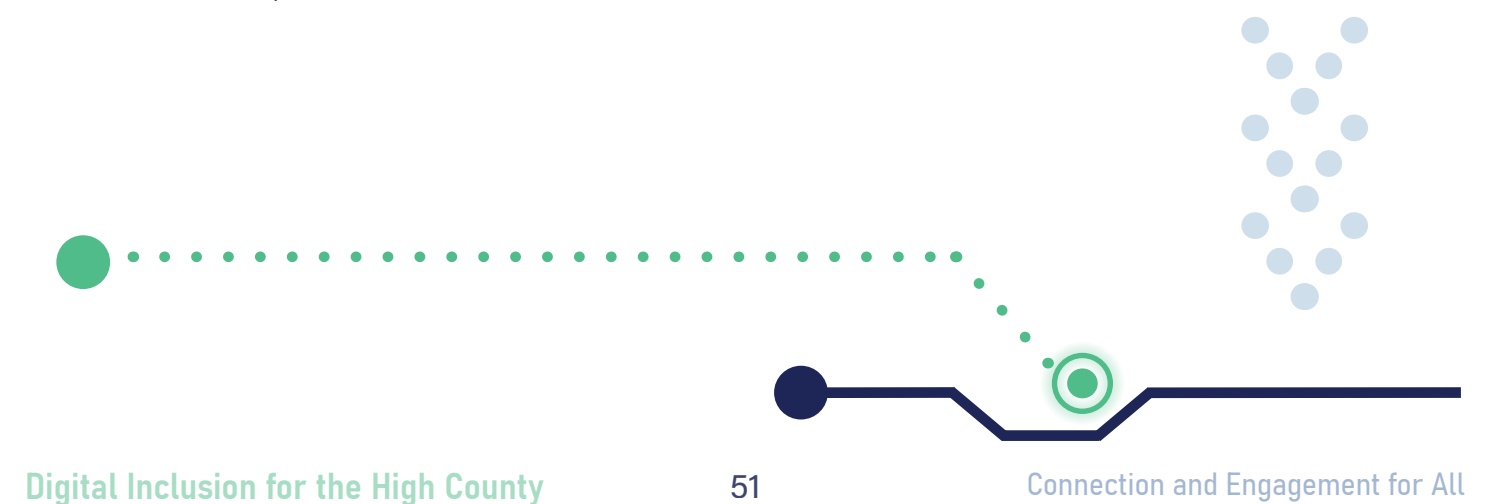
Adoption can largely be broken down into two categories, affordability, and access, yet relevancy still plays a role. Adoption obstacles for older adults largely manifests in the form of having a limited budget where a monthly internet subscription is considered best spent elsewhere (i.e., medications, etc.) or encountering application and confirmation issues when applying for ACP.

## WILKES INTERNET ADOPTION

Data retrieved from NC Broadband Adoption Index



- Resources from the Agricultural Extension to address the relevancy of broadband for the agricultural community (refer to "Why Broadband Matters to Farmers" in the Resources section).



# Afordability

## The Affordable Connectivity Program

- A federal benefit program offered through the Federal Communications Commission (FCC) that provides a discount of up to \$30 a month for internet service subscriptions for eligible households (or up to \$75 on qualifying Tribal lands) and a one-time discount of up to \$100 to purchase a device from participating providers if more than \$10 and less than \$50 is contributed towards the purchase. Households with an income at or below 200% of the Federal Poverty Guidelines are eligible, in addition to households where a member is a recipient of at least one of the following: Federal Pell Grant, SNAP, Medicaid, Free and Reduced-Price Lunch Program, Federal Housing Assistance, Supplemental Security Income, WIC, Veterans Pension or Survivor Benefits, Lifeline, Bureau of Indian Affairs General Assistance, Tribal TANF, Food Distribution Program on Indian Reservation, Tribal Head Start. Additional information and outreach materials can be found in the Resources section of this Plan.
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# Digital Literacy

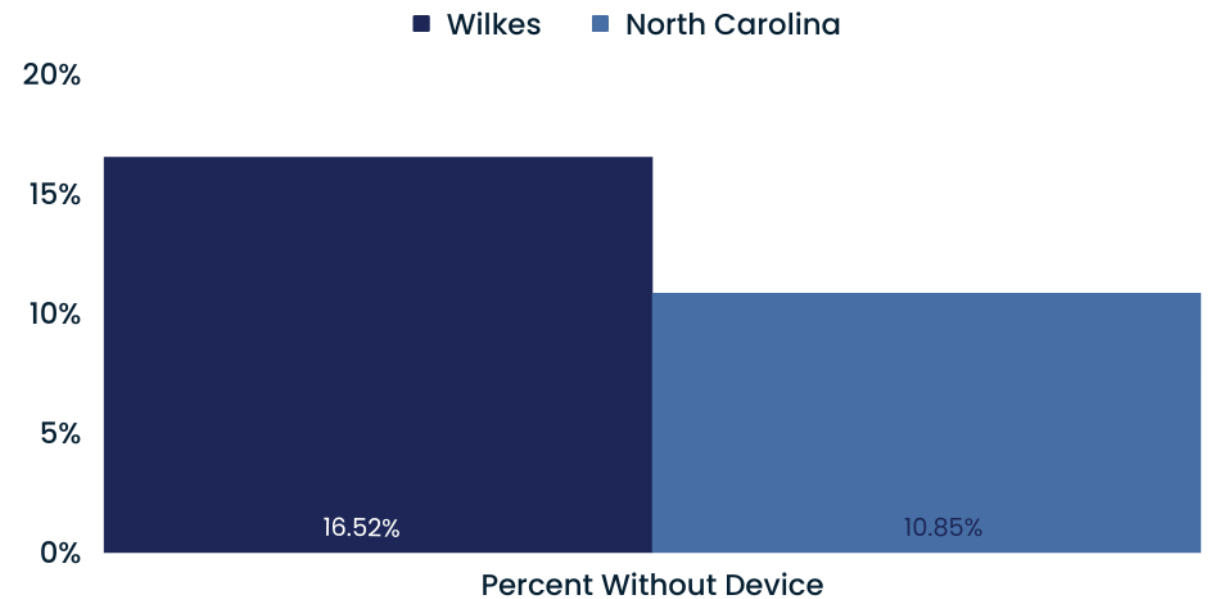
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  - Previous webinars
- Senior Planet
  - seniorplanet.org
  - Hotline: 888-713-3495
  - Tech Tip Videos
  - 1 on 1 Tech Tutoring
  - How to use Zoom
- Appalachian Regional Library
  - Book a Librarian
  - 336.838.2818 ext. 232
- Wilkes Community College Small Business Center
  - Entrepreneurial focus



# Device Acces

## WILKES DEVICE ACCESS

Data retrieved from NC Broadband Adoption Index



- E2D is a Davidson-based device refurbisher that collects used laptops from generous corporations and refurbishes them in student-led technology labs. They are welcoming conversations with Towns, Counties, and Organizations in the High Country to discuss corporate device donations and outlets to distribute devices.
- Wilkes County and Traphill Branch Public Library's offer:
  - Hotspots, laptops, and Kindle tablets are available for checkout
  - Print, Fax, Scan, and Copy capabilities
  - Public computers
- Wilkes County School System has 1:1 device to student program.



# Yancey



## Yancey

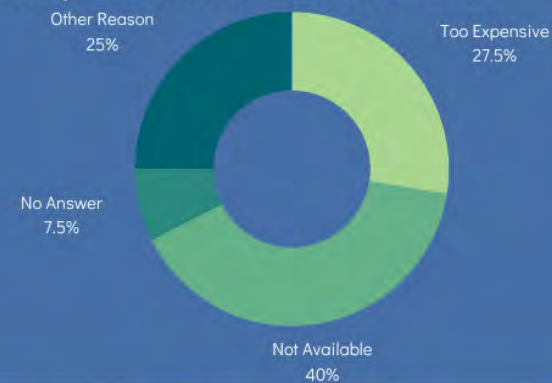
Data retrieved from Broadband Survey Data (General, Phone, and Farm) in January 2023

NC DIT Broadband Survey Respondents

**326** — 15.95% without internet (52)  
84.05% with internet (274)

**67** out of 216 with speeds under 25/3 mbps

Primary Reason for No Internet



Number Without Access to Cellular Service

**26** out of 326

2020 Population:  
18,491

NC Office of State Budget and Management

NC GREAT Grant  
Awarded in 2022

**72** 69 households  
3 businesses

**\$428.2k** grant amount

**\$75.6k** match amount

Photo Credit: Wilkes Chamber of Commerce

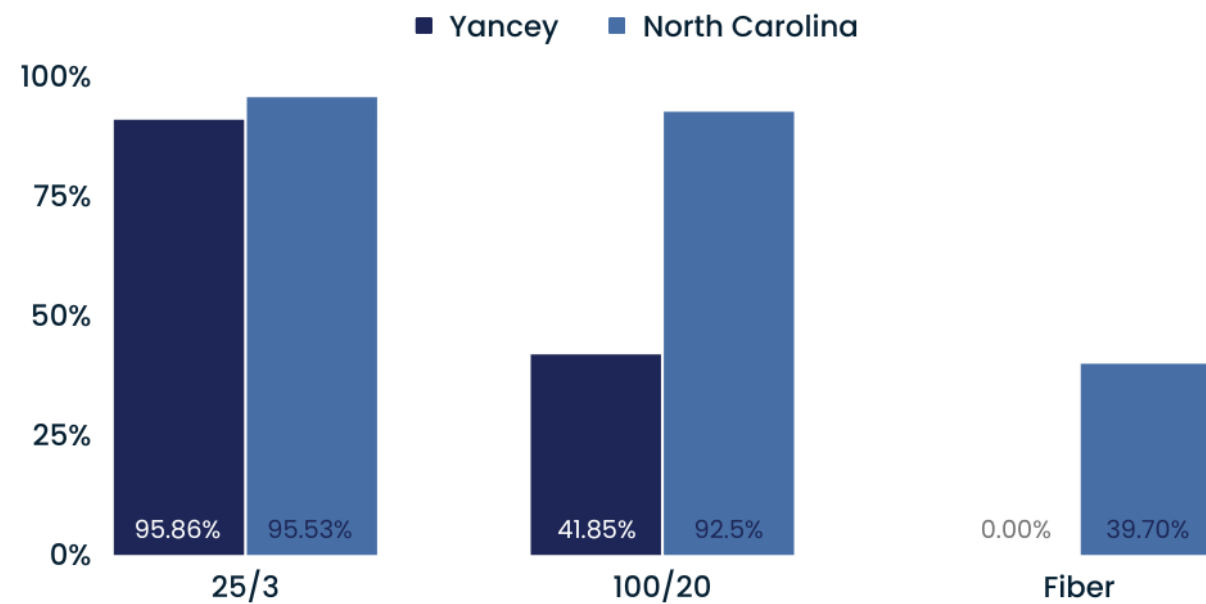


# Access

As discussed in the Overview section, data reported by ISPs via the FCC's Form 477 is known to be overreported. Therefore, there is room for improved accuracy in the data below when discussing internet accessibility.

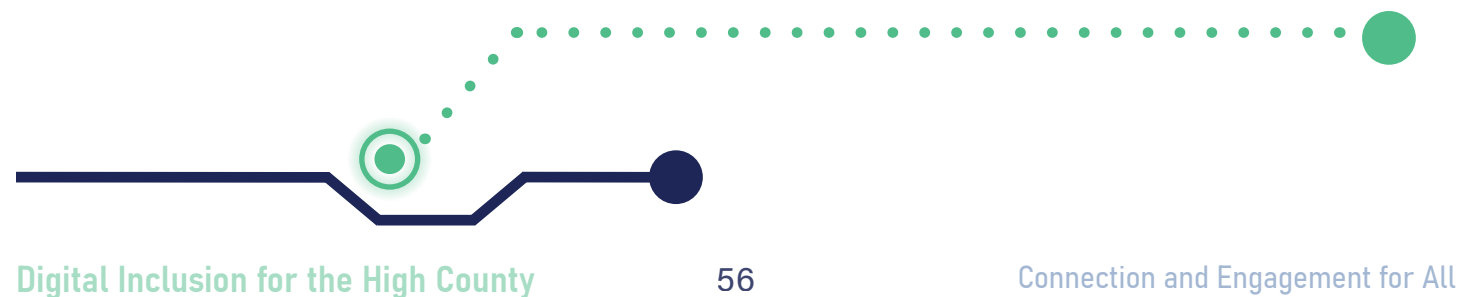
## YANCEY INTERNET AVAILABILITY

Data retrieved from NC Broadband Availability Index



### Free Public Wi-Fi Locations

- Downtown Burnsville
- Yancey County Public Library

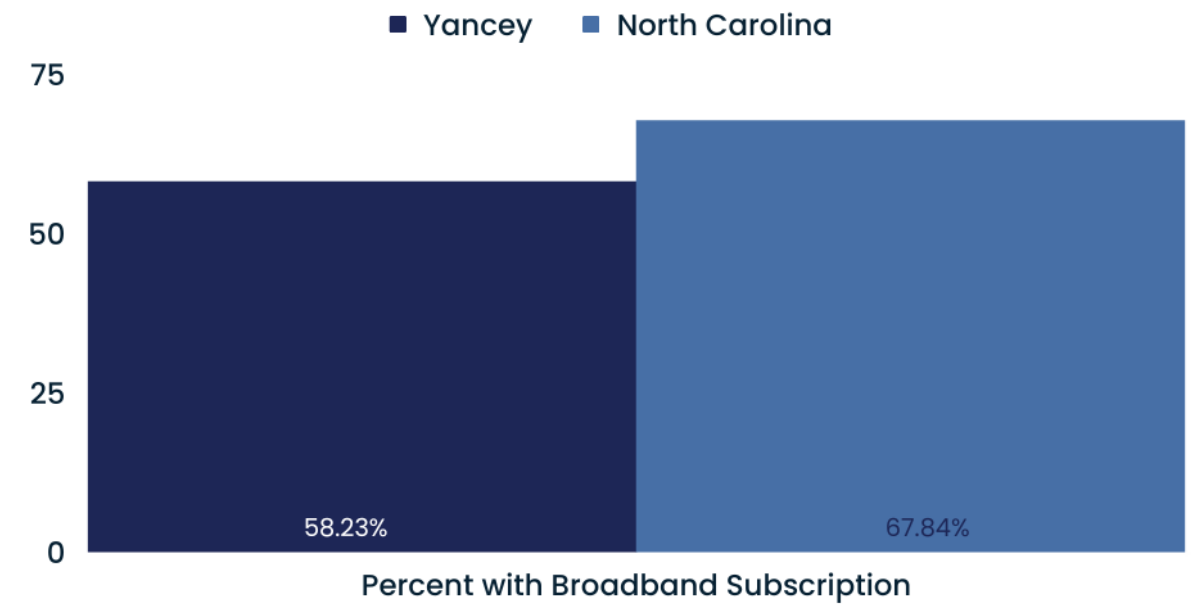


# Adoption

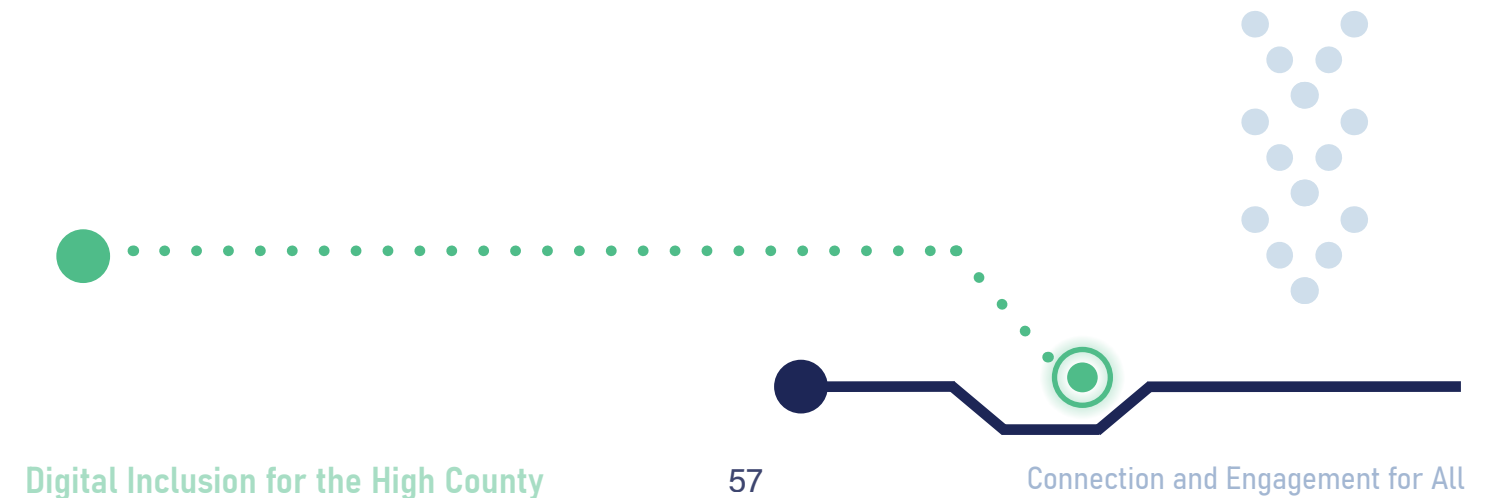
Adoption can largely be broken down into two categories, affordability, and access, yet relevancy still plays a role. Adoption obstacles for older adults largely manifests in the form of having a limited budget where a monthly internet subscription is considered best spent elsewhere (i.e., medications, etc.) or encountering application and confirmation issues when applying for ACP.

## YANCEY INTERNET ADOPTION

Data retrieved from NC Broadband Adoption Index



- Resources from the Agricultural Extension to address the relevancy of broadband for the agricultural community (refer to "Why Broadband Matters to Farmers" in the Resources section).



# Afordability

## The Affordable Connectivity Program

- A federal benefit program offered through the Federal Communications Commission (FCC) that provides a discount of up to \$30 a month for internet service subscriptions for eligible households (or up to \$75 on qualifying Tribal lands) and a one-time discount of up to \$100 to purchase a device from participating providers if more than \$10 and less than \$50 is contributed towards the purchase. Households with an income at or below 200% of the Federal Poverty Guidelines are eligible, in addition to households where a member is a recipient of at least one of the following: Federal Pell Grant, SNAP, Medicaid, Free and Reduced-Price Lunch Program, Federal Housing Assistance, Supplemental Security Income, WIC, Veterans Pension or Survivor Benefits, Lifeline, Bureau of Indian Affairs General Assistance, Tribal TANF, Food Distribution Program on Indian Reservation, Tribal Head Start. Additional information and outreach materials can be found in the Resources section of this Plan.
- Online and paper application in English and Spanish
- Outreach materials for marketing
- Free online ACP Program Certification.



# Digital Literacy

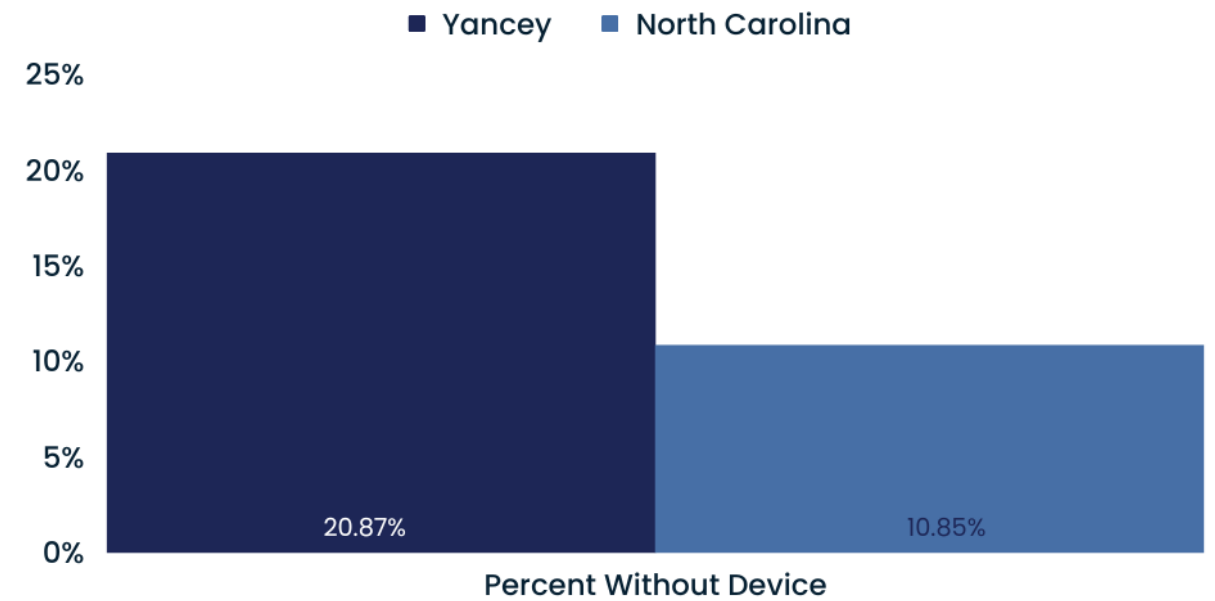
- GCF Global Resources for Anyone
  - English, Spanish, and Portuguese
  - Technology-focused topics
  - Wide range of topics
- Cyber Seniors
  - cyberseniors.org
  - Hotline: 1-844-217-3057
  - Previous webinars
- Senior Planet
  - seniorplanet.org
  - Hotline: 888-713-3495
  - Tech Tip Videos
  - 1 on 1 Tech Tutoring
  - How to use Zoom
- Yancey County Public Library offers technological assistance
  - 828.682.2600
  - Contact Form
- Mayland Community College Small Business Center
  - Entrepreneurial focus



# Device Acces

## YANCEY DEVICE ACCESS

Data retrieved from NC Broadband Adoption Index

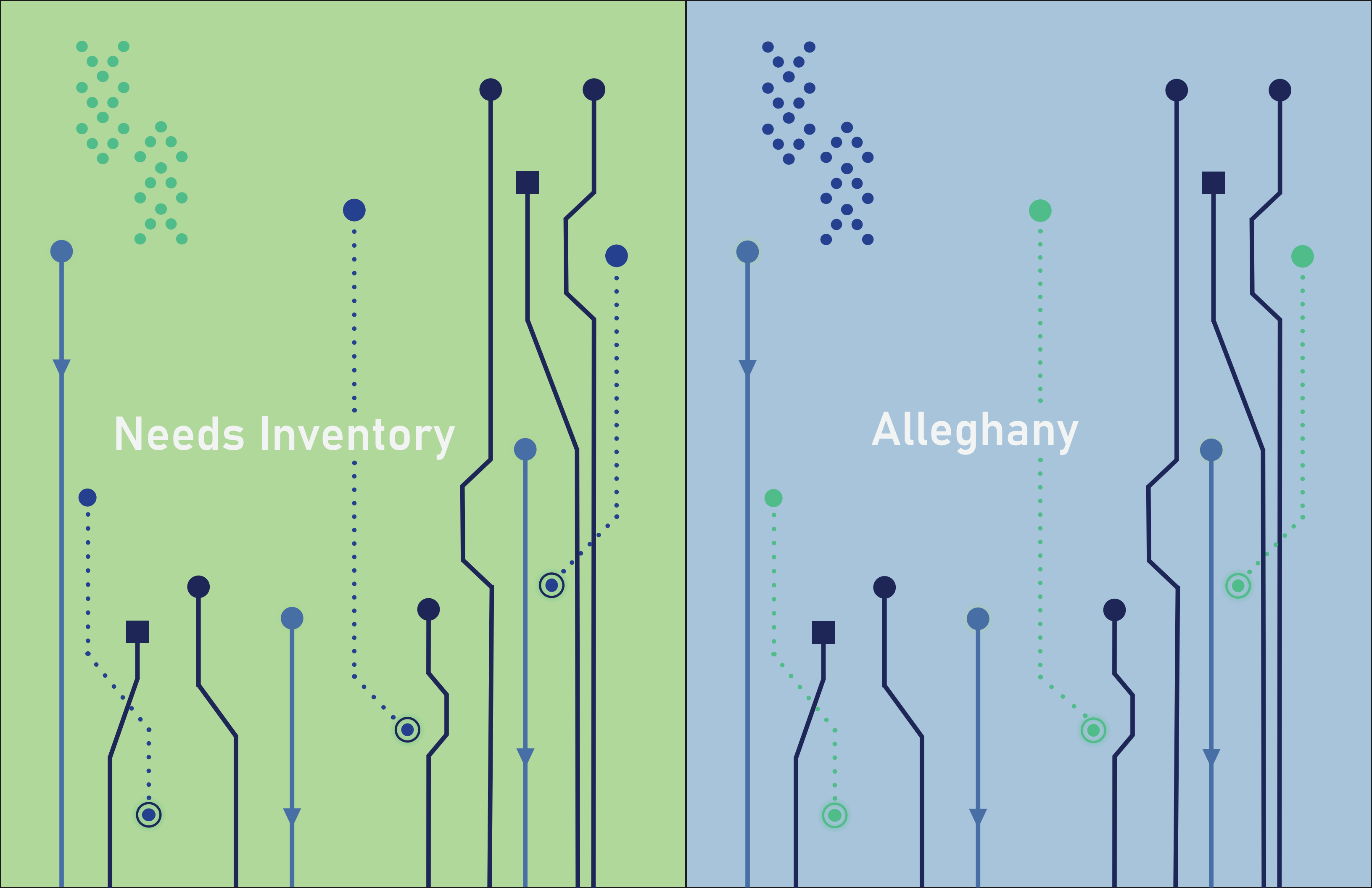


- E2D is a Davidson-based device refurbisher that collects used laptops from generous corporations and refurbishes them in student-led technology labs. They are welcoming conversations with Towns, Counties, and Organizations in the High Country to discuss corporate device donations and outlets to distribute devices.
- Yancey County School System has 1:1 device to student program at Mountain Heritage High School.



Needs Inventory

Alleghany

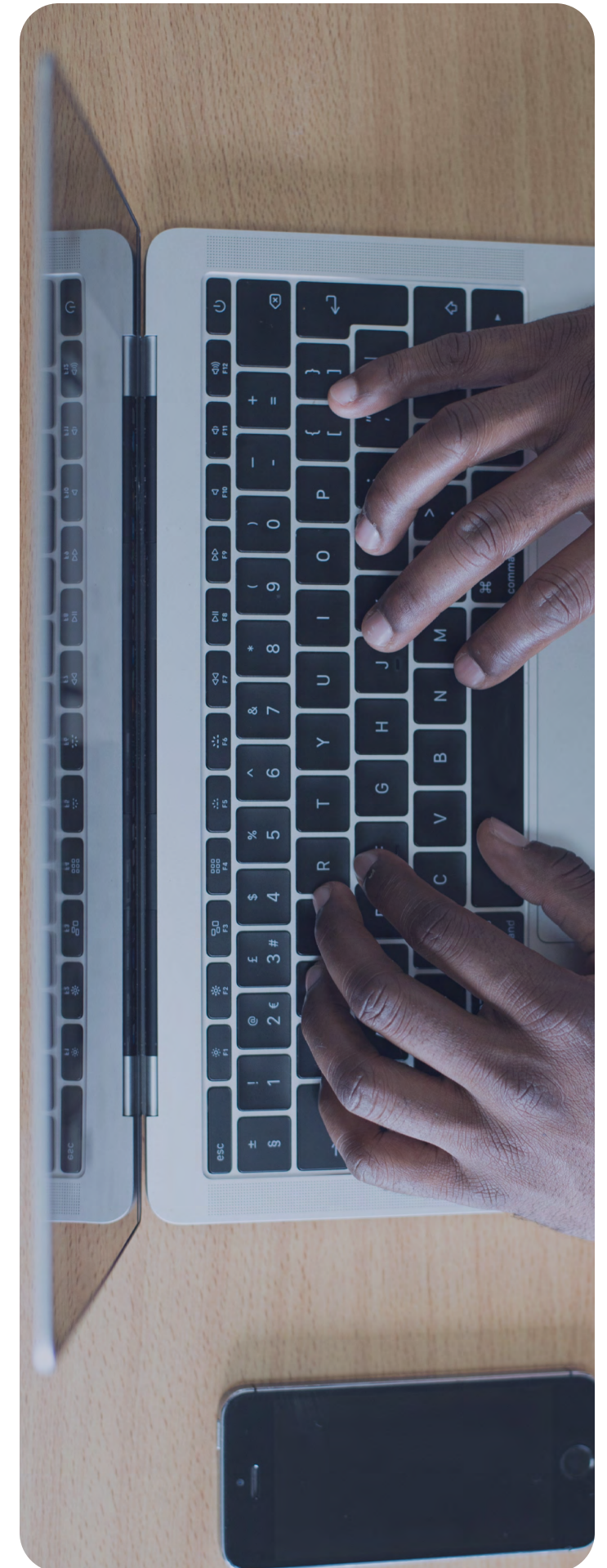


# Access

- Distribute and promote the NCDIT Broadband Survey County-wide to collect small scale data. This will provide more accurate information about served, unserved, and underserved areas.
- Prioritize free public Wi-Fi areas over hotspot distribution.
  - These free public Wi-Fi areas should include temperature control, seating, private spaces (for academic courses, recovery courses, telehealth, etc.), and transportation alternatives (public, rideshare, or multimodal).
  - Coordinate and communicate with volunteer fire departments and rural faith communities in coordination with Rural Faith Communities as Anchor Institutions at NC State University.
- Establish telehealth rooms with necessary diagnostic equipment.
- Create and regularly update an inventory and map of all free public Wi-Fi areas with corresponding attributes.
- Communicate with electric membership cooperatives (EMC) to understand capacity and interest in broadband internet business.
  - Provide Town/County support when entities apply for broadband funding and advocate for residential fiber.
  - French Broad EMC is a resource.
- Assist in extending hotspot subscriptions to institutions and organizations that have experienced success in their implementation (community health centers, Cooperative Extension offices, libraries, etc.).
  - This involvement of health centers and health departments is in accordance with the 2022 North Carolina State Health Improvement Plan.
- Catalogue all local internet subsidy programs that serve individuals and families in need of assistance.
  - Take necessary steps to discuss, consider, and acknowledge internet as a utility.
- Provide broadband infrastructure in development corridors to encourage business expansion and openings.
  - Communicate with ISPs and Blue Ridge EMC to understand the location of both Lit and Dark Fiber to best coordinate economic development potential and relay information to Economic Development Commissions and Chambers of Commerce.
- Offer on-site kiosks to allow individuals who do not have an adequate device (e.g., those who rely on smartphones) to complete online documents at appropriate locations.



Photo by Cytonn Photography on Unsplash



# Adoption

*Adoption can largely be broken down into two categories, affordability, and access, yet relevancy still plays a role.*

*Adoption obstacles for older adults largely manifests in the form of having a limited budget where a monthly internet subscription is considered best spent elsewhere (i.e., medications, etc.) or encountering application and confirmation issues when applying for ACP.*

- Distribute and market the NCDIT Broadband Survey County-wide to collect small scale data. This will provide more accurate information about served, unserved, and underserved areas.
  - Doing so will assist in understanding the breakdown of those who cannot afford an internet subscription versus those who do not have access to internet.
- Aim to have potential funding be closely connected to farmers and be from a trusted source when coordinating with Cooperative Extension Offices and other agricultural organizations.
- Create specific pools of money within appropriate community organizations to go towards paying internet subscriptions for individuals and families.

Photo by David Dvoracek on Unsplash



# Affordability

- Distribute and market ACP through all Town and County avenues and beyond while providing sign-up assistance or information of who to contact for assistance.
  - Allegheny Council on Aging, Wilkes Community College, Internet Service Providers, Area Agency on Aging, etc.
- Communicate and coordinate with Allegheny Cares and similar organizations to provide financial assistance for internet subscriptions and device and accessory costs.
- Provide information and assistance regarding ACP to HUD Affordable Housing residents.
- Incorporate ACP eligibility and application when applying for other services (e.g., Family Caregiver Support Program, SNAP/EBT, W.I.C., Senior Farmers Market Nutrition Program, etc.) at both the local government level and community organization level.
- Pursue and promote ACP training opportunities (in-person and/or remote) to provide appropriate and informed assistance in community organizations, school systems, libraries, and local government.

- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian Regional Library, and E2D.
  - Provide on-site ACP information and assistance.
- Contract with willing stakeholders to create and promote an ACP Sign-Up Day.
- **Distribute ACP Certification opportunities to train individuals.**
- **Create and publish Digital Opportunity tab with ACP resources on Allegheny County Public Library website.**



Photo by Kostiantyn Li on Unsplash

# Digital Literacy

- Distribute pre-existing digital skill tutorials, webinars, and toolkits through senior centers, school systems, Town and County networks, community organizations, Agricultural Extension Offices, and beyond. Refer to resources section of the Plan.
- Provide 1 on 1 in-person technical assistance for older adults at senior centers, libraries, Extension Offices, and beyond.
  - Staffing could be provided by Wilkes Community College, High School students, volunteers from ASU, and beyond.
  - Additionally, Cooperative Extension staff can undergo training in coordination with the Cooperative Extension's Broadband Access and Education Coordinator to provide in-house technical assistance.
- Distribute technical assistance resources for older adults through senior centers, Area Agency on Aging, Social Services, and beyond.
  - Cyber Seniors: toll free 1-844-217-3057
  - Senior Planet: 888-713-3495
  - Coordinate with AARP Mountain Region for addition services and opportunities
- Foster partnerships between healthcare systems and older adults to ensure they have the skills to appropriately participate in telehealth options.
  - Incorporate telehealth digital literacy in available resources.
- Reach the agricultural community and older adults in agriculture through coordination with Cooperative Extension Offices and other agricultural organizations (e.g., Blue Ridge Women in Agriculture) to assist and distribute digital literacy resources that address entrepreneurship, business, agriculture, and more.
- Ensure that Cooperative Extension Offices maintain contact with the Cooperative Extension's Broadband Access and Education Coordinator and maximize digital opportunity opportunities.
- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian and AMY Regional Libraries, and E2D.
  - Free assistance and troubleshooting of Macs, PCs, and smartphones.
- Begin conversations with stakeholders and community organizations to host a Device Diagnostic Day of their own.
- Ensure that all toolkits and digital literacy assistance are written at a 5<sup>th</sup> grade reading level in both English and Spanish.

# Device Access

- Prioritize the distribution of devices directly to individuals and families who will keep the devices as opposed to device rental programs that create a cycle of inaccessibility.
- Contract with E2D for device distributions through libraries, HUD Affordable Housing opportunities, school systems, community organizations, and individuals and families.
  - Begin correspondence with E2D to understand their current distribution protocol and methodology in Mecklenburg's Affordable Housing opportunities.
- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian and AMY Regional Libraries, and E2D.
  - Ensure E2D devices are available at the event.
- Provide access to devices such as printers and scanners to reduce accessory costs for small business owners, entrepreneurs, and beyond.
  - Include accessory device availability in public Wi-Fi inventory map.
- Distribute E2D laptop donor information through Chambers of Commerce, Economic Development Commissions, and other Town and County networks to inform businesses and manufacturers of better ways to dispose of unwanted devices that will ultimately return to the hands of a High Country resident.

Photo by Helena Lopes on Unsplash

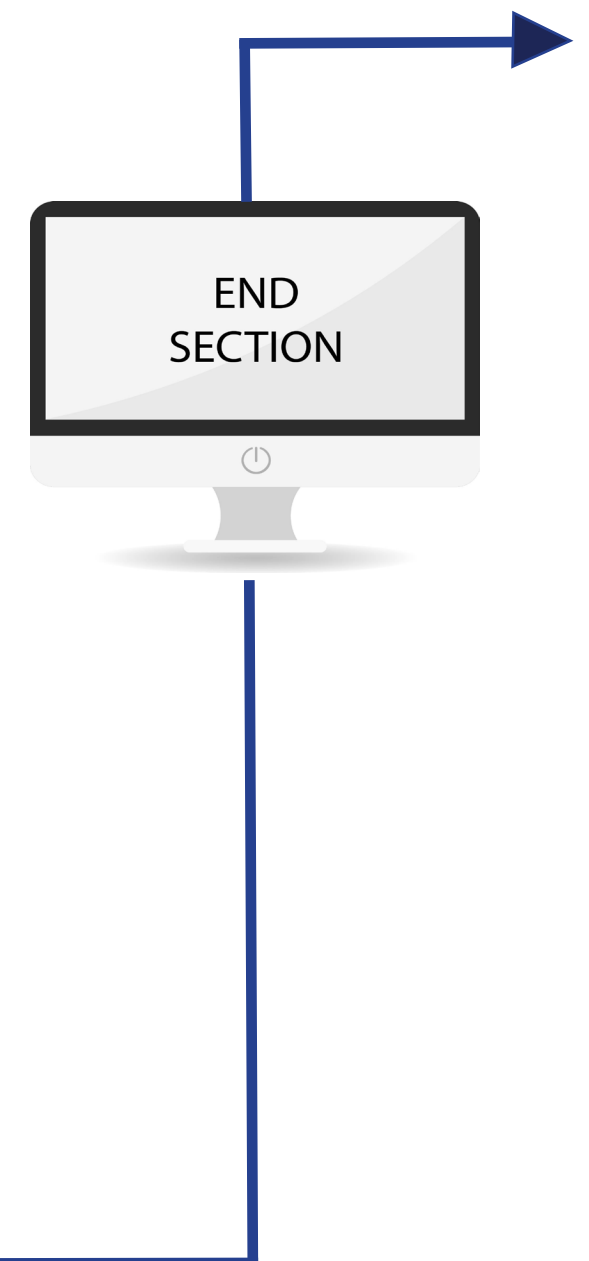


# Additional Recommendations

- Create a clearinghouse of resources addressed in this Plan to publish on Town and County websites.
  - Distribute this resource to other stakeholders (e.g., libraries, senior centers, Cooperative Extensions, school systems, etc.)
  - Ensure that information is updated and maintained regularly.
- Assist in the creation and distribution of an annual Device Distribution Impact Report in partnership with E2D, HCCOG, and Appalachian State University.
  - This report will explore where devices donated by Appalachian State University were placed after being refurbished by E2D and highlight specific stories.
- Communicate with the NC Farmworker Health Program within the Office of Rural Health to coordinate, learn of new resources, and implement programs within the agricultural community in partnership with Town and County departments and community organizations.
  - 800-533-8847
  - Jocelyn Romina Santillán-Deras: [jocelyn.santillan@dhhs.nc.gov](mailto:jocelyn.santillan@dhhs.nc.gov)
- Identify and partner with local/regional I.T. businesses to refurbish personal devices gathered from Community Tech Drives to reduce E-waste and provide a usable internet-enabled device to individuals in need.
  - Compensation for labor can be in the form of tax incentives as seen with the digital opportunity effort of Reconnecting Reentry, Asheville-based non-profit.
  - Communicate with Reconnecting Reentry on best practices.
  - A device refurbisher must be identified before the creation of Community Tech Drives.
- Hire a part-time or full-time digital navigator to serve as a permanent digital opportunity contact point and a reliable individual to travel accordingly within the County/Region.
- Gauge Cooperative Extension interest in increasing Visit NC Farms App capacity to assist farmers, growers, and producers with limited digital literacy and internet access in having an online presence.



- Minimize up-front last-mile (service lines from ISPs to a specific home/business) construction costs for home and business owners.
  - Communicate with French Broad EMC who included in their Residential Fiber Internet Service Agreement Terms and Conditions that they “agree to cover the first \$2,500.00 towards the installation of fiber-optic Internet service.”
  - Investigate and discuss the feasibility of having customers pay back last-mile construction costs with a fee added to their monthly bill to remove the obstacle of large up-front costs while also ensuring proper reimbursement.
- Convene a meeting with Cooperative Extension Agents, Chambers of Commerce, and Blue Ridge Women in Agriculture to discuss the role that their producer profiles play for those with limited digital literacy skills and internet access.
  - Address ways to minimize financial barriers in becoming a Chamber member with private donations.





# Ashe

## Access

- Distribute and market the NCDIT Broadband Survey County-wide to collect small scale data. This will provide more accurate information about served, unserved, and underserved areas.
  - Doing so will assist in acquiring broadband funding, appropriately challenging FCC data, and providing a more accurate picture of coverage availability for ISPs.
- Prioritize free public Wi-Fi areas over hotspot distribution.
  - Coordinate with Riverview Community Center and similar organizations.
  - These free public Wi-Fi areas should include temperature control, seating, private spaces (for academic courses, recovery courses, telehealth, etc.), and transportation alternatives (public, rideshare, or multimodal).
  - Coordinate and communicate with volunteer fire departments and rural faith communities in coordination with Rural Faith Communities as Anchor Institutions at NC State University.
- Support and prioritize the construction of a public library in Lansing.
  - This is in alignment with Lansing's 2019 Land Use Plan where 89.7% of survey respondents supported the creation of a public library in Lansing with 34.6% of respondents supporting such a project through monetary donations. Access to computers and Wi-Fi was the second highest ranking service requested by respondents.
- Establish telehealth rooms with necessary diagnostic equipment.
- Create and regularly update an inventory and map of all free public Wi-Fi areas with corresponding attributes.
- Communicate with electric membership cooperatives (EMC) to understand capacity and interest in broadband internet business.
  - Provide Town/County support when entities apply for broadband funding.
  - Advocate for residential fiber.
  - Use French Broad Electric Membership Cooperative as a resource.

- Assist in extending hotspot subscriptions to institutions and organizations that have experienced success in their implementation (community health centers, Cooperative Extension offices, libraries, etc.).
  - This involvement of health centers and health departments is in accordance with the 2022 North Carolina State Health Improvement Plan.
- Catalogue all local internet subsidy programs that serve individuals and families in need of assistance.
  - Take necessary steps to discuss, consider, and acknowledge internet as a utility.
- Provide broadband infrastructure in development corridors to encourage business expansion and openings.
  - Communicate with ISPs and Blue Ridge EMC to understand the location of both Lit and Dark Fiber to best coordinate economic development potential and relay information to Economic Development Commissions and Chambers of Commerce.
- Offer on-site kiosks to allow individuals who do not have an adequate device (e.g., those who rely on smartphones) to complete online documents at appropriate locations.



Photo by Paul Hanaoka on Unsplash

## Adoption

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- Create specific pools of money within appropriate community organizations to go towards paying internet subscriptions for individuals and families.



Photo by Surface on Unsplash

# Affordability

- Distribute and market ACP through all Town and County avenues and beyond while providing sign-up assistance or information of who to contact for assistance.
  - Senior Centers, Wilkes Community College, Internet Service Providers, Area Agency on Aging, etc.
- Provide information and assistance regarding ACP to HUD Affordable Housing residents.
- Incorporate ACP eligibility and application when applying for other services (e.g., Family Caregiver Support Program, SNAP/EBT, W.I.C., Senior Farmers Market Nutrition Program, etc.) at both the local government level and community organization level.
- Pursue and promote ACP training opportunities (in-person and/or remote) to provide appropriate and informed assistance in community organizations, school systems, libraries, and local government.
- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian Regional Library, and E2D.
  - Provide on-site ACP information and assistance.
- Coordinate with NC Tech Paths and HCCOG to create an ACP Sign-Up Day.

# Digital literacy

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  - Senior Planet: 888-713-3495
  - Coordinate with AARP Mountain Region for additional services and opportunities

- Foster partnerships between healthcare systems and older adults to ensure they have the skills to appropriately participate in telehealth options.
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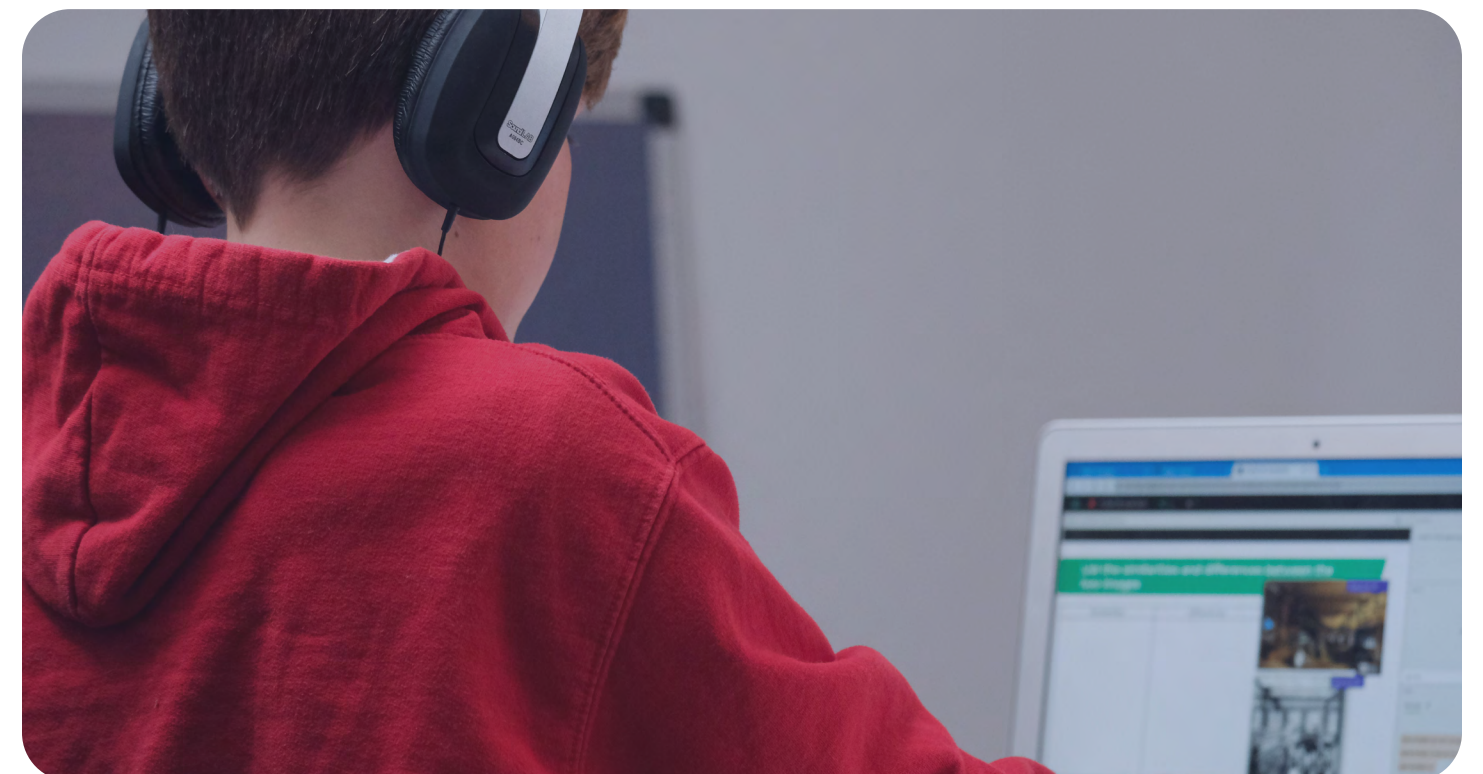


Photo by Compare Fubre on Unsplash

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- Distribute E2D laptop donor information through Chambers of Commerce, Economic Development Commissions, and other Town and County networks to inform businesses and manufacturers of better ways to dispose of unwanted devices that will ultimately return to the hands of a High Country resident.
- **Support and pursue funding opportunities for a Mobile Digital Lab operated by the Ashe County Agricultural Extension Office.**
  - This Mobile Digital Lab will include internet connected devices for residents to use and serve as a traveling WiFi area.

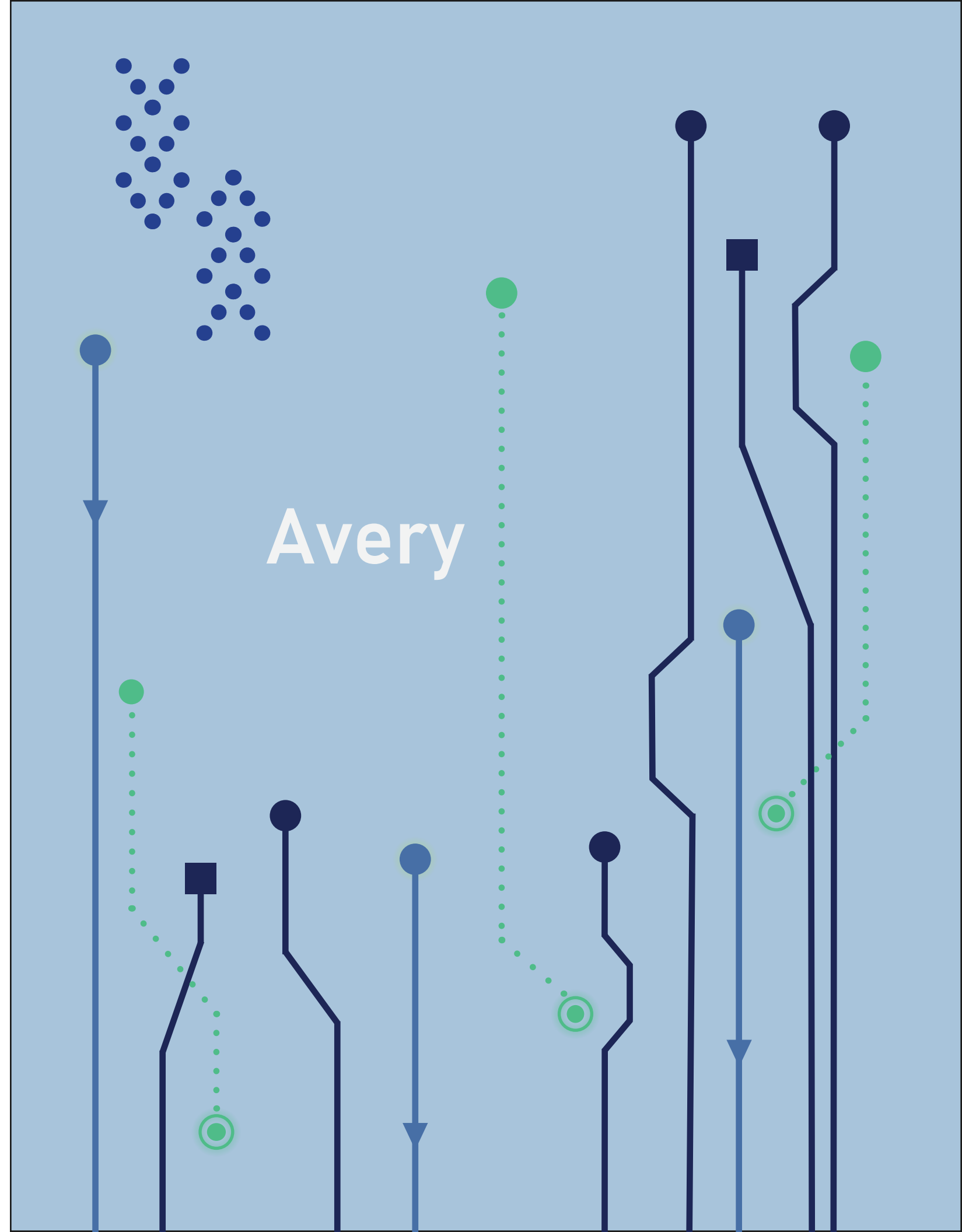
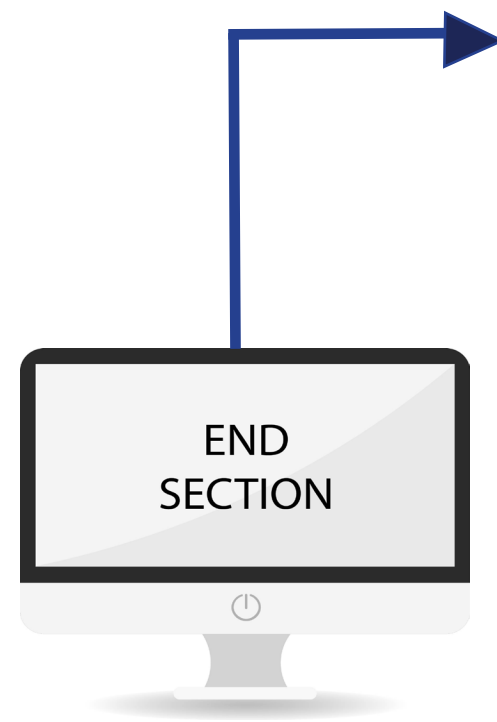


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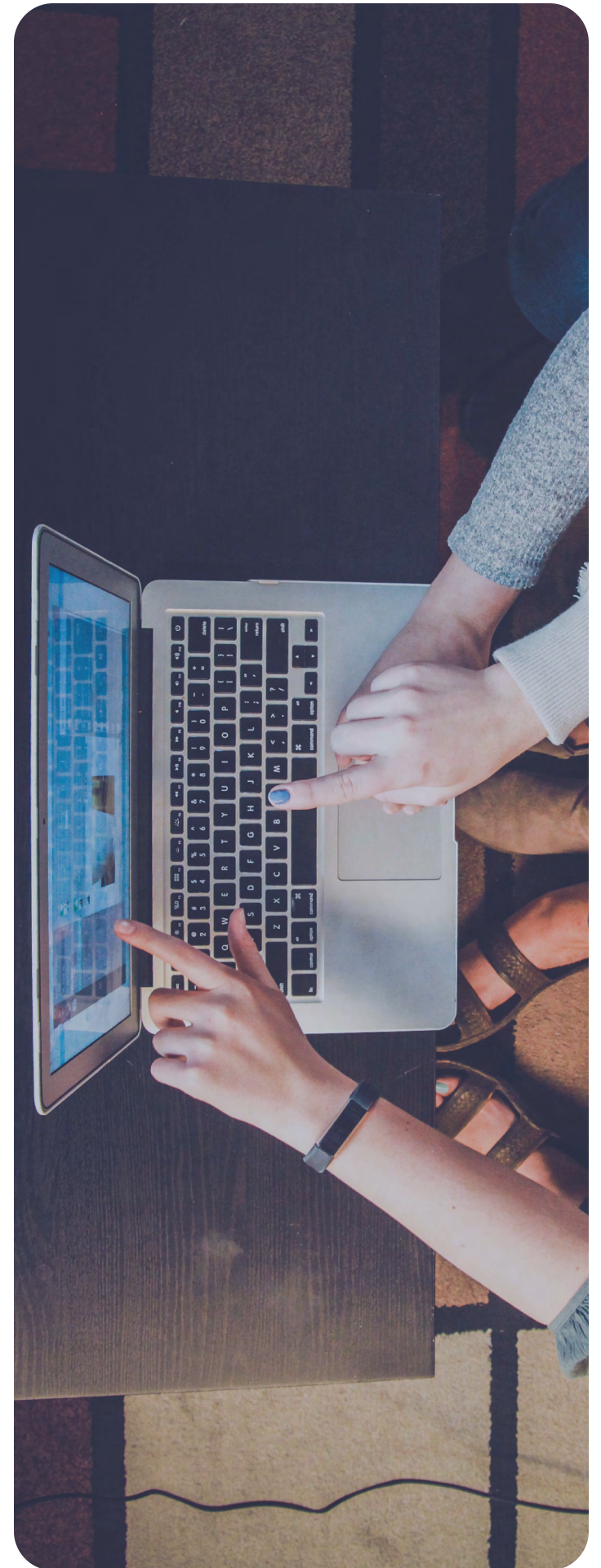


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Photo by John Schnobrich on Unsplash



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- Pursue and promote ACP training opportunities (in-person and/or remote) to provide appropriate and informed assistance in community organizations, school systems, libraries, and local government.

- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian Regional Library, and E2D.
  - Provide on-site ACP information and assistance.
- Create a Community ACP Sign Up Day.
- Support W.A.M.Y. Community Action in subsidizing internet subscription costs for clients and promote their ability to do so.



# Digital literacy

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Photo by Ehimetalor Akhere Unuabona on Unsplash

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- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian and AMY Regional Libraries, and E2D.
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- Provide access to devices such as printers and scanners to reduce accessory costs for small business owners, entrepreneurs, and beyond.
  - Include accessory device availability in public Wi-Fi inventory map.
- Distribute E2D laptop donor information through Chambers of Commerce, Economic Development Commissions, and other Town and County networks to inform businesses and manufacturers of better ways to dispose of unwanted devices that will ultimately return to the hands of a High Country resident.



# Additional Recommendations

- Implement a Digital Outreach Librarian within AMY Regional Library to travel throughout Avery, Mitchell, and Yancey counties in coordination with the Book Mobile to assist with digital literacy development, device distribution, hotspot distribution, and serve as a traveling public Wi-Fi area.
  - AMY Regional Library discussed the potential to match funds via the Morrison Charitable Trust for the implementation of such a position.
- Create a clearinghouse of resources addressed in this Plan to publish on Town and County websites.
  - Distribute this resource to other stakeholders (e.g., libraries, senior centers, Cooperative Extensions, school systems, etc.)
  - Ensure that information is updated and maintained regularly.
- Assist in the creation and distribution of an annual Device Distribution Impact Report in partnership with E2D, HCCOG, and Appalachian State University.
  - This report will explore where devices donated by Appalachian State University were placed after being refurbished by E2D and highlight specific stories.
- Communicate with the NC Farmworker Health Program within the Office of Rural Health to coordinate, learn of new resources, and implement programs within the agricultural community in partnership with Town and County departments and community organizations.
  - 800-533-8847
  - Jocelyn Romina Santillán-Deras: [jocelyn.santillan@dhhs.nc.gov](mailto:jocelyn.santillan@dhhs.nc.gov)
- Identify and partner with local/regional I.T. businesses to refurbish personal devices gathered from Community Tech Drives to reduce E-waste and provide a usable internet-enabled device to individuals in need.
  - Compensation for labor can be in the form of tax incentives as seen with the digital opportunity effort of Reconnecting Reentry, Asheville-based non-profit.
  - Communicate with Reconnecting Reentry on best practices.
  - A device refurbisher must be identified before the creation of Community Tech Drives.

- Hire a part-time or full-time digital navigator to serve as a permanent digital opportunity contact point and a reliable individual to travel accordingly within the County/Region.
- Minimize up-front last-mile (service lines from ISPs to a specific home/business) construction costs for home and business owners.
  - Communicate with French Broad EMC who included in their Residential Fiber Internet Service Agreement Terms and Conditions that they “agree to cover the first \$2,500.00 towards the installation of fiber-optic Internet service.”
  - Investigate and discuss the feasibility of having customers pay back last-mile construction costs with a fee added to their monthly bill to remove the obstacle of large up-front costs while also ensuring proper reimbursement.
- Gauge Cooperative Extension interest in increasing Visit NC Farms App capacity to assist farmers, growers, and producers with limited digital literacy and internet access in having an online presence.
- Convene a meeting with Cooperative Extension Agents, Chambers of Commerce, and Blue Ridge Women in Agriculture to discuss the role that their producer profiles play for those with limited digital literacy skills and internet access.
  - Address ways to minimize financial barriers in becoming a Chamber member with private donations.





# Mitchell

## Access

- Distribute and market the NCDIT Broadband Survey County-wide to collect small scale data. This will provide more accurate information about served, unserved, and underserved areas.
  - Doing so will assist in acquiring broadband funding, appropriately challenging FCC data, and providing a more accurate picture of coverage availability for ISPs.
- **Contract a consultant in coordination with Yancey County to collect small-scale data regarding the state of digital opportunity for both Yancey and Mitchell County residents to better understand potential priorities.**
- Prioritize free public Wi-Fi areas over hotspot distribution.
  - These free public Wi-Fi areas should include temperature control, seating, private spaces (for academic courses, recovery courses, telehealth, etc.), and transportation alternatives (public, rideshare, or multimodal).
  - Coordinate and communicate with volunteer fire departments and rural faith communities in coordination with Rural Faith Communities as Anchor Institutions at NC State University.
- Establish telehealth rooms with necessary diagnostic equipment.
- Create and regularly update an inventory and map of all free public Wi-Fi areas with corresponding attributes.
- Communicate with electric membership cooperatives (EMC) to understand capacity and interest in broadband internet business.
  - Provide Town/County support when entities apply for broadband funding.
  - Advocate for residential fiber.
  - Use French Broad Electric Membership Cooperative as a resource.
- Assist in extending hotspot subscriptions to institutions and organizations that have experienced success in their implementation (community health centers, Cooperative Extension offices, libraries, etc.).
  - This involvement of health centers and health departments is in accordance with the 2022 North Carolina State Health Improvement Plan.
- Catalogue all local internet subsidy programs that serve individuals and families in need of assistance.
  - Take necessary steps to discuss, consider, and acknowledge internet as a utility.

- Provide broadband infrastructure in development corridors to encourage business expansion and openings.
- Offer on-site kiosks to allow individuals who do not have an adequate device (e.g., those who rely on smartphones) to complete online documents at appropriate locations.

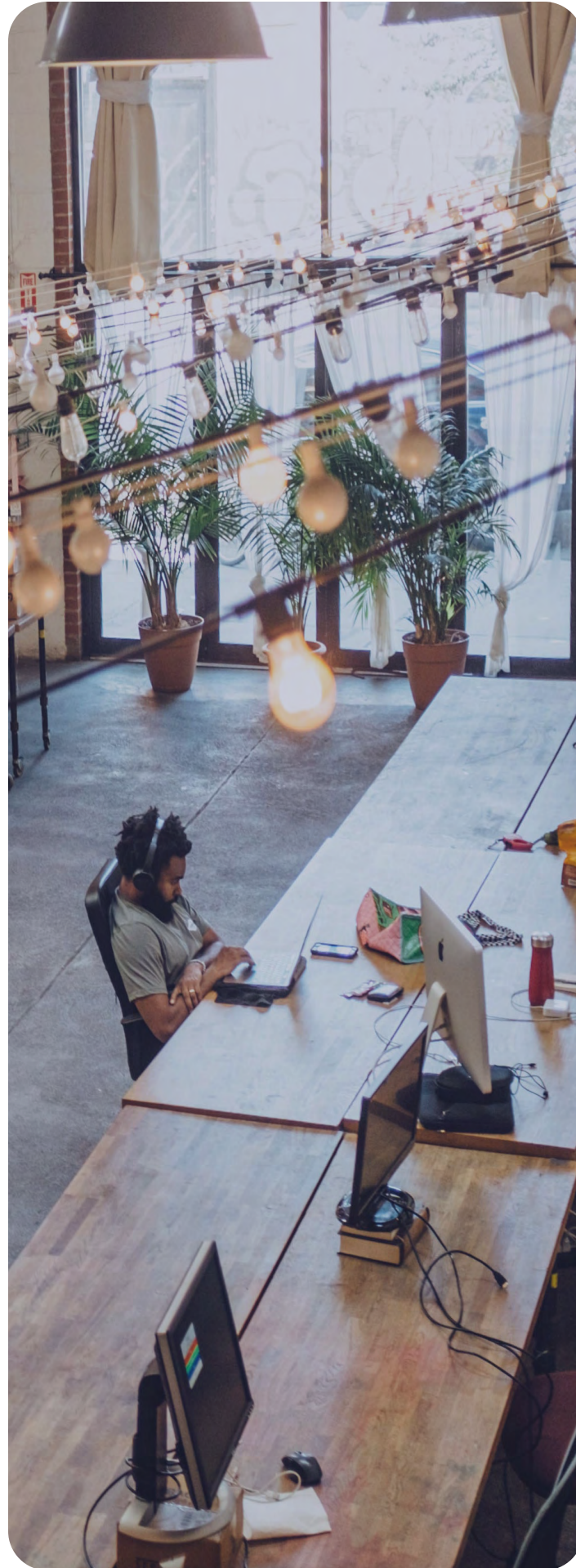


Photo by Shridhar Gupta on Unsplash

## Adoption

*Adoption can largely be broken down into two categories, affordability, and access, yet relevancy still plays a role. Adoption obstacles for older adults largely manifests in the form of having a limited budget where a monthly internet subscription is considered best spent elsewhere (i.e., medications, etc.) or encountering application and confirmation issues when applying for ACP.*

- Distribute and market the NCDIT Broadband Survey County-wide to collect small scale data. This will provide more accurate information about served, unserved, and underserved areas.
  - Doing so will assist in understanding the breakdown of those who cannot afford an internet subscription versus those who do not have access to internet.
- Aim to have potential funding be closely connected to farmers and be from a trusted source when coordinating with Cooperative Extension Offices and other agricultural organizations.
- Create specific pools of money within appropriate community organizations to go towards paying internet subscriptions for individuals and families.

## Affordability

- Distribute and market ACP through all Town and County avenues and beyond while providing sign-up assistance or information of who to contact for assistance.
  - Senior Centers, Lees-McRae College, Internet Service Providers, Area Agency on Aging, etc.
- Provide information and assistance regarding ACP to HUD Affordable Housing residents.
- Incorporate ACP eligibility and application when applying for other services (e.g., Family Caregiver Support Program, SNAP/EBT, W.I.C., Senior Farmers Market Nutrition Program, etc.) at both the local government level and community organization level.
- Pursue and promote ACP training opportunities (in-person and/or remote) to provide appropriate and informed assistance in community organizations, school systems, libraries, and local government.
- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian Regional Library, and E2D.
  - Provide on-site ACP information and assistance.

- Create an Community ACP Sign-Up Day.
- Support W.A.M.Y. Community Action in subsidizing internet subscription costs for clients and promote their ability to do so.



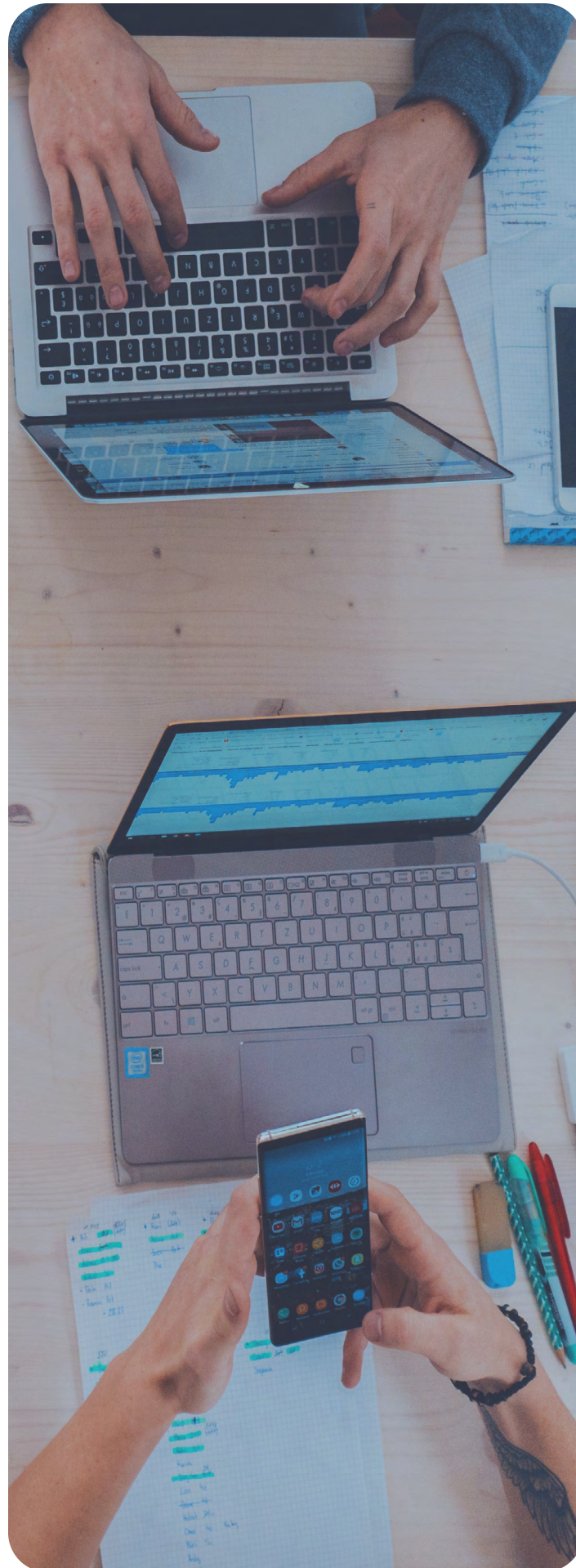
Photo by micheile dot com on Unsplash

## Digital literacy

- Distribute pre-existing digital skill tutorials, webinars, and toolkits through senior centers, school systems, Town and County networks, community organizations, Agricultural Extension Offices, and beyond. Refer to resources section of the Plan.
- Provide 1 on 1 in-person technical assistance for older adults at senior centers, libraries, Extension Offices, and beyond.
  - Staffing could be provided by Wilkes Community College, High School students, volunteers from ASU, and beyond.
  - Additionally, Cooperative Extension staff can undergo training in coordination with the Cooperative Extension's Broadband Access and Education Coordinator to provide in-house technical assistance.
- Distribute technical assistance resources for older adults through senior centers, Area Agency on Aging, Social Services, and beyond.
  - Cyber Seniors: toll free 1-844-217-3057
  - Senior Planet: 888-713-3495
  - Coordinate with AARP Mountain Region for addition services and opportunities
- Foster partnerships between healthcare systems and older adults to ensure they have the skills to appropriately participate in telehealth options.
  - Incorporate telehealth digital literacy in available resources.
- Reach the agricultural community and older adults in agriculture through coordination with Cooperative Extension Offices and other agricultural organizations (e.g., Blue Ridge Women in Agriculture) to assist and distribute digital literacy resources that address entrepreneurship, business, agriculture, and more.
- Ensure that Cooperative Extension Offices maintain contact with the Cooperative Extension's Broadband Access and Education Coordinator and maximize digital opportunities.
- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian and AMY Regional Libraries, and E2D.
  - Free assistance and troubleshooting of Macs, PCs, and smartphones.
- Begin conversations with stakeholders and community organizations to host a Device Diagnostic Day of their own.
- Ensure that all toolkits and digital literacy assistance are written at a 5<sup>th</sup> grade reading level in both English and Spanish.

# Device Access

- Prioritize the distribution of devices directly to individuals and families who will keep the devices as opposed to device rental programs that create a cycle of inaccessibility.
- Contract with E2D for device distributions through libraries, HUD Affordable Housing opportunities, school systems, community organizations, and individuals and families.
  - Begin correspondence with E2D to understand their current distribution protocol and methodology in Mecklenburg's Affordable Housing opportunities.
- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian and AMY Regional Libraries, and E2D.
  - Ensure E2D devices are available at the event.
- Provide access to devices such as printers and scanners to reduce accessory costs for small business owners, entrepreneurs, and beyond.
  - Include accessory device availability in public Wi-Fi inventory map.
- Distribute E2D laptop donor information through Chambers of Commerce, Economic Development Commissions, and other Town and County networks to inform businesses and manufacturers of better ways to dispose of unwanted devices that will ultimately return to the hands of a High Country resident.



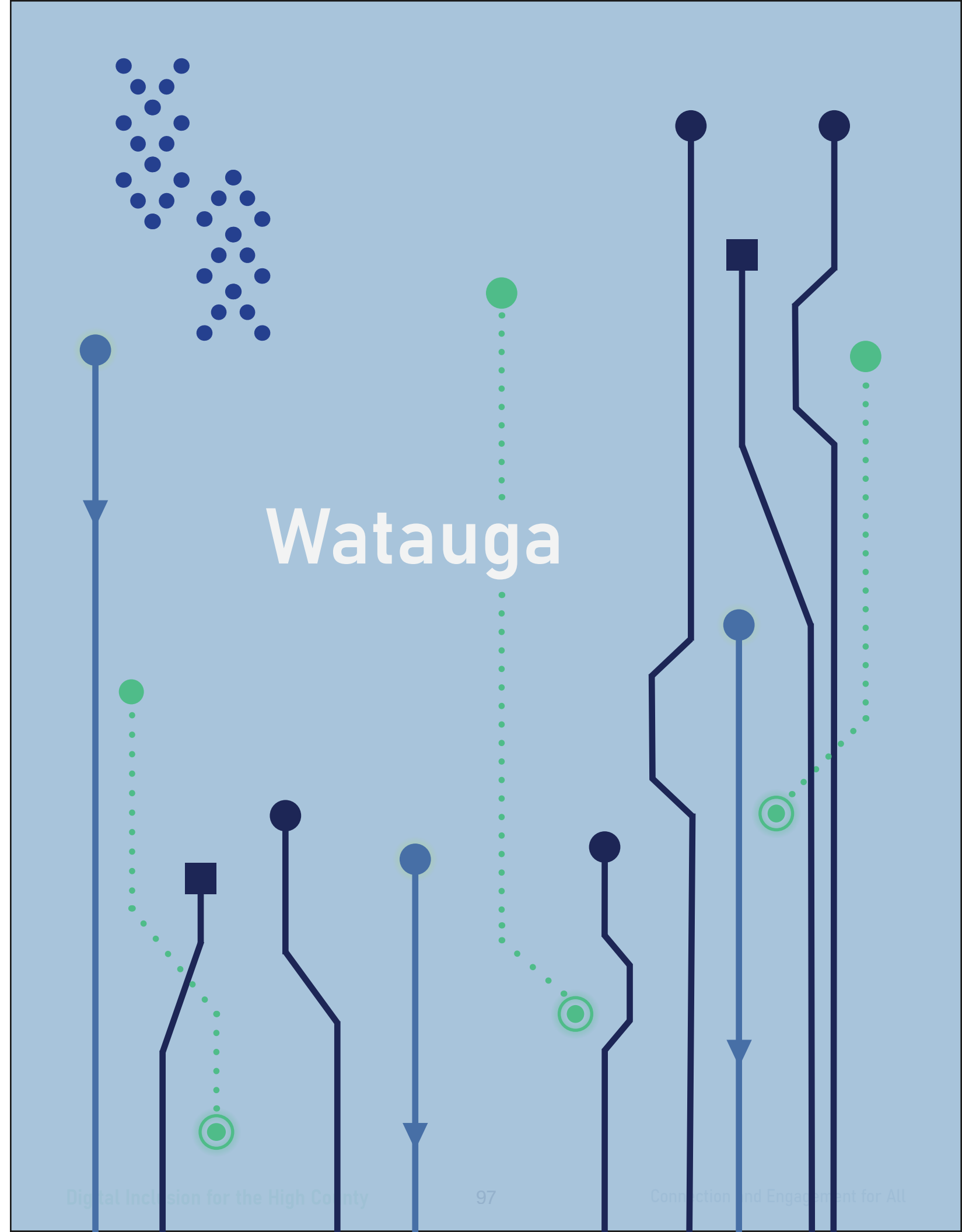
# Additional Recommendations

- Implement a Digital Outreach Librarian within AMY Regional Library to travel throughout Avery, Mitchell, and Yancey counties in coordination with the Book Mobile to assist with digital literacy development, device distribution, hotspot distribution, and serve as a traveling public Wi-Fi area.
  - AMY Regional Library discussed the potential to match funds via the Morrison Charitable Trust for the implementation of such a position.
- Create a clearinghouse of resources addressed in this Plan to publish on Town and County websites.
  - Distribute this resource to other stakeholders (e.g., libraries, senior centers, Cooperative Extensions, school systems, etc.)
  - Ensure that information is updated and maintained regularly.
- Assist in the creation and distribution of an annual Device Distribution Impact Report in partnership with E2D, HCCOG, and Appalachian State University.
  - This report will explore where devices donated by Appalachian State University were placed after being refurbished by E2D and highlight specific stories.
- Communicate with the NC Farmworker Health Program within the Office of Rural Health to coordinate, learn of new resources, and implement programs within the agricultural community in partnership with Town and County departments and community organizations.
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- Identify and partner with local/regional I.T. businesses to refurbish personal devices gathered from Community Tech Drives to reduce E-waste and provide a usable internet-enabled device to individuals in need.
  - Compensation for labor can be in the form of tax incentives as seen with the digital opportunity effort of Reconnecting Reentry, Asheville-based non-profit.
  - Communicate with Reconnecting Reentry on best practices.
  - A device refurbisher must be identified before the creation of Community Tech Drives.

- Hire a part-time or full-time digital navigator to serve as a permanent digital opportunity contact point and a reliable individual to travel accordingly within the County/Region.
- Minimize up-front last-mile (service lines from ISPs to a specific home/business) construction costs for home and business owners.
  - Communicate with French Broad EMC who included in their Residential Fiber Internet Service Agreement Terms and Conditions that they "agree to cover the first \$2,500.00 towards the installation of fiber-optic Internet service."
  - Investigate and discuss the feasibility of having customers pay back last-mile construction costs with a fee added to their monthly bill to remove the obstacle of large up-front costs while also ensuring proper reimbursement.
- Gauge Cooperative Extension interest in increasing Visit NC Farms App capacity to assist farmers, growers, and producers with limited digital literacy and internet access in having an online presence.



- Convene a meeting with Cooperative Extension Agents, Chambers of Commerce, and Blue Ridge Women in Agriculture to discuss the role that their producer profiles play for those with limited digital literacy skills and internet access.
  - Address ways to minimize financial barriers in becoming a Chamber member with private donations.



# Access

- Distribute and market the NCDIT Broadband Survey County-wide to collect small scale data. This will provide more accurate information about served, unserved, and underserved areas.
  - Doing so will assist in acquiring broadband funding, appropriately challenging FCC data, and providing a more accurate picture of coverage availability for ISPs.
- Prioritize free public Wi-Fi areas over hotspot distribution.
  - These free public Wi-Fi areas should include temperature control, seating, private spaces (for academic courses, recovery courses, telehealth, etc.), and transportation alternatives (public, rideshare, or multimodal).
  - Coordinate and communicate with volunteer fire departments and rural faith communities in coordination with Rural Faith Communities as Anchor Institutions at NC State University.
- Establish telehealth rooms with necessary diagnostic equipment.
- Create and regularly update an inventory and map of all free public Wi-Fi areas with corresponding attributes.
- Communicate with electric membership cooperatives (EMC) to understand capacity and interest in broadband internet business.
  - Provide Town/County support when entities apply for broadband funding.
  - Advocate for residential fiber.
  - Use French Broad Electric Membership Cooperative as a resource.
- Assist in extending hotspot subscriptions to institutions and organizations that have experienced success in their implementation (community health centers, Cooperative Extension offices, libraries, etc.).
  - This involvement of health centers and health departments is in accordance with the 2022 North Carolina State Health Improvement Plan.
- Catalogue all local internet subsidy programs that serve individuals and families in need of assistance.
  - Take necessary steps to discuss, consider, and acknowledge internet as a utility.
- **Adjust AppalCART routes as needed to connect people to public Wi-Fi areas and market accordingly.**
- Provide broadband infrastructure in development corridors to encourage business expansion and openings.
  - Communicate with ISPs and Blue Ridge EMC to understand the location of both Lit and Dark Fiber to best coordinate economic development potential and relay information to Economic Development Commissions and Chambers of Commerce.
- Offer on-site kiosks to allow individuals who do not have an adequate device (e.g., those who rely on smartphones) to complete online documents at appropriate locations.



Photo by Christina @wocintechchat.com on Unsplash



# Adoption

*Adoption can largely be broken down into two categories, affordability, and access, yet relevancy still plays a role.*

*Adoption obstacles for older adults largely manifests in the form of having a limited budget where a monthly internet subscription is considered best spent elsewhere (i.e., medications, etc.) or encountering application and confirmation issues when applying for ACP.*

- Distribute and market the NCDIT Broadband Survey County-wide to collect small scale data. This will provide more accurate information about served, unserved, and underserved areas.
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- Aim to have potential funding be closely connected to farmers and be from a trusted source when coordinating with Cooperative Extension Offices and other agricultural organizations.
- Create specific pools of money within appropriate community organizations to go towards paying internet subscriptions for individuals and families.

Photo by Bonnie Kittle on Unsplash



# Affordability

- Distribute and market ACP through all Town and County avenues and beyond while providing sign-up assistance or information of who to contact for assistance.
  - Senior Centers, Lees-McRae College, Internet Service Providers, Area Agency on Aging, etc.
- Provide information and assistance regarding ACP to HUD Affordable Housing residents.
- Incorporate ACP eligibility and application when applying for other services (e.g., Family Caregiver Support Program, SNAP/EBT, W.I.C., Senior Farmers Market Nutrition Program, etc.) at both the local government level and community organization level.
- Pursue and promote ACP training opportunities (in-person and/or remote) to provide appropriate and informed assistance in community organizations, school systems, libraries, and local government.
- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian Regional Library, and E2D.
  - Provide on-site ACP information and assistance.



Photo by Kostiantyn Li on Unsplash

# Digital literacy

- Distribute pre-existing digital skill tutorials, webinars, and toolkits through senior centers, school systems, Town and County networks, community organizations, Agricultural Extension Offices, and beyond. Refer to resources section of the Plan.
- Provide 1 on 1 in-person technical assistance for older adults at senior centers, libraries, Extension Offices, and beyond.
  - Staffing could be provided by Wilkes Community College, High School students, volunteers from ASU, and beyond.
  - Additionally, Cooperative Extension staff can undergo training in coordination with the Cooperative Extension's Broadband Access and Education Coordinator to provide in-house technical assistance.
- Distribute technical assistance resources for older adults through senior centers, Area Agency on Aging, Social Services, and beyond.
  - Cyber Seniors: toll free 1-844-217-3057
  - Senior Planet: 888-713-3495
  - Coordinate with AARP Mountain Region for addition services and opportunities
- Foster partnerships between healthcare systems and older adults to ensure they have the skills to appropriately participate in telehealth options.
  - Incorporate telehealth digital literacy in available resources.
- Reach the agricultural community and older adults in agriculture through coordination with Cooperative Extension Offices and other agricultural organizations (e.g., Blue Ridge Women in Agriculture) to assist and distribute digital literacy resources that address entrepreneurship, business, agriculture, and more.
- Ensure that Cooperative Extension Offices maintain contact with the Cooperative Extension's Broadband Access and Education Coordinator and maximize digital opportunities.
- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian and AMY Regional Libraries, and E2D.
  - Free assistance and troubleshooting of Macs, PCs, and smartphones.
- Begin conversations with stakeholders and community organizations to host a Device Diagnostic Day of their own.

- Communicate and coordinate with Appalachian State University's branch of Cyber Seniors (Jill Juris contact point) to support to reinstatement of the program.
- Ensure that all toolkits and digital literacy assistance are written at a 5<sup>th</sup> grade reading level in both English and Spanish.

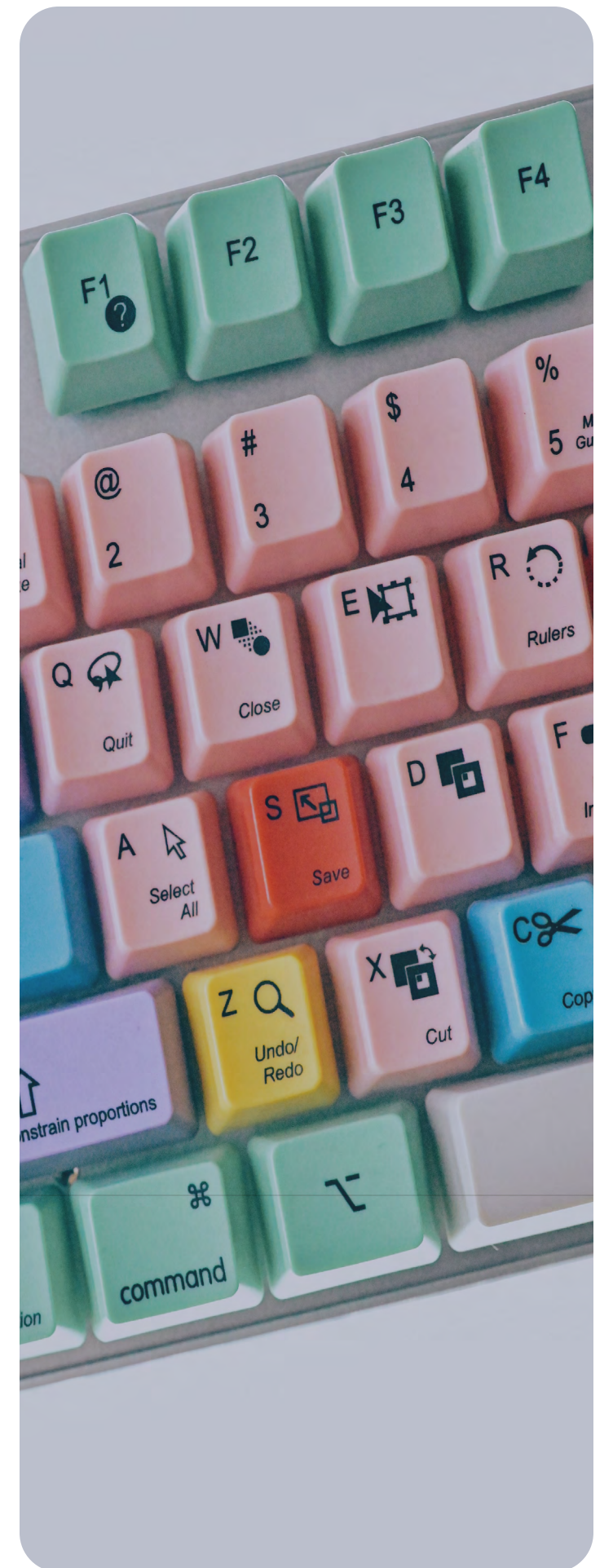


Photo by Girl with red hat on Unsplash

# Device Access

- Prioritize the distribution of devices directly to individuals and families who will keep the devices as opposed to device rental programs that create a cycle of inaccessibility.
- Contract with E2D for device distributions through libraries, HUD Affordable Housing opportunities, school systems, community organizations, and individuals and families.
  - Begin correspondence with E2D to understand their current distribution protocol and methodology in Mecklenburg's Affordable Housing opportunities.
- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian and AMY Regional Libraries, and E2D.
  - Ensure E2D devices are available at the event.
- Provide access to devices such as printers and scanners to reduce accessory costs for small business owners, entrepreneurs, and beyond.
  - Include accessory device availability in public Wi-Fi inventory map.
- Expand laptop rental program at the county library to include more laptops.
- Distribute E2D laptop donor information through Chambers of Commerce, Economic Development Commissions, and other Town and County networks to inform businesses and manufacturers of better ways to dispose of unwanted devices that will ultimately return to the hands of a High Country resident.



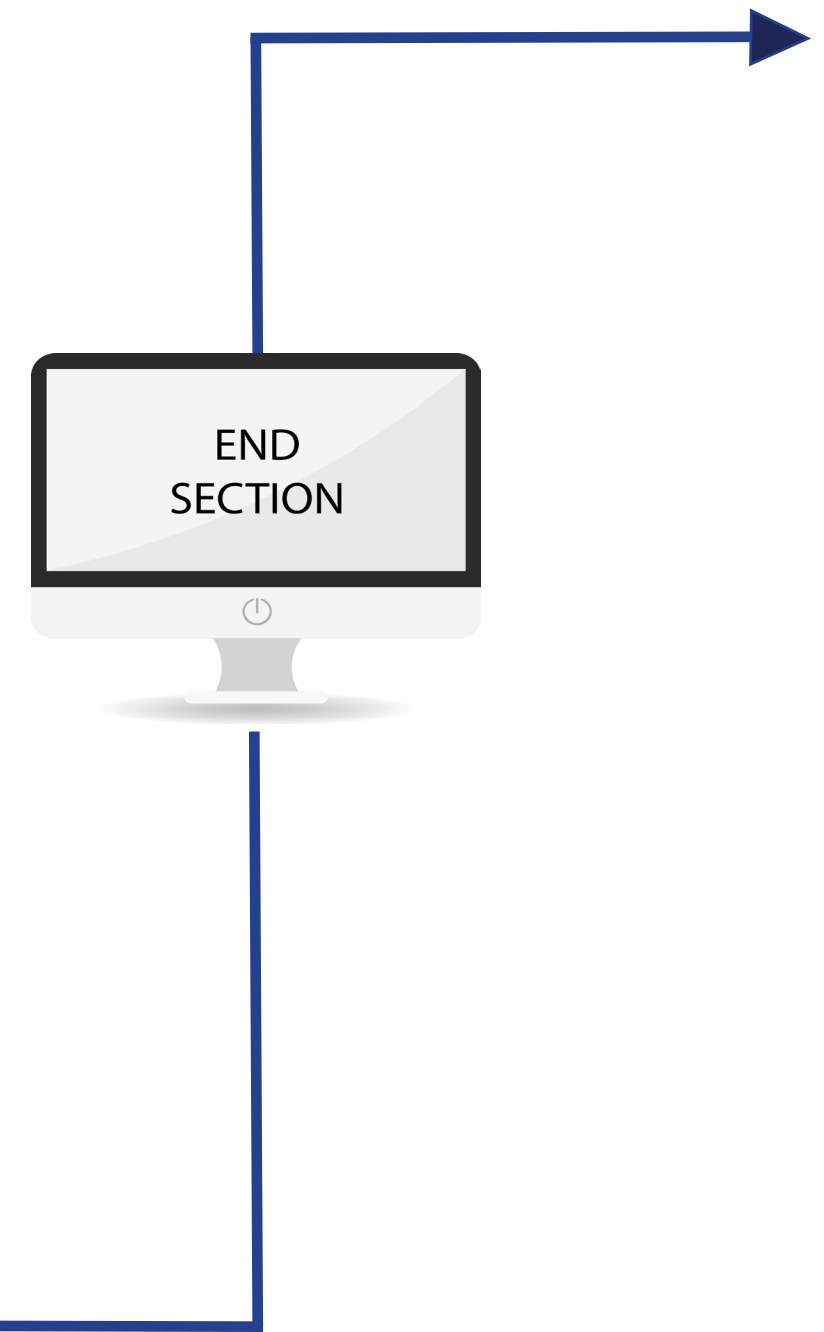
# Additional Recommendations

- Create a clearinghouse of resources addressed in this Plan to publish on Town and County websites.
  - Distribute this resource to other stakeholders (e.g., libraries, senior centers, Cooperative Extensions, school systems, etc.)
  - Ensure that information is updated and maintained regularly.
- Assist in the creation and distribution of an annual Device Distribution Impact Report in partnership with E2D, HCCOG, and Appalachian State University.
  - This report will explore where devices donated by Appalachian State University were placed after being refurbished by E2D and highlight specific stories.
- Communicate with the NC Farmworker Health Program within the Office of Rural Health to coordinate, learn of new resources, and implement programs within the agricultural community in partnership with Town and County departments and community organizations.
  - 800-533-8847
  - Jocelyn Romina Santillán-Deras: [jocelyn.santillan@dhhs.nc.gov](mailto:jocelyn.santillan@dhhs.nc.gov)
- Identify and partner with local/ regional I.T. businesses to refurbish personal devices gathered from Community Tech Drives to reduce E-waste and provide a usable internet-enabled device to individuals in need.
  - Compensation for labor can be in the form of tax incentives as seen with the digital opportunity effort of Reconnecting Reentry, Asheville-based non-profit.
  - Communicate with Reconnecting Reentry on best practices.
  - A device refurbisher must be identified before the creation of Community Tech Drives.
- Hire a part-time or full-time digital navigator to serve as a permanent digital opportunity contact point and a reliable individual to travel accordingly within the County/Region.
- Minimize up-front last-mile (service lines from ISPs to a specific home/ business) construction costs for home and business owners.
  - Communicate with French Broad EMC who included in their Residential Fiber Internet Service Agreement Terms and Conditions that they "agree to cover the first \$2,500.00 towards the installation of fiber-optic Internet service."

- Investigate and discuss the feasibility of having customers pay back last-mile construction costs with a fee added to their monthly bill to remove the obstacle of large up-front costs while also ensuring proper reimbursement.
- Gauge Cooperative Extension interest in increasing Visit NC Farms App capacity to assist farmers, growers, and producers with limited digital literacy and internet access in having an online presence.
- Support the construction and maintenance of a community center computer lab.
  - This idea was discussed with Hunger and Health Coalition and the Watauga Public Library.
- Convene a meeting with Cooperative Extension Agents, Chambers of Commerce, and Blue Ridge Women in Agriculture to discuss the role that their producer profiles play for those with limited digital literacy skills and internet access.
  - Address ways to minimize financial barriers in becoming a Chamber member with private donations.



Photo by Windows on Unsplash





# Wilkes

## Access

- Distribute and market the NCDIT Broadband Survey County-wide to collect small scale data. This will provide more accurate information about served, unserved, and underserved areas.
  - Doing so will assist in acquiring broadband funding, appropriately challenging FCC data, and providing a more accurate picture of coverage availability for ISPs.
- Prioritize free public Wi-Fi areas over hotspot distribution.
  - These free public Wi-Fi areas should include temperature control, seating, private spaces (for academic courses, recovery courses, telehealth, etc.), and transportation alternatives (public, rideshare, or multimodal).
  - Coordinate and communicate with volunteer fire departments and rural faith communities in coordination with Rural Faith Communities as Anchor Institutions at NC State University.
- Establish telehealth rooms with necessary diagnostic equipment.
- Create and regularly update an inventory and map of all free public Wi-Fi areas with corresponding attributes.
- Communicate with electric membership cooperatives (EMC) to understand capacity and interest in broadband internet business.
  - Provide Town/County support when entities apply for broadband funding.
  - Advocate for residential fiber.
  - Use French Broad Electric Membership Cooperative as a resource.
- Assist in extending hotspot subscriptions to institutions and organizations that have experienced success in their implementation (community health centers, Cooperative Extension offices, libraries, etc.).
  - This involvement of health centers and health departments is in accordance with the 2022 North Carolina State Health Improvement Plan.
- Catalogue all local internet subsidy programs that serve individuals and families in need of assistance.
  - Take necessary steps to discuss, consider, and acknowledge internet as a utility.

- Provide broadband infrastructure in development corridors to encourage business expansion and openings.
  - Communicate with ISPs and Blue Ridge EMC to understand the location of both Lit and Dark Fiber to best coordinate economic development potential and relay information to Economic Development Commissions and Chambers of Commerce.
- Offer on-site kiosks to allow individuals who do not have an adequate device (e.g., those who rely on smartphones) to complete online documents at appropriate locations.



Photo by The Standing Desk on Unsplash

## Adoption

*Adoption can largely be broken down into two categories, affordability, and access, yet relevancy still plays a role.*

*Adoption obstacles for older adults largely manifests in the form of having a limited budget where a monthly internet subscription is considered best spent elsewhere (i.e., medications, etc.) or encountering application and confirmation issues when applying for ACP.*

- Distribute and market the NCDIT Broadband Survey County-wide to collect small scale data. This will provide more accurate information about served, unserved, and underserved areas.
  - Doing so will assist in understanding the breakdown of those who cannot afford an internet subscription versus those who do not have access to internet.
- Aim to have potential funding be closely connected to farmers and be from a trusted source when coordinating with Cooperative Extension Offices and other agricultural organizations.
- Create specific pools of money within appropriate community organizations to go towards paying internet subscriptions for individuals and families.

## Affordability

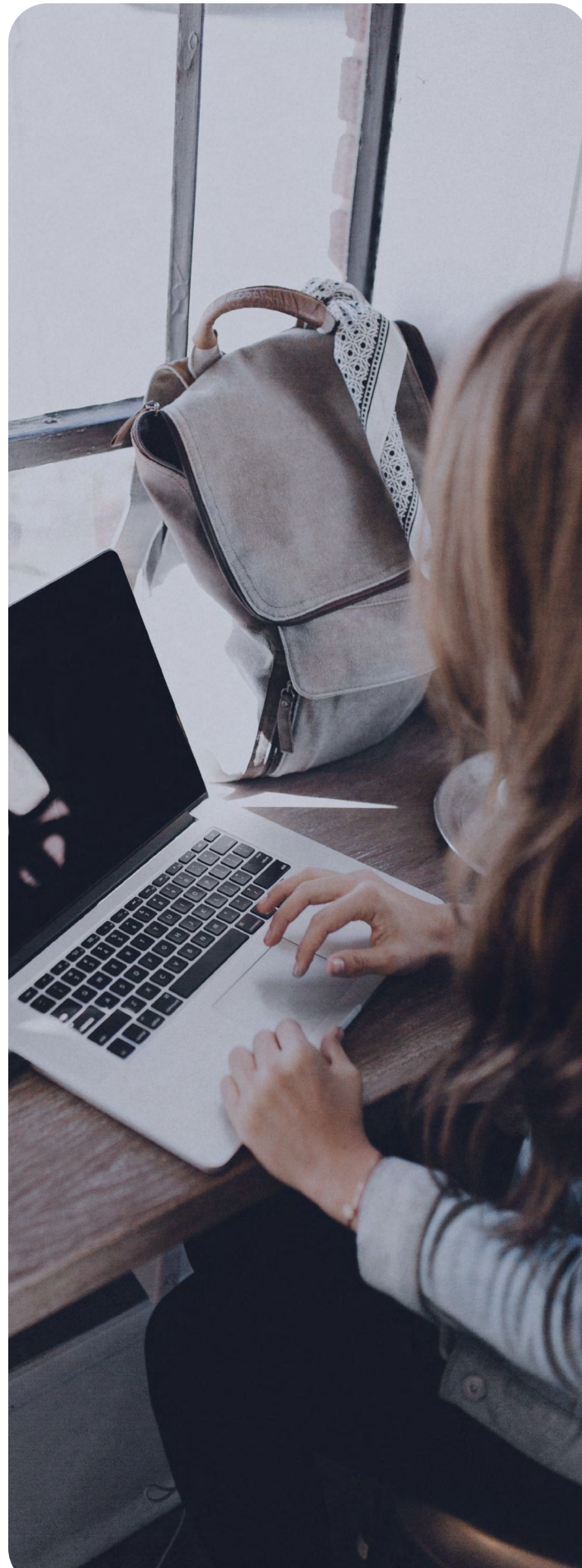
- Distribute and market ACP through all Town and County avenues and beyond while providing sign-up assistance or information of who to contact for assistance.
  - Senior Centers, Lees-McRae College, Internet Service Providers, Area Agency on Aging, etc.
- Provide information and assistance regarding ACP to HUD Affordable Housing residents.
- Incorporate ACP eligibility and application when applying for other services (e.g., Family Caregiver Support Program, SNAP/EBT, W.I.C., Senior Farmers Market Nutrition Program, etc.) at both the local government level and community organization level.
- Pursue and promote ACP training opportunities (in-person and/or remote) to provide appropriate and informed assistance in community organizations, school systems, libraries, and local government.
- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian Regional Library, and E2D.
  - Provide on-site ACP information and assistance.

- Coordinate with NC Tech Paths and HCCOG to create an ACP Sign-Up Day.
- Support W.A.M.Y. Community Action in subsidizing internet subscription costs for clients and promote their ability to do so.



Photo by Kostiantyn Li on Unsplash

Photo by Andrew Neel on Unsplash



## Digital literacy

- Distribute pre-existing digital skill tutorials, webinars, and toolkits through senior centers, school systems, Town and County networks, community organizations, Agricultural Extension Offices, and beyond. Refer to resources section of the Plan.
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- Communicate and coordinate with Appalachian State University's branch of Cyber Seniors (Jill Juris contact point) to support to reinstatement of the program.
- Ensure that all toolkits and digital literacy assistance are written at a 5<sup>th</sup> grade reading level in both English and Spanish.



Photo by Giovanni Gagliardi on Unsplash

## Device Access

- Prioritize the distribution of devices directly to individuals and families who will keep the devices as opposed to device rental programs that create a cycle of inaccessibility.
- Contract with E2D for device distributions through libraries, HUD Affordable Housing opportunities, school systems, community organizations, and individuals and families.
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  - Include accessory device availability in public Wi-Fi inventory map.
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- Distribute E2D laptop donor information through Chambers of Commerce, Economic Development Commissions, and other Town and County networks to inform businesses and manufacturers of better ways to dispose of unwanted devices that will ultimately return to the hands of a High Country resident.

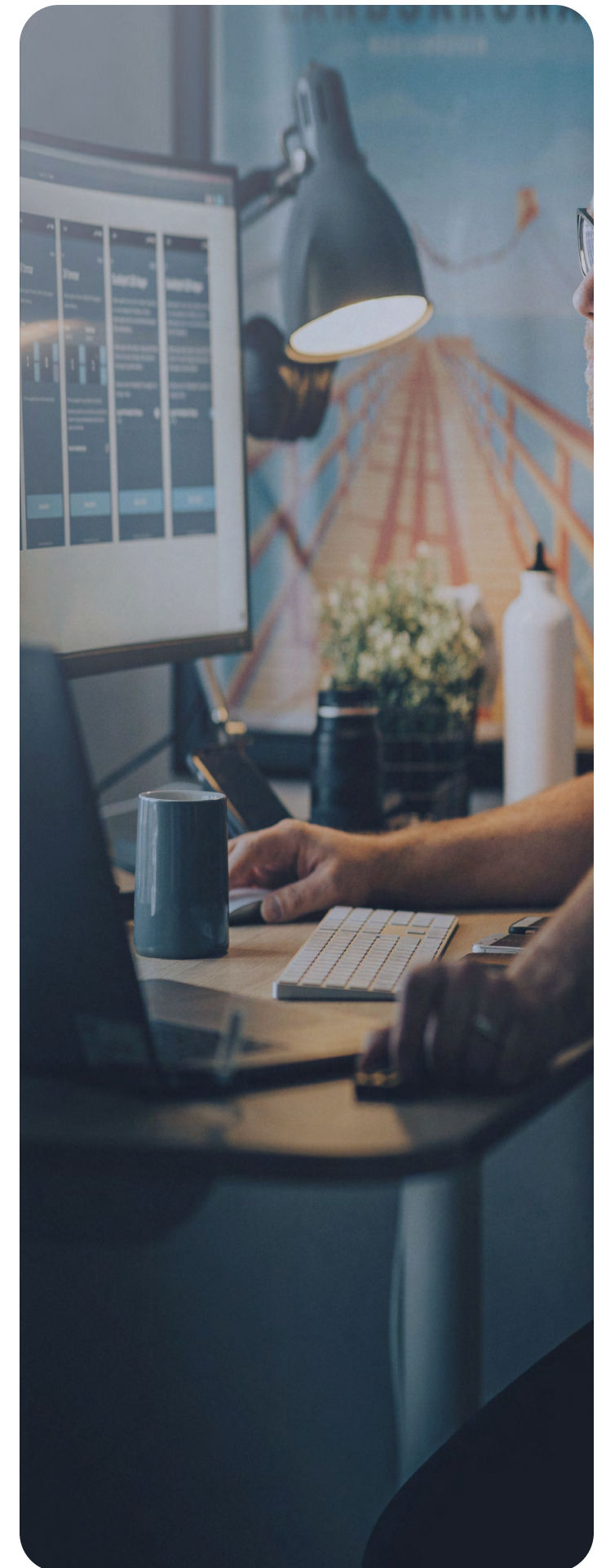


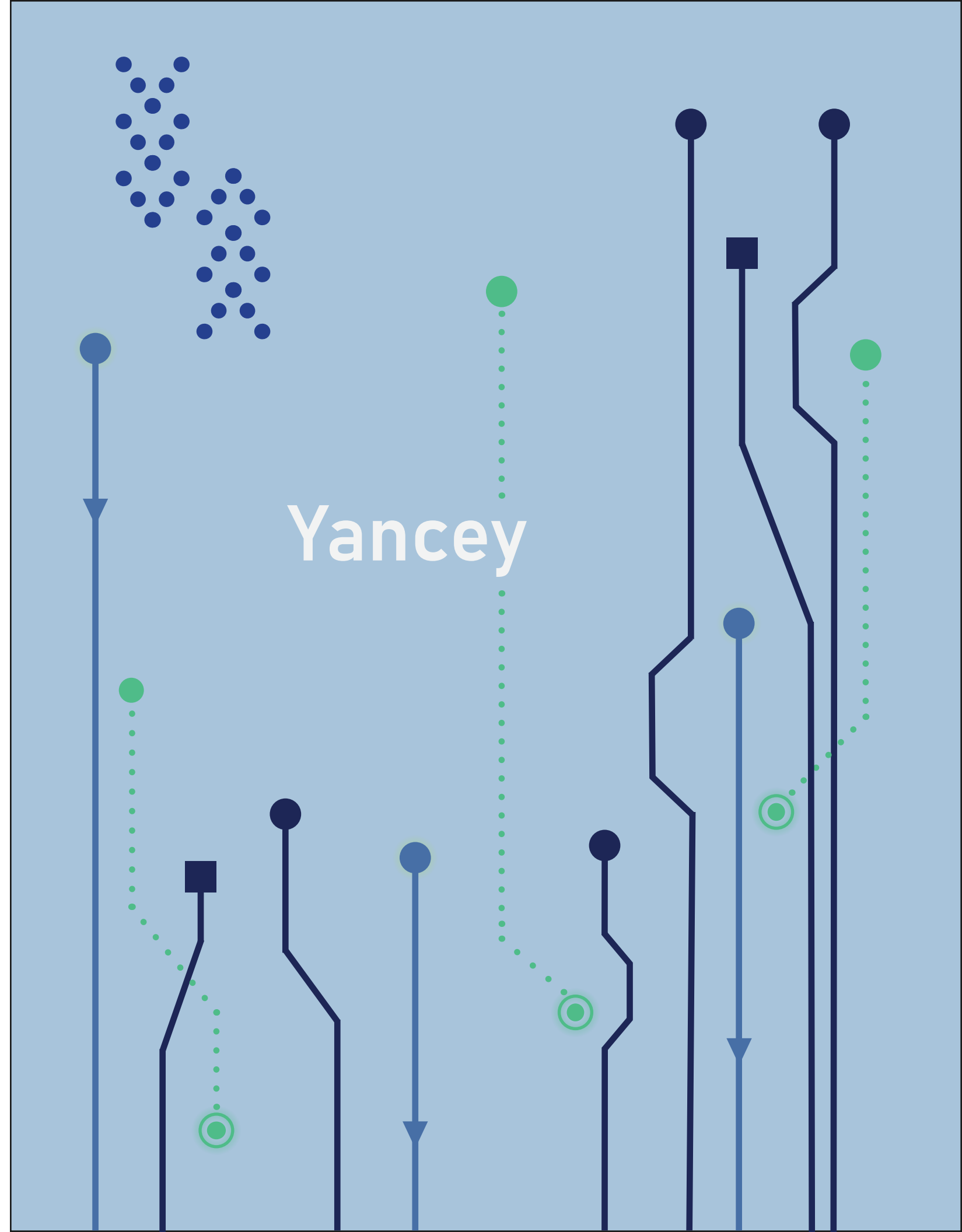
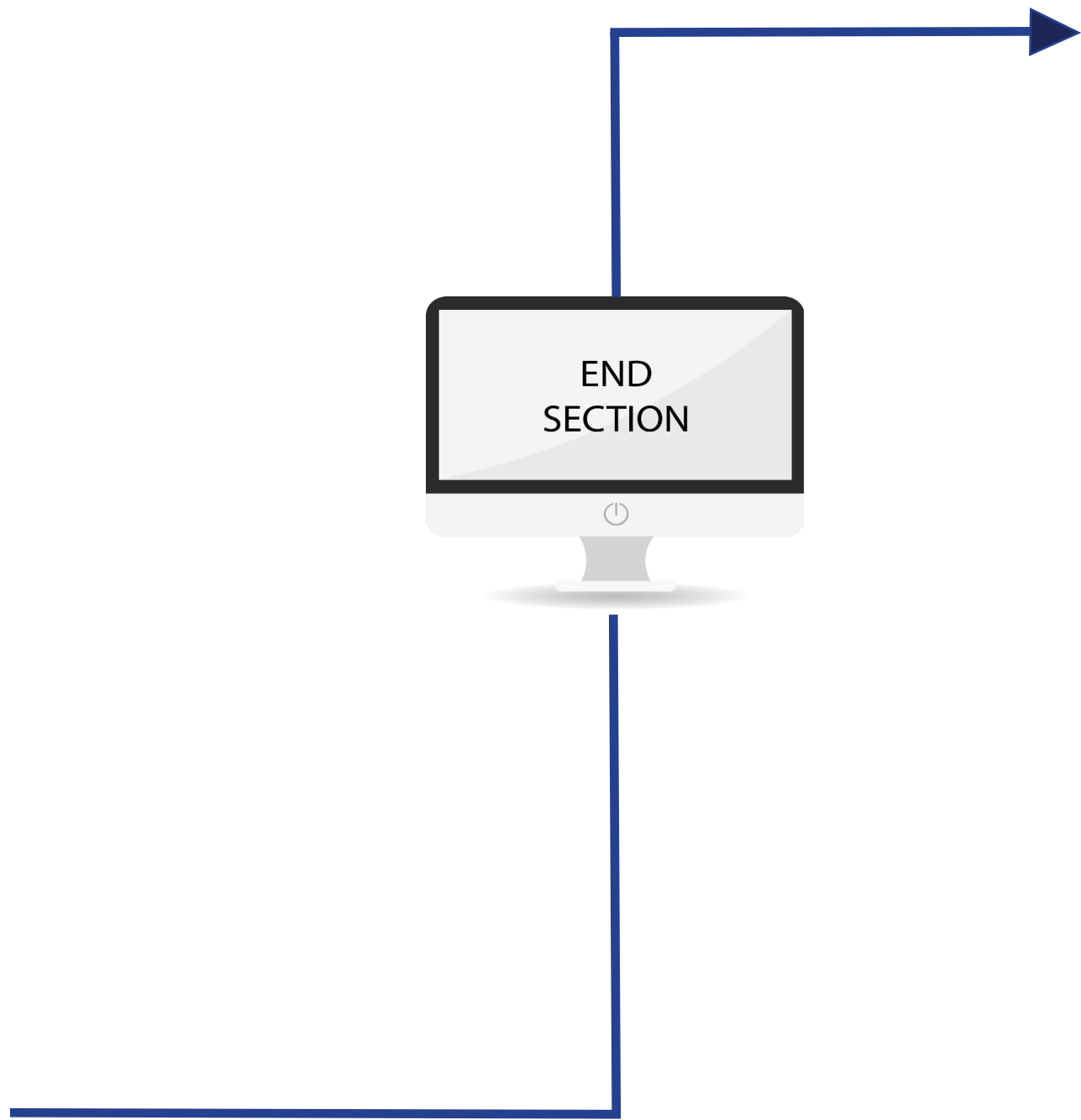
# Additional Recommendations

- Create a clearinghouse of resources addressed in this Plan to publish on Town and County websites.
  - Distribute this resource to other stakeholders (e.g., libraries, senior centers, Cooperative Extensions, school systems, etc.)
  - Ensure that information is updated and maintained regularly.
- Assist in the creation and distribution of an annual Device Distribution Impact Report in partnership with E2D, HCCOG, and Appalachian State University.
  - This report will explore where devices donated by Appalachian State University were placed after being refurbished by E2D and highlight specific stories.
- Communicate with the NC Farmworker Health Program within the Office of Rural Health to coordinate, learn of new resources, and implement programs within the agricultural community in partnership with Town and County departments and community organizations.
  - 800-533-8847
  - Jocelyn Romina Santillán-Deras: [jocelyn.santillan@dhhs.nc.gov](mailto:jocelyn.santillan@dhhs.nc.gov)
- Identify and partner with local/ regional I.T. businesses to refurbish personal devices gathered from Community Tech Drives to reduce E-waste and provide a usable internet-enabled device to individuals in need.
  - Compensation for labor can be in the form of tax incentives as seen with the digital opportunity effort of Reconnecting Reentry, Asheville-based non-profit.
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- Hire a part-time or full-time digital navigator to serve as a permanent digital opportunity contact point and a reliable individual to travel accordingly within the County/Region.
- Minimize up-front last-mile (service lines from ISPs to a specific home/ business) construction costs for home and business owners.
  - Communicate with French Broad EMC who included in their Residential Fiber Internet Service Agreement Terms and Conditions that they “agree to cover the first \$2,500.00 towards the installation of fiber-optic Internet service.”
  - Investigate and discuss the feasibility of having customers pay back last-mile construction costs with a fee added to their monthly bill to remove the obstacle of large up-front costs while also ensuring proper reimbursement.
- Gauge Cooperative Extension interest in increasing Visit NC Farms App capacity to assist farmers, growers, and producers with limited digital literacy and internet access in having an online presence.
- Convene a meeting with Cooperative Extension Agents, Chambers of Commerce, and Blue Ridge Women in Agriculture to discuss the role that their producer profiles play for those with limited digital literacy skills and internet access.
  - Address ways to minimize financial barriers in becoming a Chamber member with private donations.



Photo by Magnus Andersson on Unsplash





# Access

- Distribute and market the NCDIT Broadband Survey County-wide to collect small scale data. This will provide more accurate information about served, unserved, and underserved areas.
  - Doing so will assist in acquiring broadband funding, appropriately challenging FCC data, and providing a more accurate picture of coverage availability for ISPs.
- Prioritize free public Wi-Fi areas over hotspot distribution.
  - These free public Wi-Fi areas should include temperature control, seating, private spaces (for academic courses, recovery courses, telehealth, etc.), and transportation alternatives (public, rideshare, or multimodal).
  - Coordinate and communicate with volunteer fire departments and rural faith communities in coordination with Rural Faith Communities as Anchor Institutions at NC State University.
- Establish telehealth rooms with necessary diagnostic equipment.
- Create and regularly update an inventory and map of all free public Wi-Fi areas with corresponding attributes.
- Communicate with electric membership cooperatives (EMC) to understand capacity and interest in broadband internet business.
  - Provide Town/County support when entities apply for broadband funding.
  - Advocate for residential fiber.
  - Use French Broad Electric Membership Cooperative as a resource.
- Assist in extending hotspot subscriptions to institutions and organizations that have experienced success in their implementation (community health centers, Cooperative Extension offices, libraries, etc.).
  - This involvement of health centers and health departments is in accordance with the 2022 North Carolina State Health Improvement Plan.
- Catalogue all local internet subsidy programs that serve individuals and families in need of assistance.
  - Take necessary steps to discuss, consider, and acknowledge internet as a utility.



- Provide broadband infrastructure in development corridors to encourage business expansion and openings.
- Offer on-site kiosks to allow individuals who do not have an adequate device (e.g., those who rely on smartphones) to complete online documents at appropriate locations.

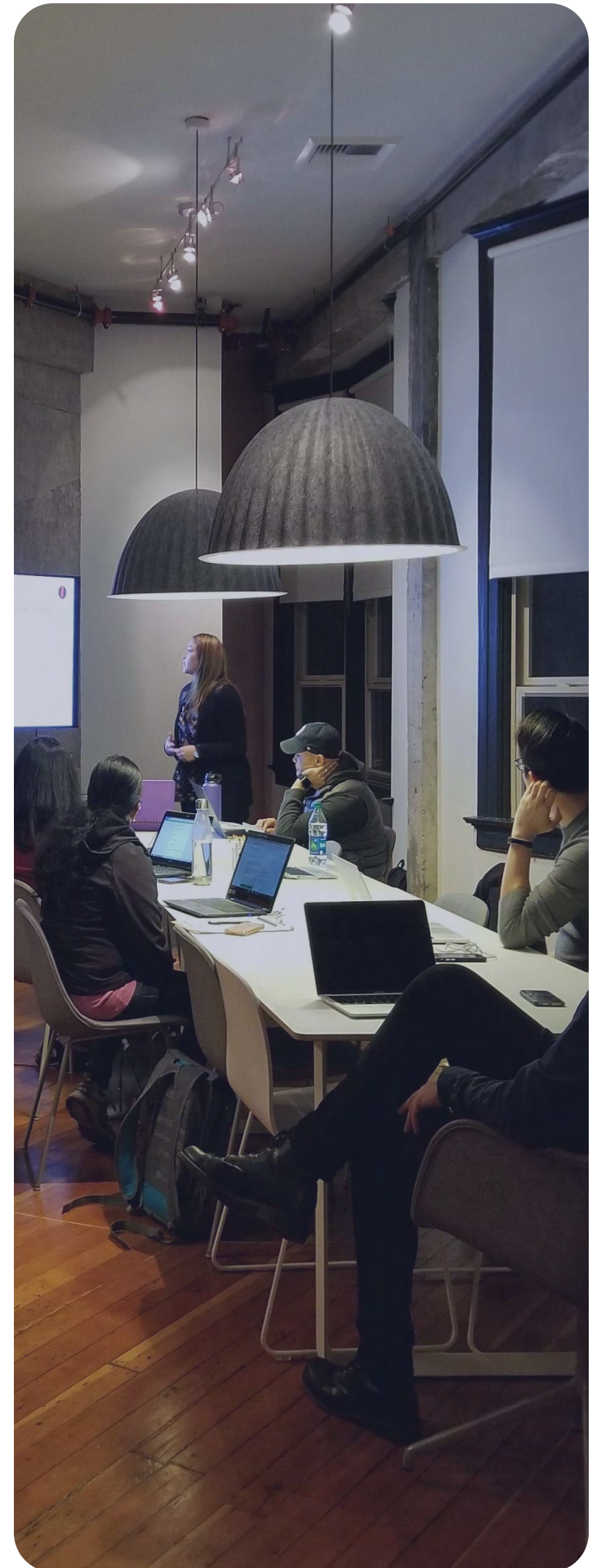


Photo by Product School on Unsplash

# Adoption

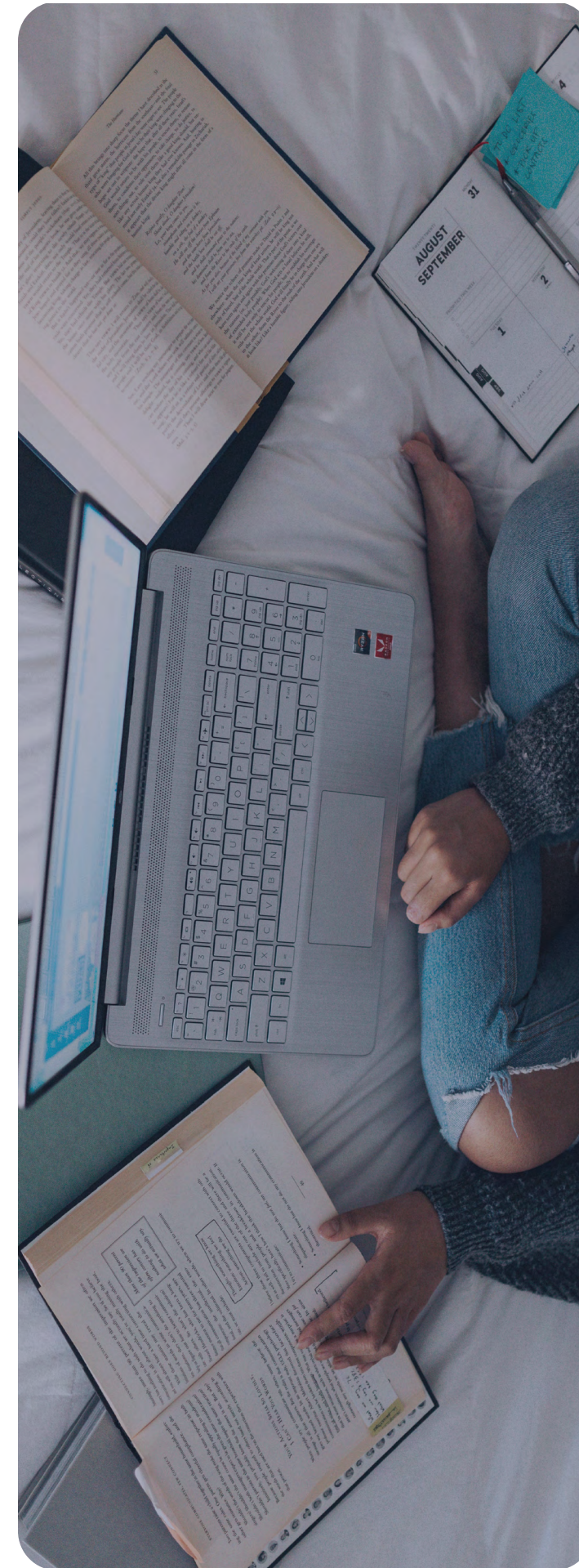
*Adoption can largely be broken down into two categories, affordability, and access, yet relevancy still plays a role.*

*Adoption obstacles for older adults largely manifests in the form of having a limited budget where a monthly internet subscription is considered best spent elsewhere (i.e., medications, etc.) or encountering application and confirmation issues when applying for ACP.*

- Distribute and market the NCDIT Broadband Survey County-wide to collect small scale data. This will provide more accurate information about served, unserved, and underserved areas.
  - Doing so will assist in understanding the breakdown of those who cannot afford an internet subscription versus those who do not have access to internet.
- Aim to have potential funding be closely connected to farmers and be from a trusted source when coordinating with Cooperative Extension Offices and other agricultural organizations.
- Create specific pools of money within appropriate community organizations to go towards paying internet subscriptions for individuals and families.

# Affordability

- Distribute and market ACP through all Town and County avenues and beyond while providing sign-up assistance or information of who to contact for assistance.
  - Senior Centers, Lees-McRae College, Internet Service Providers, Area Agency on Aging, etc.
- Provide information and assistance regarding ACP to HUD Affordable Housing residents.
- Incorporate ACP eligibility and application when applying for other services (e.g., Family Caregiver Support Program, SNAP/EBT, W.I.C., Senior Farmers Market Nutrition Program, etc.) at both the local government level and community organization level.
- Pursue and promote ACP training opportunities (in-person and/or remote) to provide appropriate and informed assistance in community organizations, school systems, libraries, and local government.
- Create an Community ACP Sign-Up Day.
- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian Regional Library, and E2D.
  - Provide on-site ACP information and assistance.



# Digital literacy

- Distribute pre-existing digital skill tutorials, webinars, and toolkits through senior centers, school systems, Town and County networks, community organizations, Agricultural Extension Offices, and beyond. Refer to resources section of the Plan.
- Provide 1 on 1 in-person technical assistance for older adults at senior centers, libraries, Extension Offices, and beyond.
  - Staffing could be provided by Wilkes Community College, High School students, volunteers from ASU, and beyond.
  - Additionally, Cooperative Extension staff can undergo training in coordination with the Cooperative Extension's Broadband Access and Education Coordinator to provide in-house technical assistance.
- Distribute technical assistance resources for older adults through senior centers, Area Agency on Aging, Social Services, and beyond.
  - Cyber Seniors: toll free 1-844-217-3057
  - Senior Planet: 888-713-3495
  - Coordinate with AARP Mountain Region for addition services and opportunities

Photo by Windows on Unsplash

- Foster partnerships between healthcare systems and older adults to ensure they have the skills to appropriately participate in telehealth options.
  - Incorporate telehealth digital literacy in available resources.
- Reach the agricultural community and older adults in agriculture through coordination with Cooperative Extension Offices and other agricultural organizations (e.g., Blue Ridge Women in Agriculture) to assist and distribute digital literacy resources that address entrepreneurship, business, agriculture, and more.
- Ensure that Cooperative Extension Offices maintain contact with the Cooperative Extension's Broadband Access and Education Coordinator and maximize digital opportunities.
- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian and AMY Regional Libraries, and E2D.
  - Free assistance and troubleshooting of Macs, PCs, and smartphones.
- Begin conversations with stakeholders and community organizations to host a Device Diagnostic Day of their own.

- Communicate and coordinate with Appalachian State University's branch of Cyber Seniors (Jill Juris contact point) to support to reinstatement of the program.
- Ensure that all toolkits and digital literacy assistance are written at a 5<sup>th</sup> grade reading level in both English and Spanish.



## Device Access

- Prioritize the distribution of devices directly to individuals and families who will keep the devices as opposed to device rental programs that create a cycle of inaccessibility.
- Contract with E2D for device distributions through libraries, HUD Affordable Housing opportunities, school systems, community organizations, and individuals and families.
  - Begin correspondence with E2D to understand their current distribution protocol and methodology in Mecklenburg's Affordable Housing opportunities.
- Market and promote a Device Diagnostic Day in coordination with Appalachian State University I.T. Department, Appalachian and AMY Regional Libraries, and E2D.
  - Ensure E2D devices are available at the event.
- Provide access to devices such as printers and scanners to reduce accessory costs for small business owners, entrepreneurs, and beyond.
  - Include accessory device availability in public Wi-Fi inventory map.

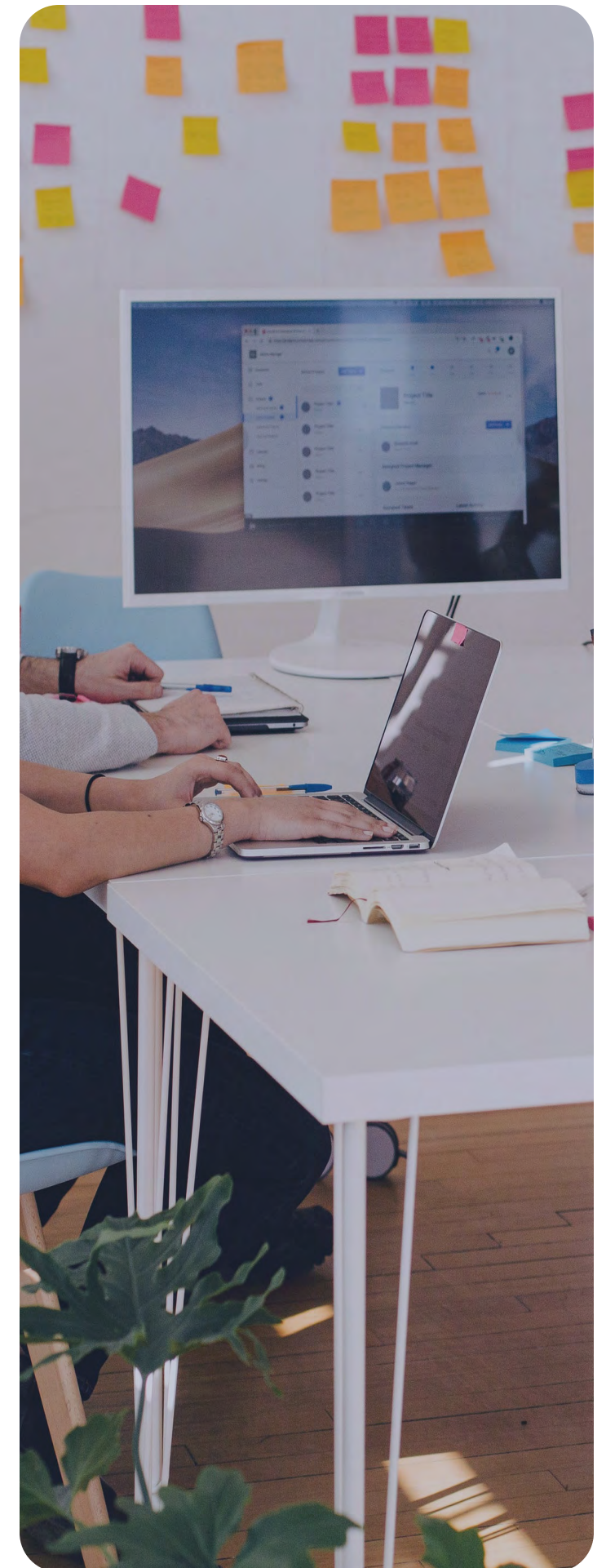


Photo by Jason Goodman on Unsplash

- Expand laptop rental program at the county library to include more laptops.
- Distribute E2D laptop donor information through Chambers of Commerce, Economic Development Commissions, and other Town and County networks to inform businesses and manufacturers of better ways to dispose of unwanted devices that will ultimately return to the hands of a High Country resident.

## Additional Recommendations

- Create a clearinghouse of resources addressed in this Plan to publish on Town and County websites.
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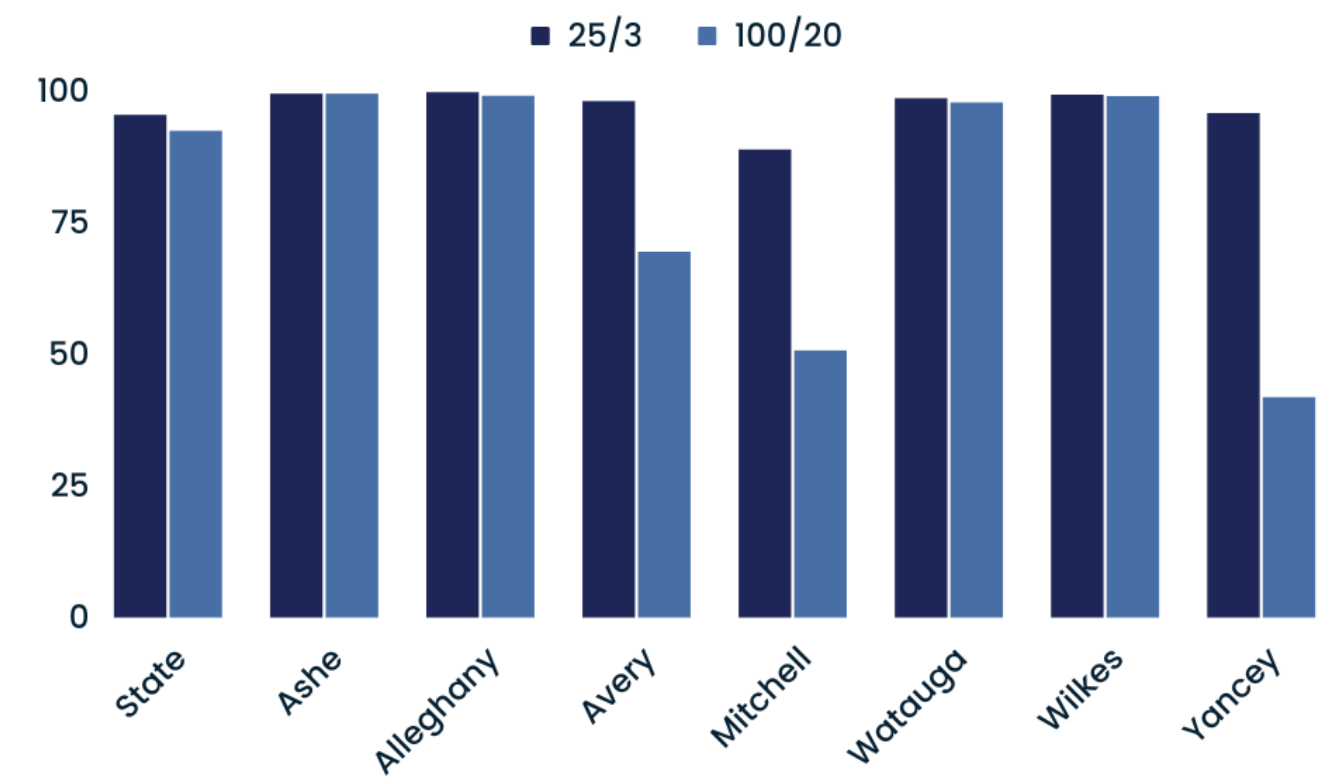
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# Counties vs. State

# INTERNET AVAILABILITY

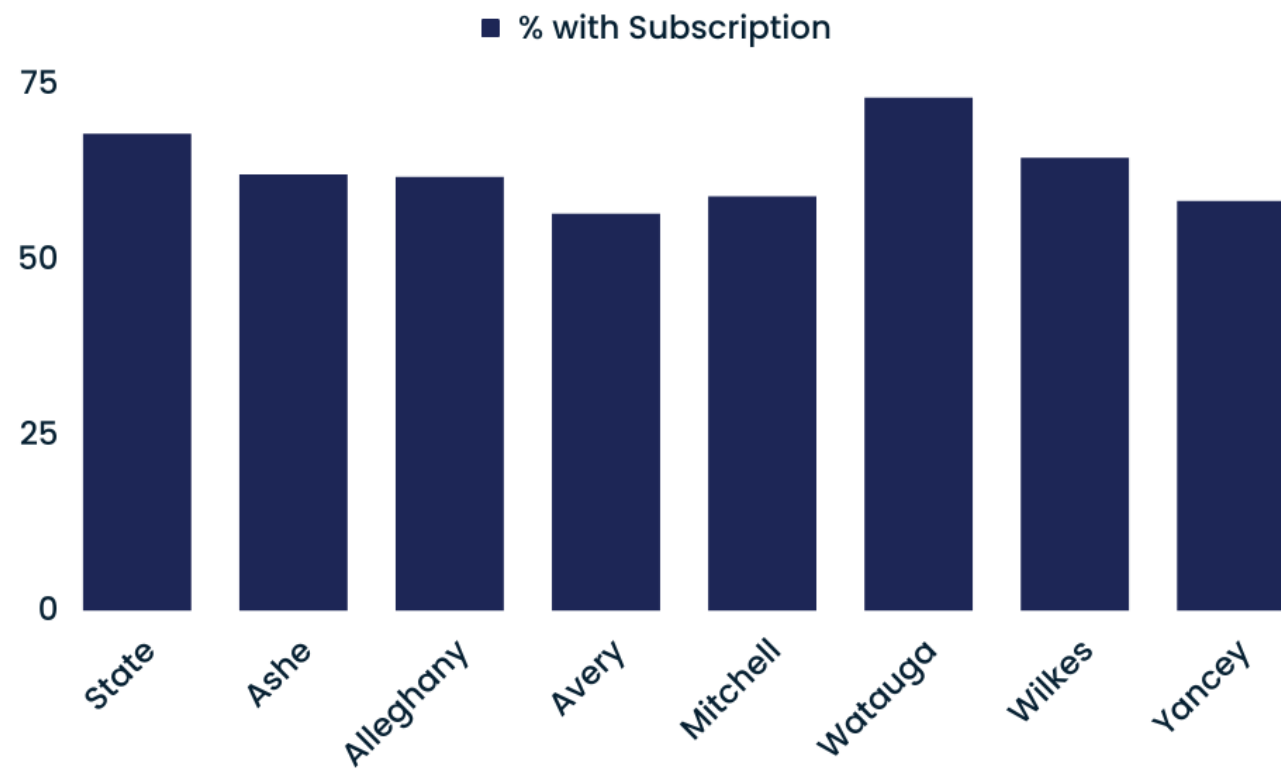
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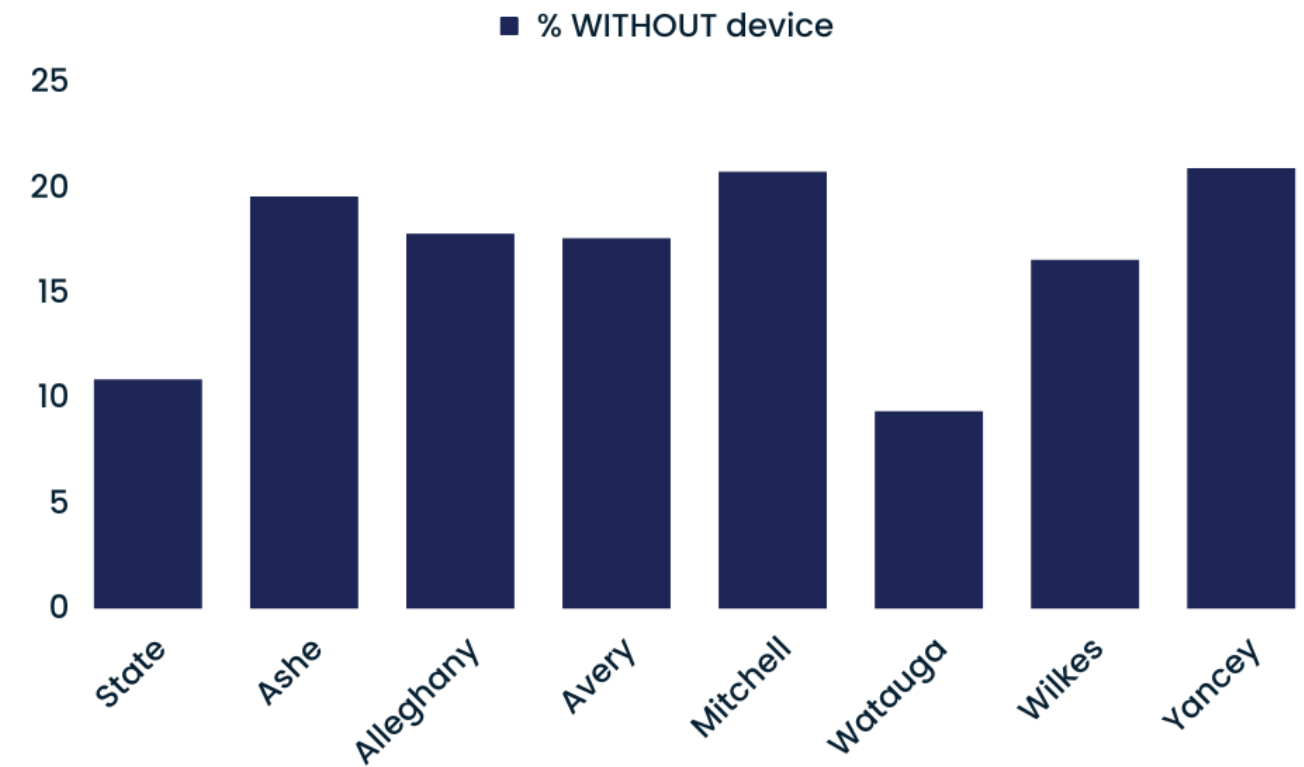
## INTERNET ADOPTION

Data retrieved from NC Broadband Availability Index



## DEVICE ACCESS

Data retrieved from NC Broadband Availability Index



# Funding Opportunities

## Completing Access to Broadband (CAB) Program

Projects that were applied for and not funded under the GREAT Grant can be funded under the CAB program.

### CAB Program 2022

CAB Program Guidance Part I has been posted with Part II expected to be posted in the coming months.

**Questions?** Contact [CABprogram@nc.gov](mailto:CABprogram@nc.gov)

### 2023

The program received \$400 million from the American Rescue Plan ACT from N.C. Session Law 2021-180. Each county has a cap of \$4 million in aggregate funding in a single year.

### Who can apply?

The CAB Program is designed for N.C. counties to coordinate with the North Carolina Department of Information Technology (NCDIT) to fund broadband deployment projects in unserved areas within each county.

Selected counties will coordinate with the Broadband Infrastructure Office to "mutually identify eligible project areas and develop the scope of work for the procurement of construction, installation and operation of broadband infrastructure in the targeted project areas. NCDIT will provide customizable procurement templates and processes for use with each county. Projects require matching investment from counties and the selected broadband service providers."



Photo by Kostiantyn Li on Unsplash

# Digital Champion Grant

## 2023

The North Carolina Department of Information Technology will be releasing the application in 2023 and applicants will have 60 days to apply.

Applicants can apply for up to \$400,000 per county with a funding term of three years. No match is necessary.

### Who can apply?

- Local Governments (town, city, county), local libraries, K-12 school systems
- Nonprofit organizations
- Higher education institutions
- Regional entities (ex. Councils of Governments)



### Priority Populations

- Low-income households
- Individuals who primarily reside in a rural area
- Aging residents
- Incarcerated and second chance residents/Reentry/Justice involved
- Veterans
- Individuals with disabilities
- Individuals with a language barrier
- Individuals who are members of a racial or ethnic minority group

### Questions about broadband mapping?

Contact  
Maggie Woods  
maggie.woods@nc.gov

# Growing Rural Economies with Access to Technologies (GREAT) Grant

## 2021-2022

The 2021-2022 funding round launched on January 1, 2022 and closed on May 4, 2022 and has the capacity to fund up to \$350 million in federal American Rescue Plan Act funding. The GREAT Grant program aims to facilitate the deployment of broadband services to unserved areas throughout North Carolina.

### Who can apply?

Private providers of broadband services (or ISPs).

A total of 93 counties were represented during the application window with 15 ISP awardees (one award in each of the 92 counties that were selected). One county was withheld funding due to a federal award that they received.

**Questions?** Contact [greatgrant@nc.gov](mailto:greatgrant@nc.gov)

### Online Dashboard and Mapping Questions

NC One Map offers an interactive dashboard of NC Great Grant 2022 locations found at [www.nconemap.gov/pages/broadband](http://www.nconemap.gov/pages/broadband)

### Questions about broadband mapping?

Contact [Broadbandmapping@nc.gov](mailto:Broadbandmapping@nc.gov)



# Digital Opportunity Grant Program

## 2022

A two-year, noncompetitive funding program launched on September 27th, 2022 by the Office of Broadband and Digital Opportunity with \$14 million in funding. Applications were due on November 10th.

### Who can apply?

State Government entities such as :

- All state government organizations
- University's of N.C. System or individual schools, colleges, or centers within the system; and
- N.C. Community College System or individual schools, colleges, or centers within the system

A total of \$10 million will support 10-15 government entities, with each applicant applying for up to \$2 million. Projects must serve more than one county.

Stay informed of similar funding opportunities offered through the Office of Broadband and Digital Opportunity within NCDIT.

**Questions?** Contact  
Maggie Woods  
maggie.woods@nc.gov

Photo by Jason Goodman on Unsplash



# Appalachia Digital Opportunity Accelerator Grants

## 2023

### Via Appalachian Regional Commission (ARC) and Connect Humanity

Appalachian Regional Initiative for Stronger Economies (ARISE) is a new Appalachian Regional Commission (ARC) initiative that focuses on bringing necessary resources to 50 communities across Appalachia with a focus on distressed counties. The first grant funded through ARISE totals \$6.3 million and was awarded to Connect Humanity to carry out detailed digital opportunity planning. Funds for this grant came from the Infrastructure Investment and Jobs Act of 2021.

### Who can apply?

Municipalities, utility cooperatives, non-profits, or community-centered enterprises in North Carolina, Georgia, Kentucky, Maryland, Mississippi, New York, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia. All HCCOG counties are eligible.

Selected communities will receive a Connect Humanity Digital Opportunity Planning Grant and partner with Connect Humanity to create detailed digital opportunity plans.

The goal of of this Planning is to:

- Assess a community's digital needs
- Create a network design
- Build a business plan

In order to better position the chosen communities to complete for a portion of the \$45 billion coming from the BEAD and DEA funds that will become available later in 2023, as well as to have a more detailed path towards digital opportunity.

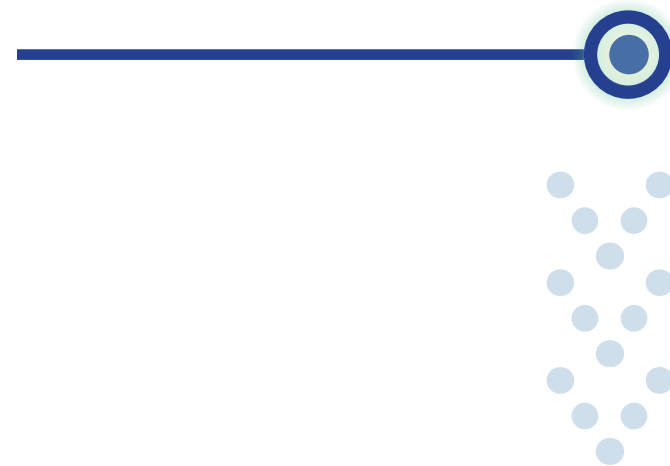
Communities are not required to apply for BEAD and DEA funds. Connect Humanity is committed to assisting the communities they partner with to secure the necessary funding to increase internet connectivity.

**Questions?** Contact  
grants@connecthumanity.fund



# AARP Community Challenge Grant - Flagship Grant

**Questions?** Contact  
CommunityChallenge@AARP.org



## Annually since 2017

Digital Connection is listed as a Project Category for the Flagship Grant category of the Community Challenge Grant.

The AARP Community Challenge Grant has invested \$12.6 million in communities since 2017. This grant program is part of the AARP Livable Communities initiative and aims to help communities become more livable for individuals of any age. The average grant size is \$11,500 with a minimum of \$500 and a maximum of \$50,000 for larger projects.

## 2023 Cycle

Application window opened on January 18th and closed on March 15th. Applicants will be notified by June 14th.

## Who can apply?

Government entities, 501(c)(3), 501(c)(4), and 501(c)(6) nonprofits, and other types of organizations that are considered on a case-by-case basis.

# For Additional Opportunities on:

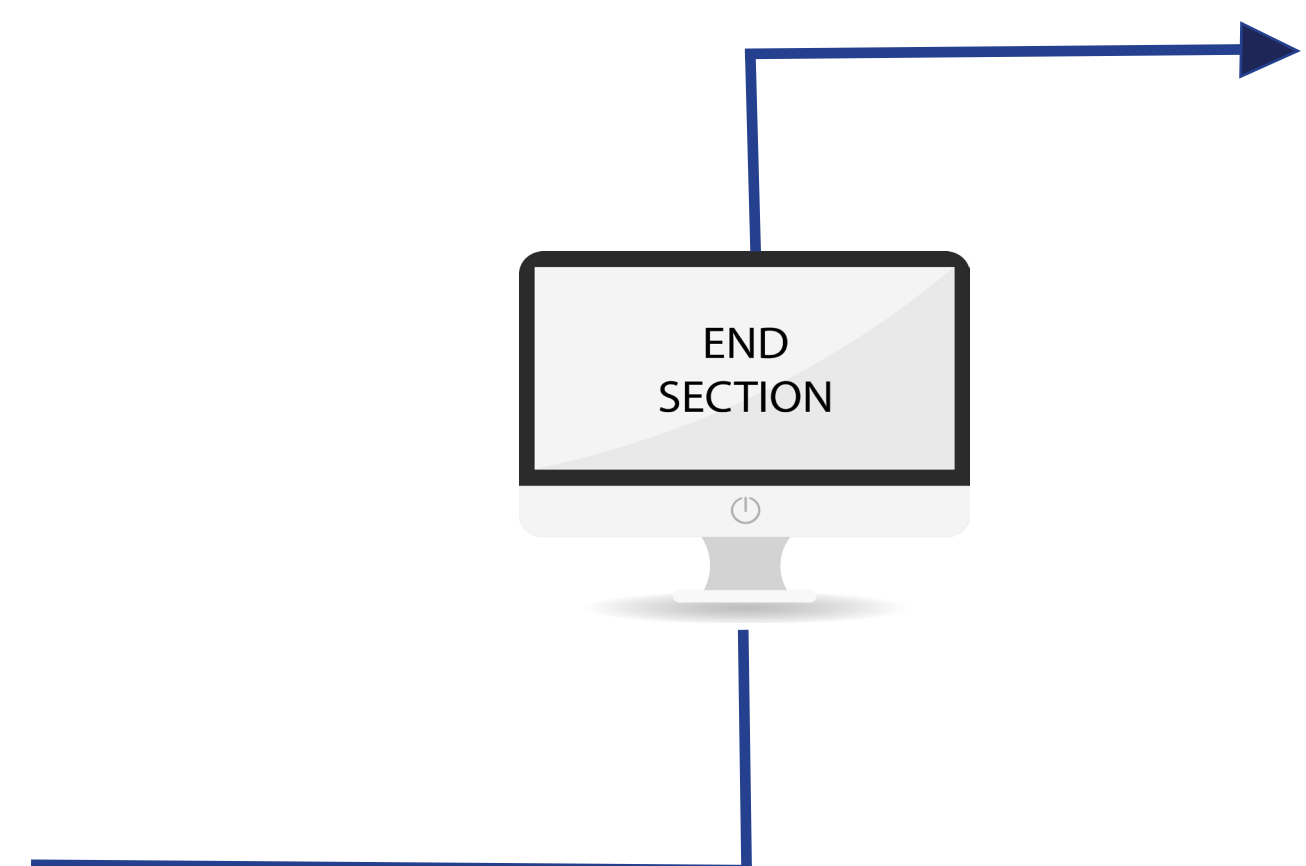
Federally Funded Programs

State-Funded Programs

Nonprofit and Foundation Opportunities

Other Funding Resources

Go to: [www.ncbroadband.gov/funding-programs](http://www.ncbroadband.gov/funding-programs)





## Digital Opportunity Resources

# Affordable Connectivity Program (ACP)

A federal benefit program offered through the Federal Communications Commission (FCC) that provides a discount of up to \$30 a month for internet service subscriptions for eligible households (or up to \$75 on qualifying Tribal lands) and a one-time discount of up to \$100 to purchase a device from participating providers if more than \$10 and less than \$50 is contributed towards the purchase.

Households with an income at or below 200% of the Federal Poverty Guidelines are eligible, in addition to households where a member is a recipient of at least one of the following: Federal Pell Grant, SNAP, Medicaid, Free and Reduced-Price Lunch Program, Federal Housing Assistance, Supplemental Security Income, WIC, Veterans Pension or Survivor Benefits, Lifeline, Bureau of Indian Affairs General Assistance, Tribal TANF, Food Distribution Program on Indian Reservation, Tribal Head Start. Additional information and outreach materials can be found in the Resources section of this Plan.

### Resources:

#### Information

[www.affordableconnectivity.gov](http://www.affordableconnectivity.gov)

#### Online Application

*English and Spanish*

#### Paper Applications & Instructions

[www.affordableconnectivity.gov/help/tools/#instructions](http://www.affordableconnectivity.gov/help/tools/#instructions)

#### ACP Consumer Outreach Toolkit

[www.fcc.gov/acp-consumer-outreach-toolkit](http://www.fcc.gov/acp-consumer-outreach-toolkit)

#### Training: Free Online ACP Certification

[www.educationsuperhighway.org/learnacp/](http://www.educationsuperhighway.org/learnacp/)



# AFFORDABLE CONNECTIVITY PROGRAM (ACP)



## BENEFITS

A \$30 per month cap to help individuals pay for an internet subscription through participating providers, or up to \$75 for households on qualifying Tribal lands.

## HOW TO ENROLL

- Step 1: Go to [AffordableConnectivity.org](https://AffordableConnectivity.org) to submit an online application or print out a mail-in application
- Step 2: Contact your participating provider and select a plan and have the discount applied to your monthly bill

## Participating Providers

Contact the internet service provider (ISP) that you are interested in using OR use the Companies Near Me tool offered through the FCC.

## Eligibility

You automatically qualify for ACP if you participate in SNAP, Medicaid, Federal Public Housing Assistance, Federal Pell Grant, Supplemental Security Income, WIC, Veterans Pension or Survivor Benefits, Lifeline, and the Free or Reduced Price School Lunch/Breakfast Program OR if the household income is at or below 200% of the Federal Poverty Guidelines

Only one monthly service discount is allowed per household.

ACP was created to phase out the Emergency Broadband Benefits Program (which had a \$50 cap) as part of the Bipartisan Infrastructure Investment and Jobs Act

## WHEN TO ENROLL

There is no specific time frame for ACP enrollment.

## OUTREACH

The FCC has compiled outreach materials in English and Spanish (along with 9 other languages). These materials range from fact sheets, press releases, and newsletter blurbs to a letter inviting pre-qualified applicants to participate in ACP.

## SIGN-UP ASSISTANCE

- ACP Support Center: (877) 384-2575
  - Contact your ISP Customer Service Center
- Older Adults/Seniors*
- Senior Planet offers a step-by-step video in English and Spanish
  - Hotline: (888) 713-3495
  - Contact your local Area Agency on Aging and/or Senior Center for potential assistance

## ONE VS. MULTIPLE HOUSEHOLDS

### Multiple Household:

- 4 roommates who live together but do not share money are 4 separate households. All 4 can receive the ACP.
- A student who receives a Federal Pell Grant and lives alone is a different household than his or her parents. Both the student and their parents are separate households and can receive their own benefits.

### One Household:

A parent/guardian and child who live together must share one ACP benefit  
An adult who lives with friends or family who provide financial support must share one ACP benefit

## CONNECTED DEVICE DISCOUNT

If you are found eligible for the ACP program you can also be offered a connected device discount. The ISP you use will provide the discount and not all ISPs offer a connected device discount. Only one device discount allowed per household.

E2D (Eliminate the Digital Divide) is a North Carolina-based device refurbisher who offers discounted refurbished devices to individuals and households. Contact: [Info@e-2-d.org](mailto:Info@e-2-d.org)

# N.C. Broadband Survey

Offered through NCDIT and the Friday Institute for Educational Innovation at NC State University

"The North Carolina Broadband Survey is designed to gather information on locations in the state without adequate internet access and speeds.

The information gathered from the survey will:

- Provide clear data to guide investment of funds through the state's Growing Rural Economies with Access to Technology grant program
- Inform research and policy recommendations
- Support strategic targeting of additional funding streams"

*The above was taken from NC DIT's website.*

The survey is available in both English and Spanish and takes approximately 5 minutes to complete.



## Resources:

### Online Survey

[www.ncbroadband.gov/broadband-survey/](http://www.ncbroadband.gov/broadband-survey/)

### Outreach Guide and Materials

[www.ncbroadband.gov/broadband-survey/broadband-survey-outreach-guide-materials](http://www.ncbroadband.gov/broadband-survey/broadband-survey-outreach-guide-materials)

### Broadband Survey Dashboard

[www.ncbroadband.gov/broadband-survey/broadband-survey-dashboards](http://www.ncbroadband.gov/broadband-survey/broadband-survey-dashboards)

## English

### No Internet Access? Text!

Text "internet" to 919.750.0553

### Can't Text? Call!

Call 919.750.0553

## Spanish

### No Internet Access? Text!

Textea "internet" a (919)750-8860

### Can't Text? Call!

Llama a (919)750-8860



**SLOW internet?  
NO internet?**  
We need to know.

The N.C. Broadband Survey is designed to gather information on locations without adequate internet access and speeds in our community.



For Homes & Businesses  
**WITH Internet Service**

Visit **NCBroadband.gov/Survey** to take the survey now.



For Homes & Businesses  
**WITHOUT Internet Service**

Text "**internet**" to **919-750-0553**. Standard text messaging rates will apply.

**Your feedback directly impacts grant and infrastructure funding in your community.**

**NCDIT** NORTH CAROLINA  
DEPARTMENT OF  
INFORMATION  
TECHNOLOGY  
Broadband Infrastructure Office



# E2D

*Eliminate the Digital Divide*

*Device Refurbisher*

## What does E2D do?

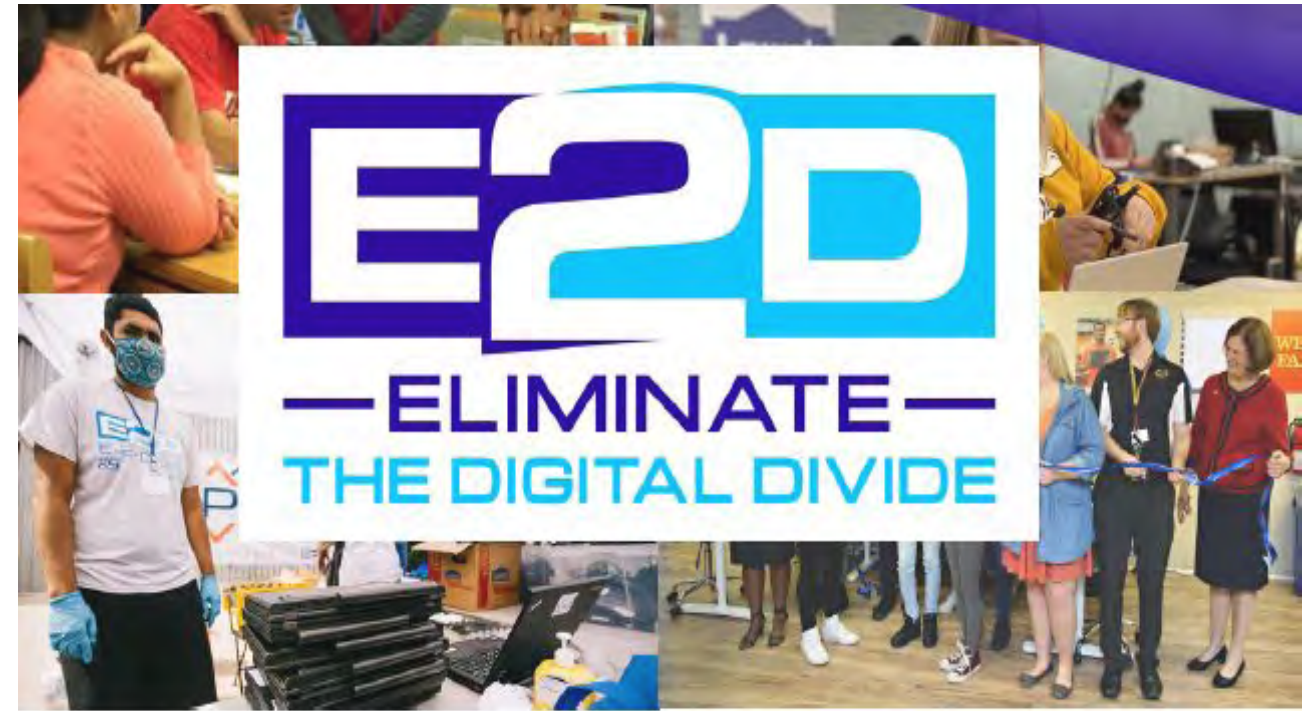
"E2D collects used laptops from generous corporations, refurbishes them in student-led technology labs, and distributes them to student families who don't have a computer at home."

## How Can you Help?

"As with most non-profit enterprises, financial support is a critical element of our operations. However, first and foremost, we need laptops! If your company retires its used laptops, please ask your IT department to donate them to E2D. We will pick them up, take them to our lab, refurbish them and redistribute them to families in our community with distinct needs.

By donating used corporate laptops to E2D, you will be in good company with 78 other corporate donors that have made eliminating the digital divide a priority."

*The above was taken from E2D's website.*



## Learn more at:

[www.e-2-d.org](http://www.e-2-d.org)

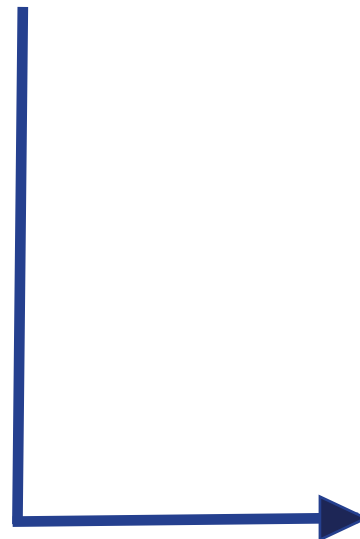
## Contact

*For General Info:*

[info@e-2-d.org](mailto:info@e-2-d.org)

*For Laptop Donation:*

[donatelaptops@e-2-d.org](mailto:donatelaptops@e-2-d.org)



*Changing Lives One Laptop At A Time!*

## OUR MISSION

The mission of E2D is to ensure that all NC families have affordable access to essential at-home technology to support academic success, and prepare students for college, careers, and beyond, as well as to foster job creation and retention for adult members of the household.

## HOW CAN YOU HELP?

First and foremost, we need laptops!

- If your company retires its used laptops, please ask your IT department to donate them to E2D.
  - We will pick them up, take them to our lab, refurbish them and redistribute them to families in local communities with distinct needs.
- Financial support is also a critical element of our operations.
  - It costs us \$150 to refurbish each device!

[Donate Here](#)




CONTACT US:  
[DONATELAPTOPS@E-2-D.ORG](mailto:DONATELAPTOPS@E-2-D.ORG)



# COMMONLY CITED BARRIERS TO DONATION


Here's a look at some of the responses we receive when discussing donations with potential corporate partners

 "To be honest, none of us really even know HOW we dispose of our expiring inventory. I'm pretty sure we have a policy that prohibits donations."


It's almost certain that a policy exists relative to expiring technology and it makes sense...or at least it did when the committee originally determined it.

E2D's questions:

- A) Are the original reasons for the policy still germane?
- B) Is E2D's imperative to digitally connect low-income families important enough to get your firm to reconsider its policy?

 "We lease our computers... we can't give them to you because they are not ours to give."

Many corporate technology leases have minimal end-of-term buyouts. We've had several companies pay as little as \$1 a piece on our behalf, for theirs.

 "We have a contract with a recycler where they take our retiring laptops."

We have yet to see a 3rd party disposition contract that requires 100% of tech be distributed to them. Most often, they come and take what is placed on the loading dock. In many cases, the firm is PAYING the 3rd-party to take retiring technology away. Holding laptops for E2D would not typically breach any 3rd-party arrangement...and we'd be happy to come to your loading dock to get them.

 "Our data is very sensitive! For security reasons we cannot donate our technology."

This is, of course, true of all companies. However, there are many ways for hard drives to be professionally and securely wiped. Companies like Lowe's, Atrium Health, Novant Health, Ally Bank, Barings Bank, and Robinson Bradshaw Law firm, among others all feel confident in the security of their data when they donate to E2D. They employ a variety of methods, from removing hard drives to securing outside certified recyclers to wipe them.

 Most often, when companies don't donate to E2D, it's because:

Doing nothing is much easier than doing something new. Maybe they don't know E2D yet. They are likely unaware of the way in which their donations can catalyze stunning transformation for local low-income families and communities.

# FREQUENTLY ASKED QUESTIONS

Do people really need laptops? Doesn't the school system provide devices?

In a 21st century, Covid-19 world, digital access is necessary to thrive. Without a laptop, families will struggle to gain upward mobility, but with digital technology, they will stabilize via health outcomes, employment, academic achievement, safe housing, and ultimately, be empowered to break cycles of intergenerational poverty.

In Charlotte, CMS has pledged to give every student a CMS Chromebook, which will eliminate the "homework gap," but which aren't functional for anything beyond homework. We have found that most school systems in NC have a similar model as CMS.

When you say companies donate to E2D, do you mean companies like mine?

Yes! Companies ranging from six person firms to giants like Lowe's proudly donate to E2D. We count the following companies among our supporters:

RED | VENTURES

BARINGS

NOVANT HEALTH

ROBINSON BRADSHAW

Electrolux

Atrium Health

ally

CAROLINA PANTHERS

Does E2D recognize its donors publicly?

E2D would not exist but for the generosity of its donors, and we are endlessly grateful for the vast amounts of support we receive. We have a number of ways in which we show our gratitude.

I'm still not sure, is there someone I can talk to?

Pat Millen, Founder and President, would love to sit down with you and work through any concerns. You can reach him at 704-904-4098 or pat@e-2-d.org.

Ashley Smith, Director of Technology, is also available to discuss technical concerns with you. She can be reached via email ashley@e-2-d.org.

# NC Cooperative Extension - Broadband Access and Education Coordinator

*Kenneth Sherin*

*Kenny Sherin also serves as Randolph County's Extension Director. He is the contact point for all Extension Offices across the State for the topics of broadband and digital opportunity.*

## What does Broadband Matter to Farmers?

Vimeo Video of Kenny's Presentation:

[www.vimeo.com/689353156](http://www.vimeo.com/689353156)

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## Digital Opportunities for the High Country

Connection and Engagement for all