Digital Equity Plan

Commonwealth of Kentucky

State Digital Equity Planning Grant Program

September 2023

TEAM KENTUCKY®

EDUCATION AND LABOR CABINET

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TEAM KENTUCKY

1 Executive Summary

The Commonwealth of Kentucky is committed to making meaningful progress toward achieving digital equity as one of our top priorities. Through the Better Internet Plan, Kentucky will ensure all Kentuckians have access to reliable high-speed internet and the right devices to access that technology while also ensuring necessary resources are allocated to identify barriers to affordability and ensure there is training and support available to develop our citizens' digital skills.

Kentucky is dedicated to achieving our vision in partnership with our trusted state, regional, and community partners through robust public-private partnerships.

Bridging the Digital Divide in Kentucky

The Commonwealth has created a Digital Equity Plan in collaboration with Kentuckians to ensure that every voice is heard, and issues related to internet use are adequately addressed over the next five years as we address our digital connectivity needs.

Pathway to Developing the Digital Equity Plan

Our pathway has been an inclusive one summarized at a high level below:

1. Establishing Digital Equity Leadership and Support
    - Created the Office of Systems Equity in the Kentucky Education and Labor Cabinet (ELC); and
    - Developed a Digital Equity Core Workgroup consisting of leaders from entities that provide services/support to covered populations, as well as lived experts.
2. Understanding the State of Digital Equity in Kentucky
    - Partnered with the Kentucky Office of Broadband Development to facilitate a 14-stop listening tour to gather information on digital equity issues and opportunities.
    - Collected information about organizations across Kentucky that provide digital inclusion services via an online asset inventory questionnaire.
    - Conducted a statewide residential survey to determine the state of internet use in Kentucky and any barriers faced by Kentuckians.
    - Partnered with community anchor institutions to conduct 16 focus groups to learn more about the lived experiences of covered populations.
    - Met with diverse stakeholders across the state in over 60 meetings and stakeholder events, resulting in almost 500 stakeholder collaborators.

Key Findings

- Over 128 institutions provide digital inclusion services across Kentucky.
- Twenty five percent of Kentuckians identified as covered populations are not adopting the internet at home.
- The leading barriers to internet adoption for covered populations are a lack of access to high-speed networks, affordability of high-speed internet and devices, and a lack of digital skills.

What's Next

This Kentucky Digital Equity Plan is a plan for all Kentuckians. The plan outlines the current state of digital equity; the various ways the Commonwealth sought input; insights about the unique needs of the communities across the Commonwealth; learnings from organizations already doing digital equity and technology work; and how we assessed what Kentucky needs to achieve digital access for all Kentuckians. This plan outlines six objectives to work toward to achieve digital equity for all Kentuckians:

- Enhance broadband availability and affordability for covered populations.
- Ensure access to affordable devices for all Kentuckians.
- Increase application accessibility and inclusivity to state and local government programs.
- Ensure that all Kentuckians are equipped to navigate the internet safely.
- Improve digital literacy for all covered populations in Kentucky.
- Empower all Kentuckians to develop the digital skills necessary for work and life.

2 Introduction and Vision for Digital Equity

The goal of the Commonwealth of Kentucky's State Digital Equity Plan is to establish a roadmap that ensures everyone, regardless of their background or community, has access to the necessary technological resources to fully engage in our society, democracy, and economy.

In our current digital era, fast, reliable internet has become an important part of our daily lives. Whether it's for work, education, collaboration, or staying in touch with loved ones, having high-speed internet is crucial. It empowers us by providing easy access to a wealth of information, services, and opportunities online. High-speed internet has transformed how we communicate, learn, collaborate, work, and access important resources. It has become a catalyst for innovation, economic growth, and social progress.

The COVID-19 pandemic and subsequent lockdowns exposed a persistent and preexisting Digital Divide that adversely affected communities across the Commonwealth. It caused significant disruptions in various aspects of life and has increased the demand for high-speed internet connectivity and applications. Remote learning became the norm as schools had to adjust, businesses were forced to close or operate under limited capacity, and many people lost their jobs without the resources to adapt. This crisis also shed light on the inadequacies in certain communities, especially low income. The health care system struggled, and education systems were unprepared for many students who lacked the necessary connectivity for remote learning. The economy suffered, with few job opportunities for individuals, and small businesses struggled to stay afloat.

It is against this backdrop that a bipartisan U.S. Congress passed the Infrastructure Investment and Jobs Act in November 2021 that provided states with funding to develop State Digital Equity Plans.

The Kentucky Education and Labor Cabinet's (ELC) Department of Workforce Development (DWD) is leading the effort to transform the lives of Kentuckians who have been left behind by the Digital Divide.

How to Use this Plan

This plan represents the Commonwealth's resource and roadmap to enable all Kentuckians to work together to close the Digital Divide.

The plan consists of four key elements for advancing digital equity in Kentucky:

- Establish clear and concise vision and mission statements for advancing digital equity in the Commonwealth (Section 2).

- Outline the current state of digital equity in the Commonwealth and its impact on covered populations (Section 3). This section explores existing digital assets, barriers to internet adoption, and existing opportunities and programs.
- Identify methods for involving Kentucky stakeholders in designing and carrying out the Commonwealth's Digital Equity Plan (Section 4).
- Outline strategies and actions for advancing fair access to digital resources in the Commonwealth in the next five years and beyond (Section 5).

As we work toward digital equity for all Kentuckians, this plan should be used by all individuals and entities who share this vision.

2.1.1 Vision for Kentucky

Kentucky will be a place where all individuals, businesses, and communities have full and equitable digital access to pursue economic and personal opportunities.

2.1.2 Our Mission

Kentucky will work to remove barriers to digital adoption by creating opportunities through technology, affordable high-speed internet, and digital skills development for all people and businesses.

The goal of this five-year Digital Equity Plan is empowering communities, businesses, local governments, and state agencies to sustain the Commonwealth's digital equity efforts beyond this initial five-year period.

We have identified, in collaboration with lived experts and partner organizations, the following objectives and strategies for advancing digital equity through this five-year Digital Equity Plan. Section 5 of this plan details the actions supporting these objectives and strategies.

Many of the objectives and strategies below will rely on leveraging the existing departmental and programmatic infrastructure of state, regional, and local institutions, such as Commonwealth Cabinets and Agencies, Area Development Districts, and Community Anchor Institutions (CAIs).

Objective 1: Enhance broadband availability and affordability for covered populations.

Strategies:

1. Optimize broadband deployment in partnership with the Office of Broadband Development (OBD) by sharing data regarding covered populations to inform the prioritization process and develop strategies.
2. Detect and alleviate obstacles and barriers preventing broadband expansion and adoption by facilities that provide services to covered populations.
3. Build a publicly accessible catalog of state and national subsidies on the digital equity website.
4. Identify and increase participation rates in low-cost or affordable broadband programs such as the Affordable Connectivity Program in targeted communities that have lower participation rates than the national average.
5. Promote community anchor institutions with free Wi-Fi or hotspot loan programs as a stop-gap measure.

Objective 2: Ensure access to affordable devices for all Kentuckians.

Strategies:

1. Create a sustainable device ecosystem in alignment with local digital equity plans, particularly in areas with low device ownership.
2. Identify and promote device refresh programs to deploy/sell low-cost refurbished devices to covered populations in collaboration with local government.
3. Capitalize on funding to drive impact while balancing urgency, universality, and equity.

Objective 3: Increase application accessibility and inclusivity to state and local government programs.

Strategies:

1. Conduct an accessibility study on critical state programs that are most frequently used by the covered populations.
2. Make it easier for covered populations to access government resources and programs online.
3. Develop an assessment tool for local governments to improve citizens' overall experience in accessing government services online.
4. Improve civic and social engagement options for covered populations.

5. Enhance the delivery of other essential services, such as emergency management alert efforts for covered populations.

Objective 4: Ensure that all Kentuckians are equipped to navigate the internet safely.

Strategies:

1. Develop and deliver basic internet safety and internet essentials online resources and post them on the digital equity website.

2. Create and distribute publicly accessible computer placards/aids as covered populations frequently utilize public computers and Wi-Fi.

3. Collaborate with the Kentucky Office of Cybersecurity to develop best practices resources on internet safety targeting covered populations in their communities.

Objective 5: Improve digital literacy for all covered populations in Kentucky.

Strategies:

1. Define digital citizenship in the Commonwealth and roll out with key stakeholders.

2. Improve Kentuckian's digital literacy via private-public partnerships to promote or enhance existing programs.

3. Build an interactive digital inclusion map so all Kentuckians can find training resources and support near them.

4. Enhance the digital aptitude and self-assurance of covered populations in Kentucky by implementing an enhanced program through our collaborative partnership.

Objective 6: Help Kentuckians develop the digital skills necessary for work and life.

Strategies:

1. Offer personal digital skills assessments and certifications in Kentucky to all who wish to achieve their goals or attain a basic digital skills level.

2. Incorporate digital skills training into existing education, training, and workforce development programs.

3. Expand covered populations' participation in and completion of online targeted-sector training in alignment with Kentucky's economic and workforce development goals, plans, and outcomes.
4. Enhance educational outcomes of covered populations through engagement in online learning platforms along the education continuum from preschool to postsecondary (P-20).
5. Positively impact the outcome and equity gaps for covered populations.
6. Increase participation in telehealth services, resulting in improved health outcomes of covered populations.

2.2 Alignment with Existing Efforts to Improve Outcomes

As the designated entity for state digital equity planning and capacity build, the ELC/DWD is well-suited to lead this effort due to the natural alignment across workforce development, education, and labor efforts.

We collaborate with various stakeholders, most importantly, the covered populations themselves. Other stakeholders include businesses, industry associations, labor organizations and educational institutions. Together, we create and deliver programs that equip individuals with the skills needed for the job market. Services comprise adult basic education, including civic education and English limited programming, integrated education and training programs, work-based learning, apprenticeship, rehabilitation and supportive services, veteran's services, vocational training, and other programs that help Kentuckians develop their skills. These programs enhance employment opportunities and economic growth across Kentucky.

This outline describes how the Kentucky Digital Equity Plan aligns with workforce development, educational outcomes, health outcomes, civic and social engagement, and delivery of essential services – as required in the State Digital Equity Planning Grant Notice of Funding Opportunity (NOFO).

Economic and workforce development goals, plans, and outcomes

The ELC is utilizing its current infrastructure for workforce development, along with newly hired staff, to aid in state digital equity planning and capacity building. The Kentucky Education and Labor Cabinet's Draft Strategic Plan 2023-2027 provides a vision that is designed to "foster opportunities for lifelong learning, training, and career services while protecting the well-being of Kentucky's workforce." That closely aligns with the State Digital Equity Plan, embracing technology as a mechanism for making Kentucky "a place where all individuals, businesses, and communities have full and equitable digital access to pursue economic and personal opportunities."

The plan also provides goals and objectives that relate to technological advancement. For example, Goal 2 of the plan is: "Align education and workforce programs with labor market demands to connect job creators with qualified employees and prepare Kentuckians for productive employment."

Associated measurable objectives include expanding services and utilizing social media to communicate with stakeholders. This goal will benefit from a digital equity strategy that ensures that Kentuckians have the skills and tools to access information shared by the Cabinet.

In addition to vision alignment, the ELC oversees several programs that can be leveraged to advance digital literacy and workforce development. The ELC's Kentucky Career Center offers a full suite of services designed to help grow and manage the workforce so that businesses run more efficiently and profitably. With over 100 locations across Kentucky, The Kentucky Career Center collaborates with various partner organizations, such as local Workforce Development Boards, Cabinet for Economic Development, Labor Cabinet, Public Protection Cabinet, Department of Education, Kentucky Community and Technical College System (KCTCS), and the Kentucky Council on Postsecondary Education to help Kentuckians with skills development.

The Kentucky Workforce Investment Board (KWIB) plays a crucial role in workforce development and aligning workforce needs with economic development policy and goals, as well as education goals in Kentucky. To address digital equity, KWIB can:

1. Promote Digital Inclusion: Encourage initiatives that provide affordable internet access, devices, and digital literacy training to underserved communities.
2. Offer Skills Development: Support programs that offer digital skills training and upskilling opportunities, especially for job seekers and workers in industries impacted by technological advancements.
3. Provide Business Support: Assist businesses in adopting digital technologies and implementing remote work solutions, which can create job opportunities and increase digital literacy.
4. Offer Data-Driven Decision-Making: Use data and analytics to identify regions or industries with the greatest digital disparities and tailor workforce development strategies accordingly.
5. Promote Public-Private Partnerships: Collaborate with private sector organizations to invest in digital infrastructure, offer training programs, and promote digital inclusion.
6. Provide Policy Advocacy: Advocate for policies that promote digital equity, such as funding for broadband expansion, digital literacy programs, and incentives for tech companies to invest in underserved areas.

By integrating digital equity considerations into its workforce development efforts, the Kentucky Workforce Investment Board can help ensure that all Kentuckians have access to

the digital skills and opportunities needed for a 21st-century workforce. Some examples of services that are relevant to the State Digital Equity Plan include:

- Work Ready Kentucky - A community certification program that encourages counties to take a credible inventory of their current and future workforce, identify the gaps, and carry out strategies to achieve a more knowledgeable, trained workforce and set broadband standards. This program is available to county governments.
- WIN Career Readiness System - A suite of career readiness courses available at no cost to every adult in Kentucky. It includes a Digital Literacy Courseware, and the Digital Literacy Credential focuses on building technology skills needed for success across all careers.
- Work Ready Scholarships - Scholarships for training for high-paying, in-demand jobs are offered in Kentucky universities and colleges across the Commonwealth. This includes our targeted growth sector and high-demand occupations, many of which are tech jobs and or require digital skills. This program is available to Kentucky residents, high school graduates or those with a GED, and individuals with associate degrees or higher.
- Registered Apprenticeship Programs - This program is designed to assist businesses in enhancing their workforce by addressing the critical need to retain employees and seek qualified candidates for hard-to-fill positions. It accomplishes this by providing work-based training initiatives that combine on-the-job training with practical experience. With about 1,500 occupations for apprenticeship programs, this innovative program offers an alternative path to postsecondary education that drives Kentucky's growth and competitiveness by aligning with community college courses.
- Work Based Learning - This program helps companies cultivate and nurture talent through customized, employer-driven skill enhancement programs that are flexible and effective. Individuals also have the opportunity to engage with employers while improving their essential skills and demonstrating their employability. Some components of this program include mentorship, job shadowing, entrepreneurial education, internships, transitional jobs, cooperative education and on-the-job training.

According to a report released by the National Skills Coalition in February 2023, 92% of jobs analyzed required digital skills, while only one-third of workers possess the foundational digital skills required to thrive in today's job market. This highlights the critical importance for the ELC to closely align workforce development activities with current programs and resources.

Digital equity is also closely linked to economic development strategic direction in several ways:

1. Access to opportunities: Digital equity ensures that all individuals have equal access to digital resources, such as technology and internet connectivity. This access opens

up a world of opportunities for individuals to engage in online education, entrepreneurship, remote work, and access to global markets. By bridging the Digital Divide, digital equity enables individuals to participate in the digital economy and take advantage of economic opportunities.

2. Skills development: Digital equity promotes the development of digital skills among individuals, which are increasingly in demand in the modern workforce. By providing equal access to digital skills training, digital equity helps individuals acquire the necessary competencies to thrive in the digital economy. These skills include digital literacy, coding, data analysis, online marketing, and more. With these skills, individuals can enhance their employability and contribute to economic growth.
3. Entrepreneurship and innovation: Digital equity fosters entrepreneurship and innovation by providing individuals with the tools and resources to start and grow their own businesses. With access to technology and digital skills, individuals can create online businesses, reach wider markets, and leverage digital platforms for marketing and sales. Digital equity empowers individuals to become entrepreneurs, driving economic development and job creation.
4. Closing the Digital Divide: Digital equity is crucial for closing the Digital Divide, which refers to the gap between those who have access to digital technologies and those who do not. By bridging this divide, digital equity ensures that individuals from all socioeconomic backgrounds have equal opportunities to participate in the digital economy. This inclusivity promotes economic development by tapping into the full potential of the population and preventing the marginalization of certain groups.
5. Digital infrastructure investment: Achieving digital equity often requires investments in digital infrastructure, such as broadband networks and public access points. These investments not only improve digital connectivity but also stimulate economic development. Robust digital infrastructure attracts businesses, encourages innovation, and supports the growth of industries that rely on digital technologies.

Recognizing that a company's workforce is its No. 1 priority, Kentucky is taking steps to ensure that workers in the Commonwealth are equipped with superior training and skills needed to compete in the global economy. Kentucky has aligned resources to ensure companies and individuals receive the assistance they need to be successful. Below are a few examples of economic development programs supporting the digital skill development of Kentucky's workforce with ELC:

Bluegrass State Skills Corporation (BSSC) - Providing employers with more training funds to develop new and existing employees.

Providing Second Chances - Supporting job placement assistance to nonviolent offenders after they have completed their sentence to allow them to re-enter the workforce, thus lowering the state's rate of recidivism and saving taxpayer money.

Equipping Offenders with Trade Skills - Offering apprenticeship programs for adult and juvenile offenders while incarcerated to give them nationally recognized journeyman credentials in skilled trades upon their release.

In summary, digital equity is a critical component of economic development as it enables individuals to access opportunities, develop digital skills, engage in entrepreneurship, close the Digital Divide, and drive innovation. By promoting digital equity, societies can unlock the economic potential of our untapped talent.

Education Outcomes

The Kentucky Department of Education's (KDE) mission is to create broad partnerships and support so that every student is equipped for the future.

Additionally, the KDE has resources that are critical to advancing digital equity:

- United We Learn is a tool for better family communication and partnership overall. A key part of United We Learn's vision is embracing a culture of deep and authentic partnerships between schools, families, community members, and business leaders.
- For Kentucky staff and students, it's no longer a question of IF online learning experiences will arrive, but HOW they can be utilized to better prepare students for a digitally connected life and workforce. For this reason, the Kentucky Department of Education provides a nine-point Digital Citizenship paradigm to promote responsible technology usage in schools.
- Digital access at school and at home is essential for academic success. Students without access to technology in school or at home are less likely to engage in 21st-century learning skills. Access to reliable high-speed internet service is a precursor to the desired academic outcomes that are powered by digital tools and resources. Strategies such as 1:1 and Bring Your Own Device (BYOD) policies are being adopted across Kentucky to help meet this need.

Kentucky's Digital Equity Plan effectively aligns with the Commonwealth's educational mission and strategic plan in several key ways. First, the plan prioritizes ensuring universal internet access for all students, regardless of their financial circumstances. This equitable access to the internet is paramount for student success, as it facilitates research, assignment completion, and communication with teachers and peers. In fact, a study conducted by Michigan State University to determine impact of poor or no home Internet access on student performance and the associated costs to society provided the following data-driven insights and conclusions:

- The gap in digital skills between students with no home access or cell phone only and those with fast or slow home internet access is equivalent to the gap in digital skills between eighth and 11th grade students.

- 47% of students who have no home internet access or have cell phone only access to the internet plan to complete a postsecondary program. This compares with 60% of those with slower home internet access and 65% of those with fast home internet.
- Students with higher digital skills are more likely to plan to enter a career in a STEM- or STEAM-related profession.

Therefore, a strategy that is committed to universal access provides opportunities for student success. Additionally, this strategy will help to advance the KDE's strategic objective of improving student opportunities.

Second, the plan places a strong emphasis on enhancing digital literacy among students, parents, and all Kentuckians. Digital literacy encompasses the ability to use technology effectively and responsibly. By bolstering digital literacy skills, students will be better equipped to utilize the internet as a valuable learning tool, thereby maximizing its educational benefits.

Third, the plan addresses the critical objective of improving the accessibility of educational resources for students. With the internet serving as an expansive repository of information and learning materials, the plan seeks to optimize access to these resources. This, in turn, empowers students to engage in more effective and comprehensive learning experiences. Additionally, the plan helps to advance KDE's strategic objective of engaging "stakeholders in consultation, collaboration, and co-creation".

In addition to KDE, the Kentucky Council on Postsecondary Education (CPE) is the state's higher education coordinating agency committed to strengthening our workforce, economy and quality of life. CPE does this by guiding the continuous improvement and efficient operation of a high-quality, diverse and accessible system of postsecondary education. The Kentucky Student Success Collaborative (KYSSC), recently released a report, "Kentucky's Strategy and Recommendations for Addressing Student Basic Needs." The report outlines eight recommendations to assist college students with basic needs insecurity, which means a lack of affordable food, housing, and other necessities. Currently, about 1 in 3 Kentucky students are classified as low-income and are struggling with nonacademic barriers to success, like hunger or even homelessness. It reinforces the need to address digital equity in the education environment: "Just as technology is revolutionizing the way we work, it is also transforming teaching and learning. Digital classrooms, global online collaborations, and personalized learning software are only the beginning. Combined with face-to-face instruction, technology can accelerate and deepen learning in profound ways. But we cannot harness this powerful tool if educators lack training and resources, or if broadband access is not universally accessible and affordable."

Overall, Kentucky's Digital Equity Plan constitutes a pivotal investment in the future of the state's education system. It positions Kentucky at the forefront of educational innovation and sets the stage for a more equitable and prosperous future for its citizens.

Health Outcomes

The Kentucky Department of Public Health Strategic Plan that was approved and adopted in January 2022 includes a focus on health equity. The plan references the Robert Wood Johnson definition of health equity as a society where "everyone has a fair and just opportunity to be as healthy as possible." Like the Digital Equity Plan, the plan recognized that in order to effectively deliver public health services, the Department of Public Health would require "a comprehensive plan to address the challenges and barriers associated with populations at risk and social determinants of health."

As a result, health equity efforts are elevated and have become an overarching principle of strategic planning throughout KDPH. Assessing, providing, and delivering public health services throughout the Commonwealth requires an understanding of health equity and a comprehensive plan to address the challenges and barriers associated with populations at risk and social determinants of health. With a mission to improve the health and safety of people in Kentucky through prevention, promotion, and protection, KDPH will help attract and retain a competent and diverse workforce; cultivate a positive work environment and satisfied workforce; implement and maintain a culture of quality and customer satisfaction; and support evidence-based and promising public health practice and research.

To support health outcomes, Kentucky's Digital Equity Plan aligns with its health care initiatives, offering a multitude of benefits. The plan aims to ensure universal access to high-speed internet for all Kentuckians. This is of paramount importance as it enables patients to tap into telehealth services. Regardless of residing in rural areas or facing challenges in reaching a doctor's office, individuals can still access vital care through telehealth. By bridging geographical barriers, the plan ensures that Kentuckians can receive necessary medical assistance conveniently.

Additionally, the plan focuses on bolstering digital literacy among Kentuckians. Digital literacy encompasses the skill set needed to navigate technology effectively and responsibly, and that applies to telehealth just as it does to so many other facets of life. By enhancing digital literacy, individuals become more adept at utilizing the internet to access valuable health care information and resources. This empowers them to make informed decisions about their well-being and take an active role in managing their health.

Moreover, the plan endeavors to augment the accessibility of health care resources for Kentuckians. The vast expanse of the internet serves as a comprehensive repository of health care-related information and tools. By improving accessibility to these resources, the plan enables Kentuckians to find the care they require more efficiently. They can explore a wealth of health care options, enhancing their ability to make informed choices regarding their treatment and wellness.

When considering the broader impact, Kentucky's Digital Equity Plan emerges as a crucial investment in the future of the state's health care system. Its potential to improve health care outcomes for all Kentuckians is immense.

Civic and Social Engagement

Kentucky's Digital Equity Plan will allow residents to stay informed, connected, and engaged in their communities. Broadband allows people to access information, communicate with others, and participate in civic activities.

Broadband can assist with civic and social engagement in Kentucky by providing Kentuckians a means to:

- Stay informed about current events by reading news articles, watching videos, and listening to podcasts. This is especially important for people who live in rural areas, where they may not have access to traditional news sources.
- Participate in online discussions about important issues by joining online forums, commenting on articles, and sharing their thoughts on social media. This allows people to share their views with a wider audience and to get involved in important conversations.
- Contact their elected officials by email, phone, and social media. This makes it easier for people to make their voices heard and to hold their elected officials accountable.
- Connect with friends and family who live far away by using video chat, social media, and email. This is especially important for people who have moved away from their hometowns or who have family members who live in other states.
- Participate in online communities that share their interests. This allows people to connect with others who share their passions and to learn from each other.
- Volunteer for causes they care about by finding opportunities online. This is a great way to give back to the community and to make a difference in the world.
- Access educational resources, health care resources, and government services online. This makes it easier for people to get the information and assistance they need, regardless of where they live.

Delivery of Other Essential Services

Kentucky's Digital Equity Plan will foster collaboration with state agencies to bring awareness to essential online services. By ensuring that Kentuckians are aware of and can utilize the electronic resources, the state can maximize use of digital government and essential services. Below are some examples:

- Banking and financial services: Broadband can be used to provide online banking and financial services to Kentuckians, regardless of their location. This can help to improve financial literacy and access to financial resources for all Kentuckians.

- Public safety: Broadband can be used to improve public safety by providing law enforcement and first responders with access to real-time information and resources. This can help to keep Kentuckians safe and to respond to emergencies more effectively. For example, planning and action to transition analog 911 infrastructure to Next Generation 911 (NG911) is already underway. NG911 is a digital, internet protocol-based system for emergency communication. NG911 will improve the public's ability to report emergencies and improve the capability of first responders to pinpoint responses more quickly, efficiently, and effectively.

- Transportation: Broadband can be used to improve transportation by providing real-time traffic information and by enabling the use of connected vehicles. This can help to reduce traffic congestion and improve safety on Kentucky's roads. A great example is the City of Louisville's New Dixie Highway project, designed to make the roadway safer for drivers and pedestrians, improve traffic flow, and improve public transit service. This project relies heavily on a fiber-optic network that enables an "intelligent transportation system" to manage and coordinate traffic signal timing along Dixie Highway between I-265 and Downtown Louisville.

- Agriculture: Broadband can be used to improve agriculture by providing farmers with access to information and resources, such as weather forecasts and market data. This can help to increase crop yields and improve the profitability of farming operations.

- Tourism: Broadband can be used to improve tourism by providing visitors with information about Kentucky's attractions and by enabling them to book accommodations and activities online. This can help to boost the state's economy and create jobs. A key element of the Kentucky Department of Parks' work to maintain its "best in the nation" status is more robust broadband service.

- Government services: The internet is a valuable resource for government services, such as applying for benefits, renewing licenses, and paying taxes. By ensuring that all Kentuckians have access to the internet, the plan will help to improve government efficiency and transparency and deliver better outcomes for all Kentuckians.

- Business services: The internet is a critical resource for businesses, such as marketing, customer service, and supply chain management. By ensuring that all Kentuckians have access to the internet, the plan will help to improve the state's economy and create jobs.

- Entertainment: The internet is a valuable resource for entertainment, such as streaming movies, listening to music, and playing games. By ensuring that all

Kentuckians have access to the internet, the plan will help to improve the quality of life for all Kentuckians.

Aligning Kentucky's Digital Equity Plan with State Goals

The Better Kentucky Plan, spearheaded by Gov. Andy Beshear, seeks to advance economic development in the state after the COVID-19 pandemic began in 2020. To achieve this goal, bipartisan House Bill 320 and House Bill 382 were passed during the 2021 and 2022 legislative sessions to allocate federal funds toward initiatives such as constructing new schools, providing access to clean drinking water, and expanding broadband coverage. Most notably, the Better Kentucky Plan includes the Better Internet Plan, which is designed to help the state's economy and workforce by expanding access to high-speed internet. This marked a key recognition and prioritization of high-speed internet as essential for businesses to compete in the global economy, for students to learn and prepare for the workforce, and for health care providers to deliver quality care.

The plan is helping to expand access to broadband internet by investing in infrastructure, providing financial assistance to low-income households, and creating programs to train people in digital literacy. These efforts are already making a difference in the lives of Kentuckians. Businesses in areas with high-speed internet are more likely to create new jobs and invest in research and development. Students in areas with high-speed internet are more likely to graduate from high school and attend college.

The Better Internet Plan is a work in process, but it has the potential to make a significant impact on Kentucky's economy and workforce. By expanding access to broadband internet, the plan can help the state attract new businesses, create new jobs, and improve the quality of education and health care.

Coordinating with the Kentucky Office of Broadband Development

In 2022, Kentucky House Bill 315 established the Kentucky Office of Broadband Development (OBD) to act as the primary entity for coordinating and planning broadband services throughout the state. The OBD is charged with fulfilling the mission of statewide broadband expansion by enhancing broadband access for underserved and unserved communities. Its responsibilities include developing a comprehensive plan, managing grant applications, processes, and procedures, making formal grant awards, and overseeing the sub-recipients of the grants. This includes grant agreements, monitoring, compliance, and federal reporting requirements. Ultimately, its function is to lead to increased innovation and job opportunities and expand Kentucky's business markets. Additionally, the OBD aims to provide support to Kentucky's public safety systems, educational and health care institutions, governmental operations, and citizens.

The ELC/DWD and the OBD are collaborating to ensure that issues of internet access and adoption are addressed concurrently, in accordance with the bipartisan infrastructure bill.

The OBD is primarily focused on deploying infrastructure to ensure universal access for Kentuckians. Following are just a few examples of our collaborative efforts: the Better Internet Listening Tour, OBD participation in the DE core work group; data sharing regarding covered populations and broadband workforce; joint stakeholder engagement sessions with partners, including local government and internet service providers; setting objective, strategies, and actions as well as contributing to each other's respective state plans.

Incorporation of Local, Municipal, and Regional Digital Equity Plans

Overcoming the Digital Divide in Kentucky requires a united effort from various community entities, both public and private. Kentucky recognizes the importance of ensuring municipal and Regional Digital Equity Plans are accounted for in the state's overall plan. This was part of the reason the ELC and OBD held a series of town hall events in communities throughout the Commonwealth to gauge the digital needs of Kentuckians. This was a six-week, 14-stop listening tour that began on February 14, 2023, to obtain input from stakeholders and residents across the state. The OBD also hosted a June 2023 meeting with local government officials to provide an early look at the state's new broadband map and to engage with local officials about broadband needs, as well as existing programs and resources.

ELC/DWD has also partnered with the Kentucky League of Cities and the Kentucky Association of Counties to gather DE plans. It became clear that cities and counties are doing work in the DE space. However, we identified only three local, municipal and/or regional plans: the City of Louisville's plan, Simmons College NTIA plan, and the SOAR Regional Digital Equity Plan. High level summaries of the plans can be found on page 21.

3 Current State of Digital Equity: Barriers and Assets

3.1 Asset Inventory

It is important to identify existing assets promoting digital equity that are available to Kentuckians. Any state digital equity plan should account for organizations and program already doing this important work. The ELC created an online survey for organizations to complete, gathering data on organization type, types of digital inclusion services offered, and covered populations served. The ELC promoted the survey through email, state websites, and to nonprofits and state organization representatives. Below are some highlights from the asset inventory:

- One hundred thirty institutions responded to the ELC questionnaire, stating that they offer digital inclusion services and training.
- Most institutions offer training to help clients develop their digital workforce skills, teaching clients how to use the internet, and offering general digital literacy training.
- Two out of three institutions offer free Wi-Fi to the public, while more than half provide career readiness assistance and public access to computers.
- Three digital equity plans have already been developed for different regions of Kentucky.
- The Affordable Connectivity Program (ACP) is a federal program that helps make internet service affordable through discounts for computing devices and monthly internet service costs for eligible households; currently, Kentucky ranks fifth in the percentage of eligible households that subscribe to the program (48.6%). There are ongoing policy discussions at a federal level on whether to or how to extend the ACP beyond its current programmatic lifespan.
- For most Kentucky internet subscribers, the ability to go online impacts their health: 77% search for health information online, and 76% interact with health care providers.
- Internet service affects education in Kentucky, as 62% of Kentuckians report doing schoolwork or conducting research for school online, while 54% take online classes.
- Home internet service also plays a role in Kentucky's economy, with 61% reporting that they use the internet to search or apply for jobs, and 45% say they advertise or sell products online.

3.1.1 Digital Inclusion Assets by Covered Population

As of September 2023, more than 130 organizations have completed the survey and reported which covered populations they serve. Results can be viewed in Appendix II. Overall, the asset inventory showed that the covered populations were receiving some services from the reporting organizations.

The resulting data from the survey have been incorporated as points on an interactive map available here: KY Map of Targeted Populations - Digital Equity

3.1.2 / 3.1.3 Existing Digital Equity Plans & Programs

Name of Organization	Digital Inclusion Plan/Program Name	Description
Louisville Metro Government	Louisville Digital Inclusion Plan	Digital Inclusion Transforms Lives Louisville Metro's Office for Civic Innovation and Technology digital inclusion plan provides the first steps toward eliminating the Digital Divide in Louisville. It assesses the current landscape of digital inclusion in Louisville, identifying gaps in the current capabilities, and making recommendations based on benchmarks from around the country.
Shaping Our Appalachian Region (SOAR)	The Digital Equity Action Plan for Eastern Kentucky	This plan helps Eastern Kentucky's rural towns and counties work toward achieving digital equity for everyone, despite the significant barriers that have long existed for the region. "Eastern Kentucky's rural towns and counties urgently need a digital equity plan that works for us – one that is informed by our people's unique needs and way of life. If we achieve digital equity in our region, every Eastern Kentuckian resident will gain access to reliable, high-speed internet at home. Ideally, this would also ensure every home may leverage fiber infrastructure so these connections may endure."
Simmons College of Kentucky	NTIA Connecting Minority Communities Pilot Program Grant	The program is for expanding high-speed internet access and connectivity to eligible historically black colleges or universities (HBCUs), tribal colleges or universities, and minority-serving institutions (MSIs). "The internet is essential for access to work, to education, to health care, and to justice," said Alan Davidson, Assistant Secretary of Commerce for Communications and Information, in a prepared statement. "Our Connecting Minority Communities program is about equipping students and the surrounding communities with the skills, the devices, and the capacity needed to reap the full benefits of our digital economy." Simmons College of Kentucky was awarded a $2.7 million grant.

The digital inclusion asset inventory illustrated the various digital literacy and skills training programs offered by various Kentucky organizations. The table below provides a breakdown of services currently offered and those that would be of interest if they had the resources:

Figure 1. Digital Trainings Offered by Organizations in Kentucky

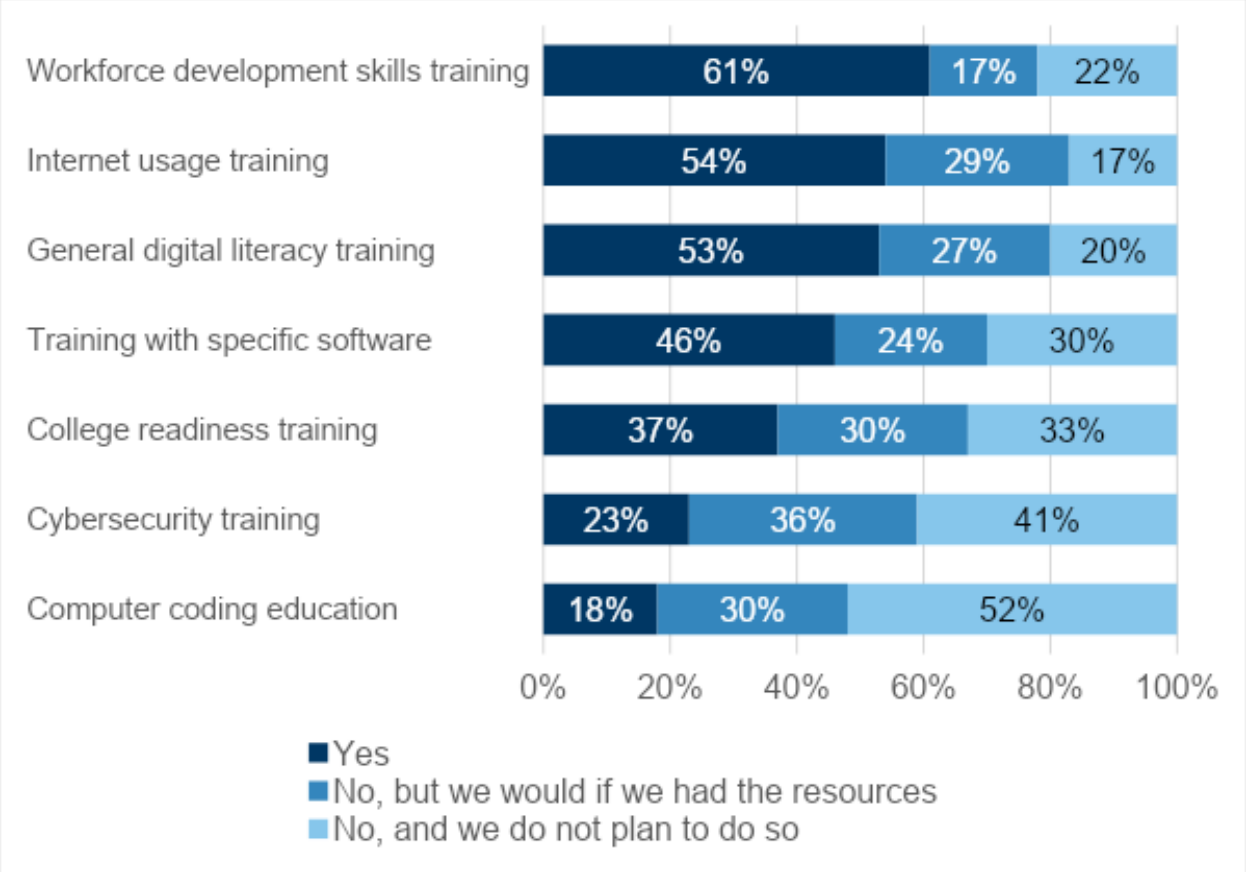
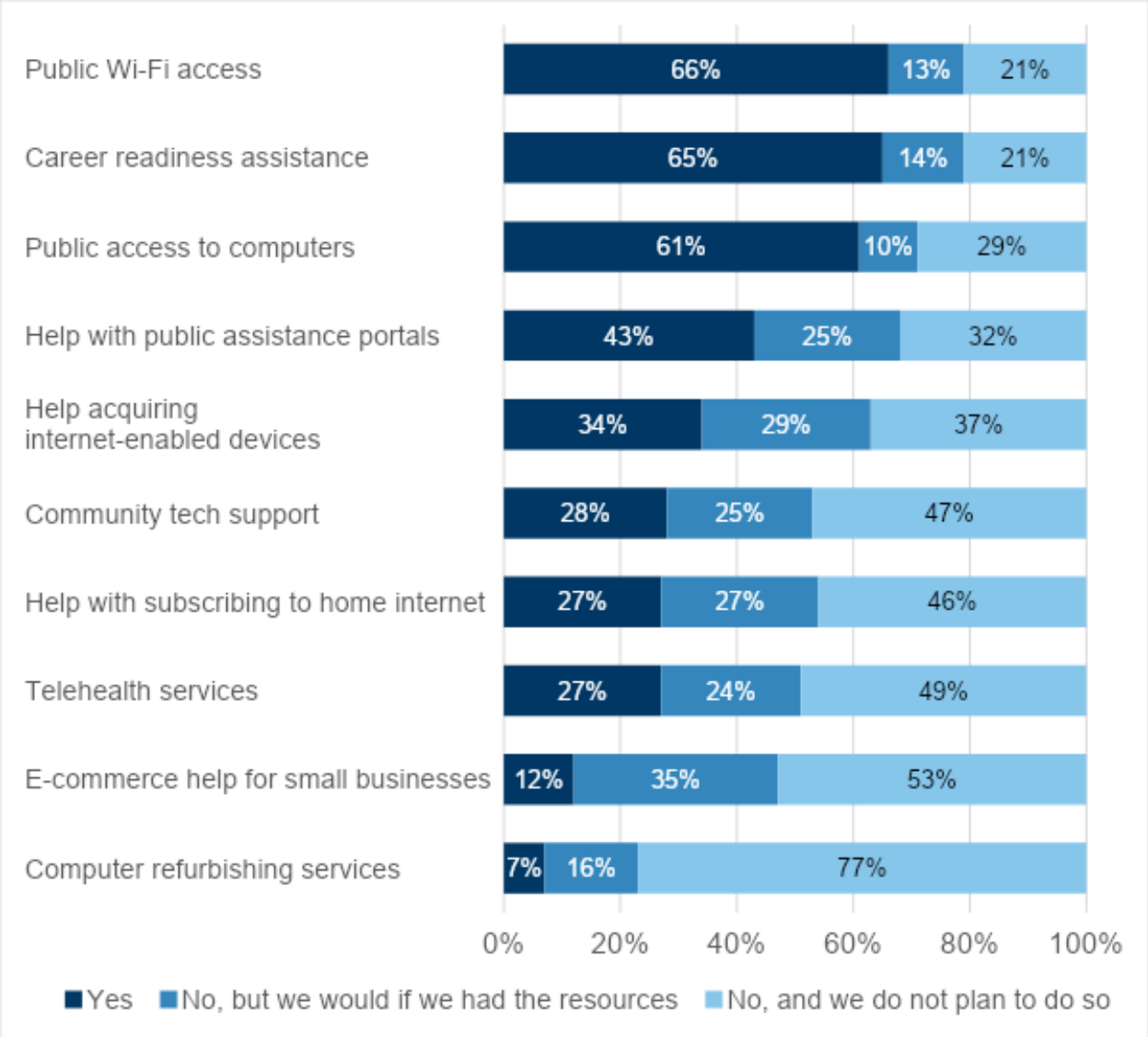


Figure 2. Digital Services Offered by Organizations in Kentucky

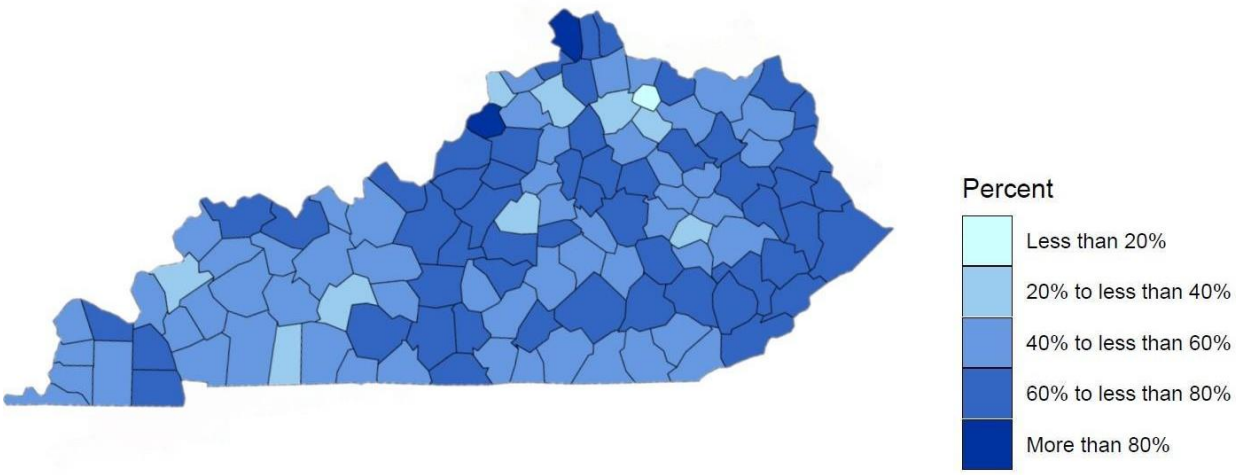


3.1.4 Broadband Adoption

The U.S. Census Bureau's American Community Survey (ACS) collects data about home internet subscriptions and internet-enabled computing devices in the household.

Figure 3 below illustrates the ACS 2017-2021 five-year estimates of the percentage of households in each county in Kentucky that subscribe to fixed home internet service.

Figure 3. Fixed Internet Adoption by County



Based on 2017-2021 five-year ACS estimates

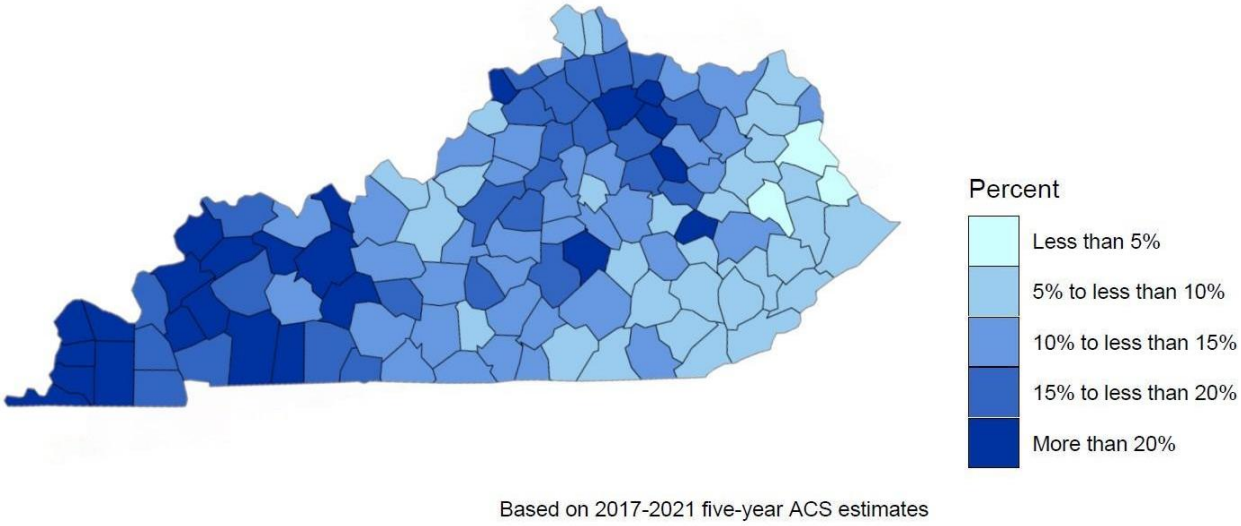
These numbers do not include:

- Households with a cellular data plan but no other type of internet subscription
- Households with dial-up internet but no other internet service, and
- Households that rely on satellite internet service.

At the county level, the percentage of households that subscribe to fixed internet varies widely. Two counties – Boone (in Northern Kentucky) and Oldham (near Louisville) – have home internet adoption rates above 80%.

- Meanwhile, rural Robertson County has a fixed home internet adoption rate of 19.7% – much lower than the counties with the second and third lowest rates (Crittenden and Lee, with 33.8% and 34% respectively).
- Surprisingly, the map shows high connectivity in the hills of eastern Kentucky. Many of these counties have home internet adoption rates between 60% and 80%. This is a rural area with high poverty rates – attributes usually associated with lower home internet adoption rates.
- It's possible that because of the lack of access to reliable cellular internet (because of the mountainous terrain), households may choose to spend more on home internet.

Figure 4. Households with a Cellular Data Plan as their Only Home Internet Source



- As expected, the areas of Eastern Kentucky with higher home internet adoption rates also have the lowest rates of households that rely solely on cellular internet.

The ELC administered a residential technology survey to Kentuckians in 2023 that shows some interesting results:

- 74.7% of Kentuckians subscribe to fixed home internet.
- Of those survey respondents who have fixed home internet, 72% report download speeds higher than 25 Mbps, the FCC definition of broadband. The average reported download speed is 328 Mbps.

What Are Kentuckians Using the Internet For?

- The U.S. Census Bureau's 2021 Current Population Survey included a computer and internet use supplement, which showed that many Kentucky households use the internet to telework, participate in virtual health care meetings, videoconference for work, and stay connected with their community.

  (Table 2).

Table 2. Internet Use in Kentucky

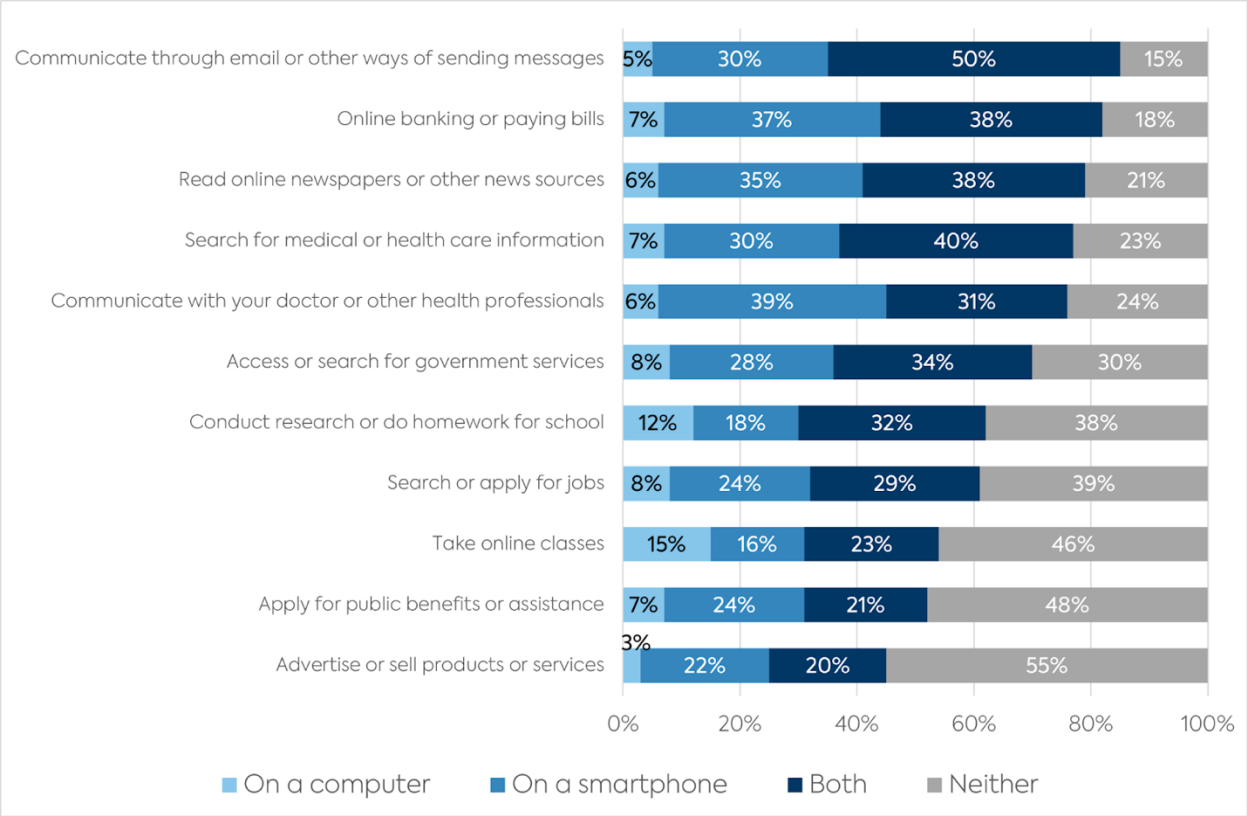
	Aging Individuals	Veterans	Racial or Ethnic Minorities	Statewide
Use Internet for Video Conferencing	43.7%	41.9%	56.9%	56.3%

Use Internet for Teleworking	28.6%	33.3%	21.1%	33.9%
Use Internet for Job Classes and Online Training	6.3%	3.2%	22.4%	17.4%
Use Internet for Online Banking	55.6%	61.3%	63.8%	65.6%
Use Internet for Accessing Medical Records	32%	43.5%	44.1%	44.2%
Use Internet for Telemedicine Appointments	33.2%	40.3%	34.7%	41.5%

Source: Current Population Survey, Computer and Internet Use Supplement, November 2021

- Kentucky's ELC residential technology survey showed that Kentucky adults go online for a variety of different activities (Figure 4).

Figure 4. Online Activities Among Kentucky Households



- Focus group participants listed several different ways that they (and other members of their households) rely on their home internet service for work, school, and entertainment:

"Everybody's on devices and TVs … so you've got 8 to 9 devices going at the same time."

"I use Facebook daily."

"I like the internet for the ability to read comics online and use YouTube videos to read things. I get audiobooks free that way."

"I like to use the internet for multiple things, like watching YouTube videos of how to cook certain dishes, budgeting, stuff like that."

"I do my homework online – I go to the community college."

3.1.5 Broadband Affordability

Access vs. Affordability

- Broadband affordability serves as a significant barrier to home internet adoption. While many households may have access to broadband, not all are able to afford it.
- According to Kentuckians who attended listening tours across the state, 60% said that high costs were a barrier to subscribing to home internet.

How Expensive is Internet Service in Kentucky?

- Based on responses from the ELC residential technology survey, Kentucky residents pay an average of **$72.94 per month** for their internet service.

As noted above, the cost of a broadband subscription is a barrier to broadband adoption in Kentucky. Availability issues may limit choice, forcing broadband adopters into sub-par internet service plans, or into higher-cost plans such as those offered by satellite broadband providers.

Several government programs exist to make home internet more affordable and reduce the gap between access and adoption rates, including:

- The ACP mentioned in Section 3.1, which was created by the federal government and managed by the Federal Communications Commission (FCC), provides a monthly discount toward internet subscriptions and a one-time discount toward an internet-enabled device for all eligible households.
- Lifeline is the other major federal program, also through the FCC, that lowers the monthly cost of phone or internet service for eligible households.

- Across the Commonwealth, 84 internet service providers participate in the ACP and/or Lifeline programs to help reduce the cost of home internet service. A list of those providers can be found in Appendix IV.

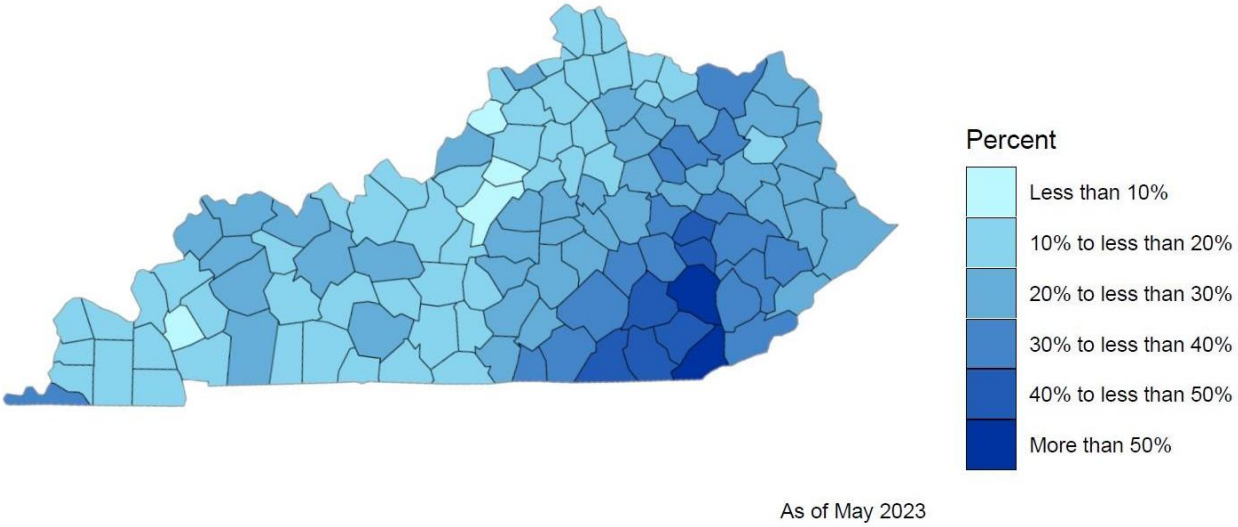
Table 3 below depicts the percentage of eligible households that subscribe to ACP, using eligibility numbers from Education Superhighway and enrollment numbers from USAC's ACP Enrollment and Claims Tracker (with data as of August 7, 2023).

Table 3. Overall, Kentucky ranks fifth in the country in ACP participation.

Rank	State	Enrolled	Eligible	Percent
1	Puerto Rico	618,066	962,129	64.2%
2	District of Columbia	56,598	104,893	54.0%
3	Louisiana	487,396	904,157	53.9%
4	Ohio	1,025,139	1,984,218	51.7%
5	Kentucky	411,231	846,290	48.6%

To visualize ACP participation, Figure 5 below illustrates the percentage of total households in each county that have enrolled in the program as of May 2023. Data on the number of total households per county comes from 2017-2021 five-year ACS estimates, while information on the number of households that participate in the program comes from USAC's ACP Enrollment and Claims Tracker.

Figure 5. Households Participating in the ACP



As of May 2023

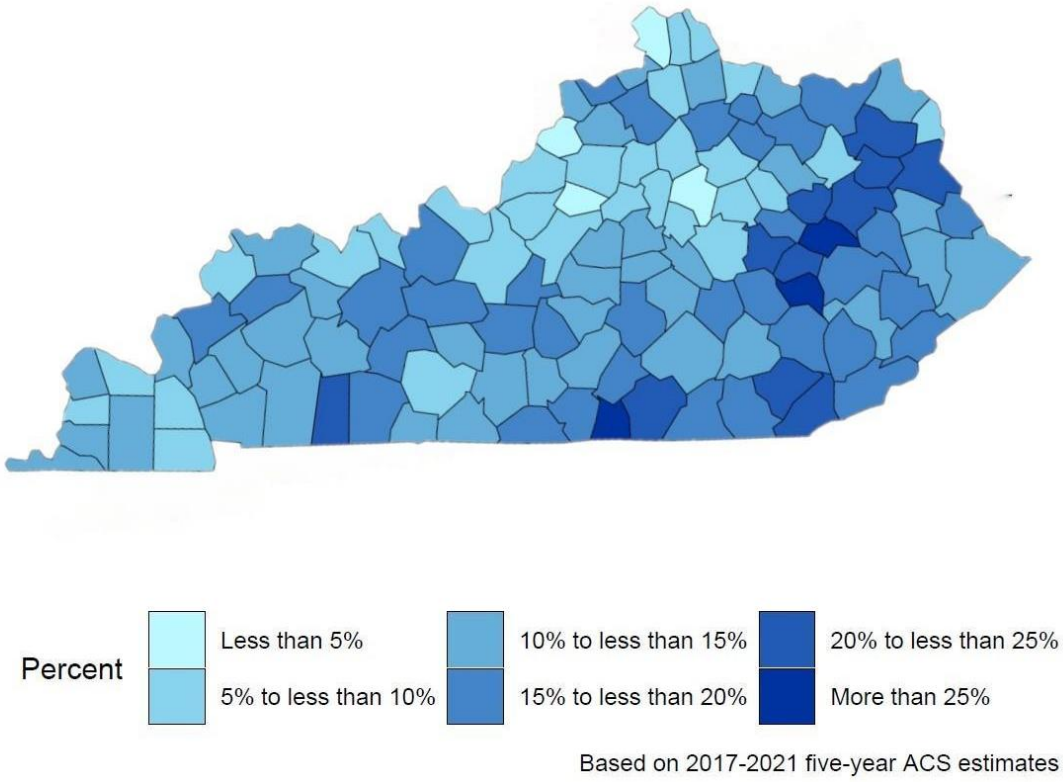
- Southeastern Kentucky has some of the highest ACP participation rates. Clay County stands tall above the others – 61% of total households subscribe to the ACP. Other counties with notably high participation rates include Bell County (54%), Owsley County (49%), and Knox County (47%).
- On the other hand, some counties have relatively low participation, including Oldham County (7%), Nelson County (9%), and Spencer County (9%). This may represent a need for focused outreach to identify if ACP or Lifeline eligible households in low-participation counties have enough information about these resources.

The FCC's Affordable Broadband Outreach Grants Program awarded funding to two entities in the Commonwealth. In total, the Louisville Metro Housing Authority and Shaping Our Appalachian Region (SOAR) received $533,927 to help enroll Kentuckians in the ACP. At the time that this funding was awarded, it amounted to $1.02 for every non-enrolled eligible household.

How Many Kentuckians Own Devices?

Figure 6 below depicts the percentage of households that do not own internet-enabled computing devices by county from the 2017-2021 five-year iteration of the U.S. Census Bureau's American Community Survey (ACS).

Figure 6. Percentage of Households that Do Not Own Internet-enabled Computing Devices by County.



- Without devices to access the internet, households cannot utilize the internet at home and must rely on computers at local libraries or other community-based organizations.
- While the ACS does not explain or ask why households do not have devices, the map above alludes to the importance of affordability. The hills of Eastern and Southeastern Kentucky, which face several economic challenges, have some of the highest rates of households without computing devices.
    - In Owsley County, for example, 31% of households lack computing devices – the highest rate of any county in the state.
    - Meanwhile, according to the ACS, the county has a median household income of $29,340, which is much lower than the state's median household income of $55,573.
    - The county also has a much higher poverty rate (27.7%) than the statewide average (16.5%). Therefore, it wouldn't be unreasonable to conclude that residents struggle with affording devices.

3.2 Needs Assessment

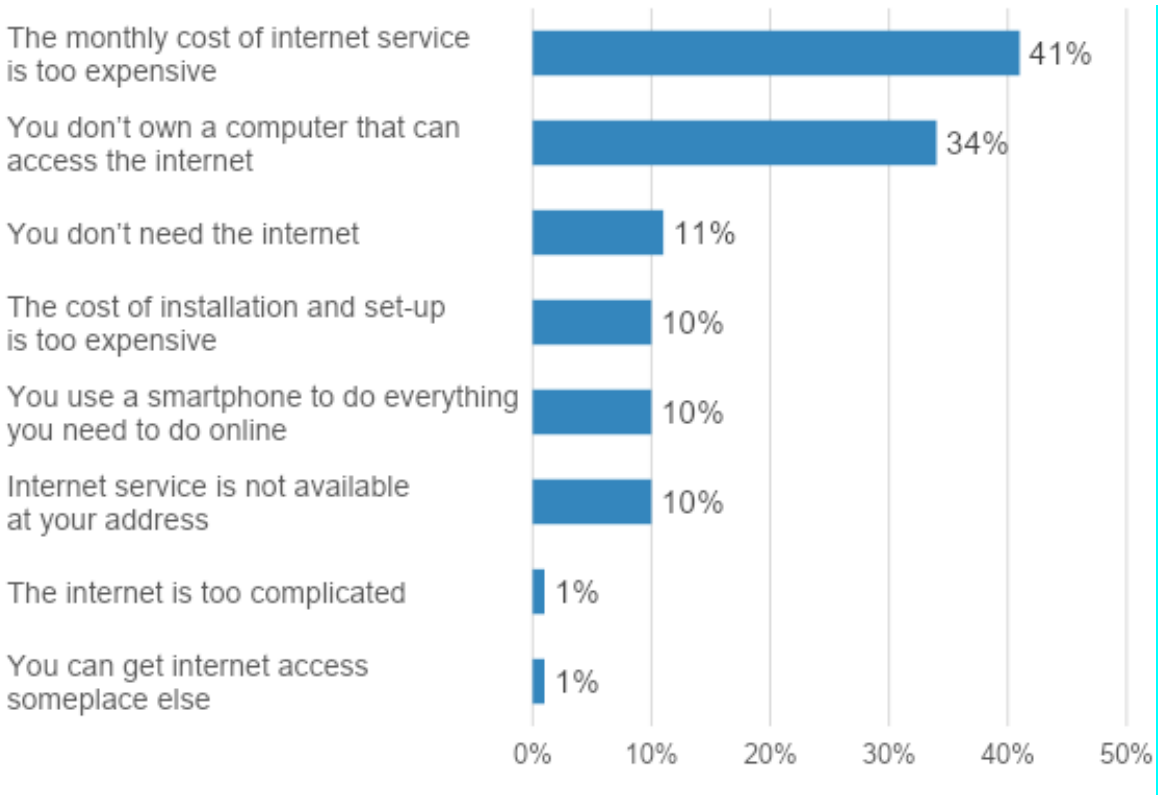
Another vital step is to identify the primary barriers that prevent many Kentuckians (particularly covered populations) from adopting and using the internet. To identify these needs, the Commonwealth of Kentucky conducted a 14-stop Better Together Listening Tour, focus group discussions, and a survey of Kentucky households to determine what prevents Kentuckians from adopting home internet service. Among the findings from this effort:

- More than 2 out of 5 survey respondents (41%) who do not subscribe to home internet service cite the monthly cost of service as a barrier to home internet adoption, followed by a lack of a computing device and a perception that they do not need the internet;
- Listening tour attendees agreed that cost or expense is the top reason why Kentucky households do not subscribe, followed by a lack of available service to the home;
- In addition to a lack of available, affordable service, there persists a digital skills gap that prevents many Kentuckians from fully utilizing the internet;
- More than 1 in 4 survey respondents (26%) who identify as a member of a covered population report that they do not have fixed internet service at home;
- The monthly cost of home internet service is the top barrier among respondents aged 60 or older, low-income households, and rural households;
- Among racial and ethnic minorities, veterans, and respondents with disabilities, the lack of a computing device is the top barrier to fixed internet adoption; and
- For individuals who face language barriers, major concerns include a lack of services offered in their native language and a digital skills gap.

The Commonwealth of Kentucky has taken multiple steps to identify the challenges that prevent households from subscribing to home internet service and learning how to use applications needed to succeed at work and school.

Figure 7 illustrates the primary reasons why survey respondents did not subscribe to home internet service.

Figure 7. Barriers to Home Internet Adoption

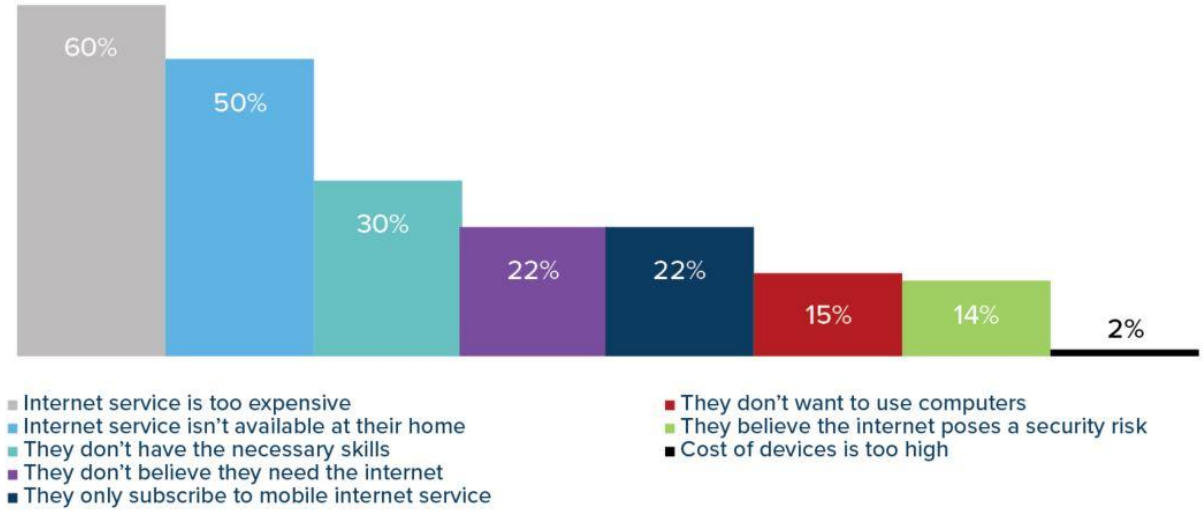


Details about this survey methodology can be found in Appendix VI.

In addition to the residential survey, attendees of the Better Together Listening Tour across Kentucky provided input on what they consider the top barriers to adoption facing their communities.

Figure 8 below shows the percentages of listening tour participants that indicated each reason is a barrier.

Figure 8. What Do You Believe Is the Biggest Barrier to Broadband Adoption in Your Community?



Top Three Barriers to Home Internet Adoption in Kentucky

Drawing from a series of interviews, listening tour events, focus groups and surveys, several challenges became apparent for households across Kentucky, as well as among covered populations. Through this effort, three challenges face the largest share of Kentuckians as they try to get home internet service.

1. In several areas of the state (urban, suburban, but primarily in rural areas) the infrastructure needed to connect households to broadband service does not exist.

- Statewide, 9.6% of those without internet at home said that they do not subscribe to broadband because it is not available at their home.
- Listening tour participants also cited availability as a primary concern; half (50%) said that a lack of available service is a reason why many households do not subscribe to home internet service.
- Focus group quotes:

> "They are laying the wires and cables, it's just that it's not available, it's not even being offered to you right now."
>
> "It's just not here yet."

2. Broadband and internet-compatible devices are often not affordable.

- The cost of broadband is cited by **41%** of people without home internet and by the majority (60%) of listening tour participants as a reason why households do not subscribe to home internet service.
    - **9.6%** of survey respondents also cited the cost of installation and setup as a barrier to subscription.

- The cost of home internet service was mentioned multiple times during focus group meetings:

> "It's just not affordable."
>
> "There's a lot of people that can't afford it."
>
> "I pay like $30, it's still expensive. I really think they need to either make it free for everybody, or at one price."
>
> "Being homeless, it's too expensive."
>
> "The affordability of having good quality internet is out of reach for a lot of houses."

- **33.7%** of survey respondents without home internet service cited their lack of a device as a barrier to adoption.
- **32.6%** of all respondents did not have a computer at home.
- **56.9%** of those without a computer cited the cost of devices as a barrier to obtaining one.

3. Many Kentuckians need digital skills training to increase their comfort level with being online.

For many Kentucky residents, a lack of digital skills represents a barrier to adopting and using home broadband service. This is reflected in the number of residents who don't feel comfortable using a computer or going online; it also includes those who do not know how to avoid online threats such as malware, scams, or other digital security threats.

- Three out of 10 listening tour attendees (30%) cite a lack of digital literacy skills as a barrier to home broadband adoption, while others cite concerns about using computers altogether or going online due to security threats.
- Digital literacy came up regularly during focus group meetings as well, with many participants saying that they either did not know how to navigate the internet or they did not feel safe doing so:

> "There's no training."
>
> "Not everyone knows how to connect."
>
> "I don't know anything about the internet, never used it."
>
> "[It's a] matter of trust … so many scams and hackers."
>
> "Scams, you gotta watch out for scams. Hackers. Oh, Lord, you're getting hacked."

Listening to Kentuckians

These needs and gaps are further supported by the anecdotal responses and feedback received during the Better Internet Listening Tour that was conducted in spring 2023. Public comments and discussion focused heavily on obvious gaps in service across the Commonwealth, often focusing on specific or targeted areas where service is unavailable.

- The listening tour was a localized and targeted effort that took shape as a 14-stop tour that was geographically diverse and provided opportunities for Kentucky's rural and urban populations to discuss the needs, concerns, and hopes for high-speed internet and digital equity in an open and public manner.
- While some of the covered populations were more heavily represented than others, such as those that primarily reside in rural areas (59%) and low-income households (39%), all the covered populations were represented in the tour, with 17% being the lowest percentage represented for incarcerated individuals.
- Those discussions also included representation from local governments, ISPs, nonprofits, residents, and for-profit businesses, as well as education, libraries, and health care to a lesser extent.
- Participants were led through a discussion that included a summary and timeline of the BEAD and DE programs, as well as an hour-and-a-half facilitated discussion related to high-speed internet, needs, barriers, digital inclusion, and how it impacts their community (city, county, region, etc.). Digital meeting facilitation tools were utilized to ask questions and further help in the facilitation of the meeting, allowing participants to interact both verbally and in a quantitative fashion.

Listening tour attendees echoed concerns about digital literacy tools in their open-ended feedback:

> "Many folks don't take advantage of [digital inclusion] resources due to ignorance or sheer apathy."
>
> "People aren't going to utilize these tools unless [they are] easily digestible."

Covered Populations

Q: What are covered populations?

A: Covered populations have much in common with demographic groups collectively and colloquially referred to as "at-risk populations" or "vulnerable populations," including in broadband and digital inclusion programs from prior years. However, the term is formally defined for the purposes of digital equity programs in the Digital Equity Act of the 2021 Bipartisan Infrastructure Law, and includes:

a) individuals who live in low-income households;
b) aging individuals;
c) incarcerated individuals;
d) veterans;
e) individuals with disabilities;
f) individuals with a language barrier;
g) individuals who are members of a racial or ethnic minority group; and
h) individuals who primarily reside in a rural area.
Source: Infrastructure Investment and Jobs Act, 2021

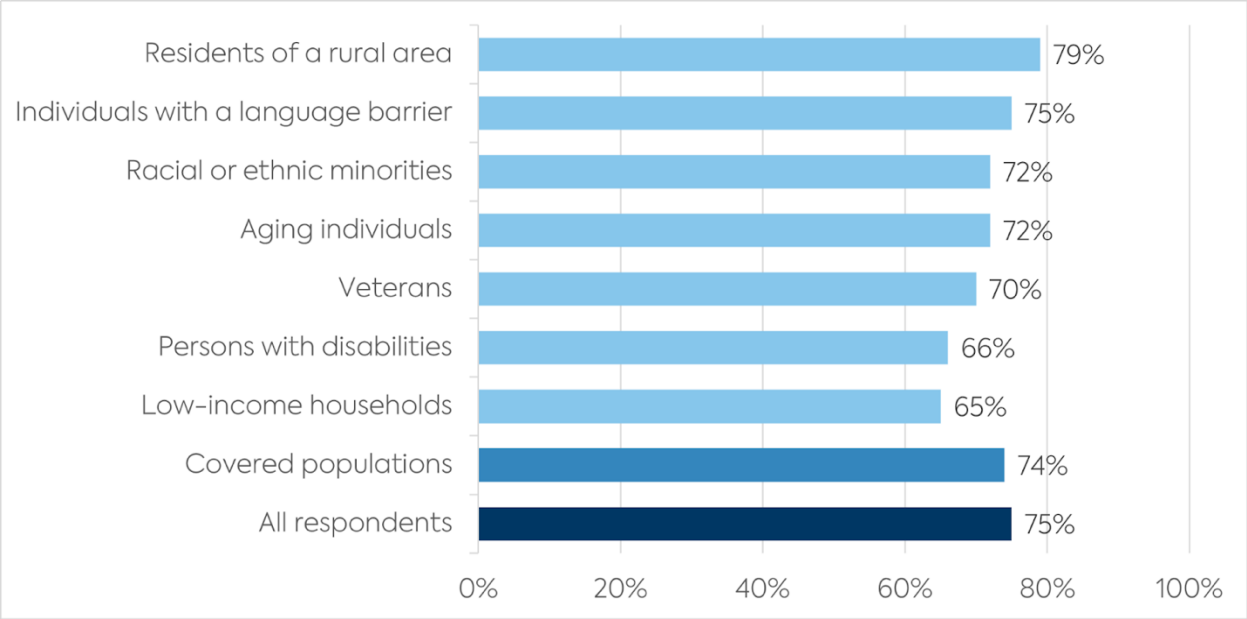
To explore a map of where covered populations live in Kentucky, follow this link:

https://digitalequity.ky.gov/Pages/KY-Map-of-Targeted-Populations.aspx

3.2.1 Barriers for Covered Populations, Adoption, and Affordability

Broadband adoption rates among individuals who identify as covered population members tend to be lower overall than the statewide average (Figure 9).

Figure 9. Broadband Adoption Rates Among Covered Populations



Among all covered populations, 74.2% of households report that they subscribe to fixed home internet service, compared to 74.7% statewide. Among specific groups of covered populations, low-income households and respondents with disabilities had the lowest internet adoption rates among the covered populations in the survey, reporting 65% and 66% adoption rates, respectively, trailing the state average by at least nine percentage

points. The following section breaks down data on how gaps in digital equity manifest across the groups that comprise covered populations, and these data necessarily inform specific recommendations that will close those gaps.

Alongside the residential survey, ELC worked with community partners to facilitate a series of focus groups across the state and learn more about these covered populations. From May 25 to July 31, 2023, 16 focus groups were conducted across 10 cities in Kentucky, reaching a total of 184 participants. While all covered populations were represented, some conversations better illustrated the unique challenges these populations face than others.

Insights pertaining to each covered population, derived from the residential survey, Better Together Listening Tour, and the focus groups, can be found below.

Aging Individuals (60+)

To ensure that broadband is available to individuals who identify as members of covered populations, it is first necessary to determine where those populations live. The Commonwealth of Kentucky, through the Kentucky Center for Statistics, developed maps showing where covered populations reside, and which counties have the largest percentages of these individuals. The map below focuses specifically on aging individuals.

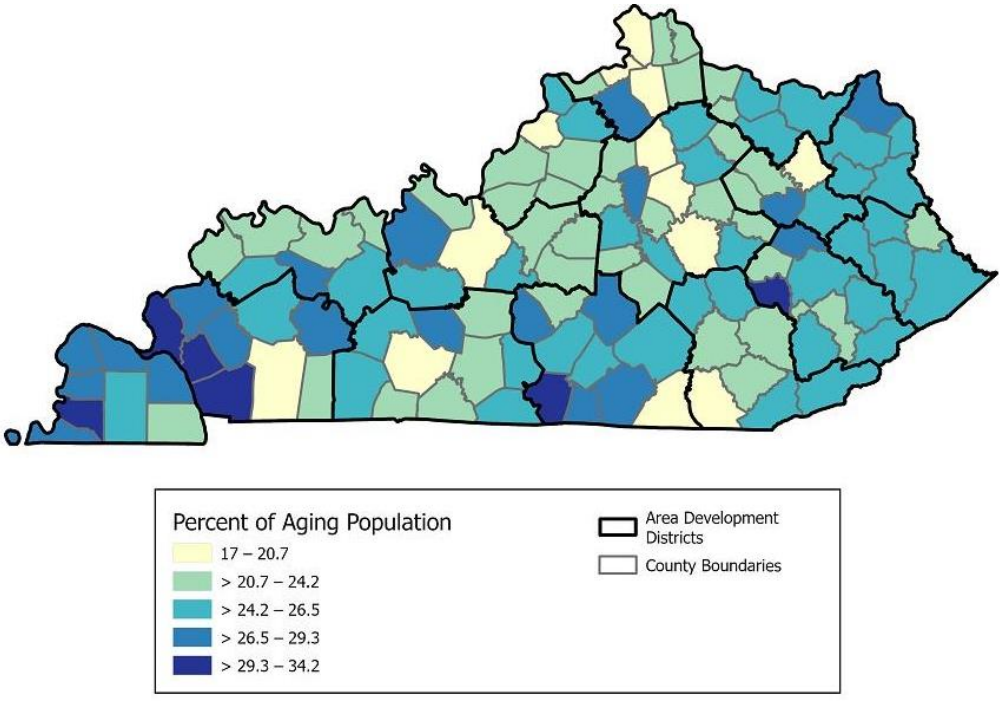
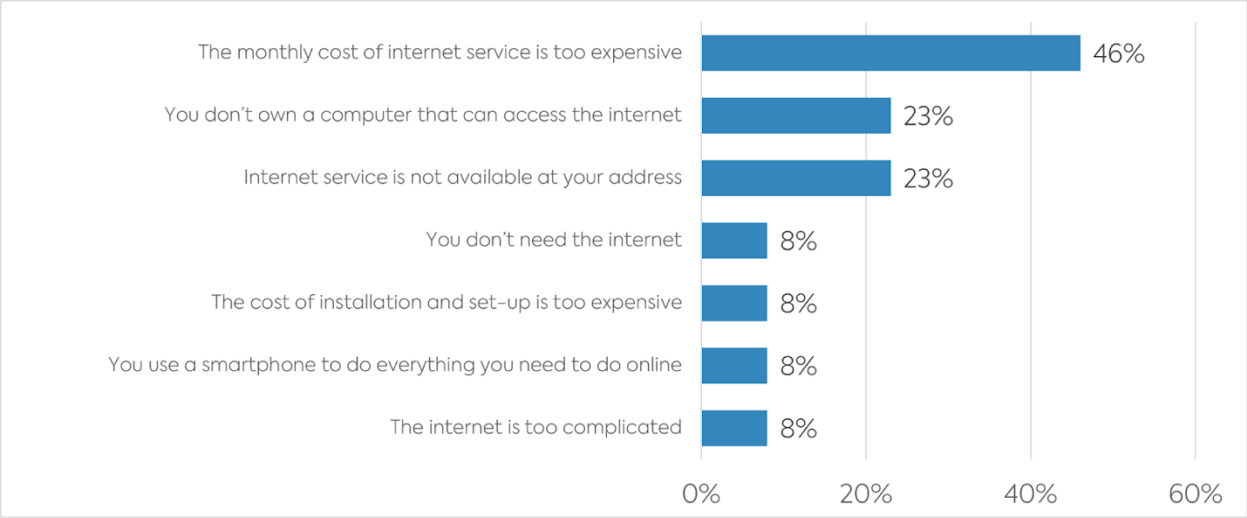


Figure 10 below highlights why aging individuals without home internet service do not subscribe. The primary barrier facing this population is that the monthly cost of service is too expensive.

Figure 10. Why Aging Individuals Do Not Subscribe to Home Internet Service



In addition to the residential survey, ELC partnered with Adam Haley from Goodwill Industries of Kentucky and Kevin Middleton from the United Way of Kentucky to conduct focus groups of aging individuals in the state. Across five cities, these discussions included 89 participants who provided context about the unique challenges that this population faces related to broadband. Aging individuals also participated in other focus group discussions not specific to the covered population.

Table 4 below summarizes key takeaways gathered from these focus group discussions.

Finding	Quote(s)
Aging individuals can struggle with using internet-connected technologies due to a lack of understanding.	"And signing up for benefits in general, really, there's a lot of people nearing retirement age that just, technology grew faster than they understood it, and just signing up for bank statements online is confusing."
Given a lack of resources to train this generation, many feel that they must rely on family members (if available) to properly understand the internet and associated technologies.	"If I have an issue, I take my phone or my tablet to my children. Or my 5-year-old grandson is really good at that, too." "I give [my phone] to my grandkids because they can do anything they want to do on it."
Because of their lack of familiarity with internet-connected devices, information retention can be a problem even after things have been properly explained.	"I mean, I've just passed the beginning stages of it, but I'm old, and I've already forgotten half of it."

Lacking digital skills makes this population more vulnerable to cybersecurity threats, as scams can be hard to identify with limited information.	"Not to make a generalization, but a lot of the older people don't really know as much about the internet because they didn't grow up with it. Trying to get them more aware about how the hackers can get in through your email. They'll literally change one character, or one letter of an email, and it looks like it's an email from Apple."
To some degree, these problems reinforce each other – aging individuals without digital skills may be afraid to use the internet because they fear being scammed, which makes it difficult to attain digital skills on their own.	"A lot of the older people in this area have the attitude [that] they won't click or do nothing. My dad won't go explore anything. He's too afraid because he's heard all the stories. He doesn't go look up stuff. He's terrified of being scammed."

Low-Income Households (at or Below 150% of Federal Poverty Threshold)

The map below shows the percentage of low-income households in each of Kentucky's counties.

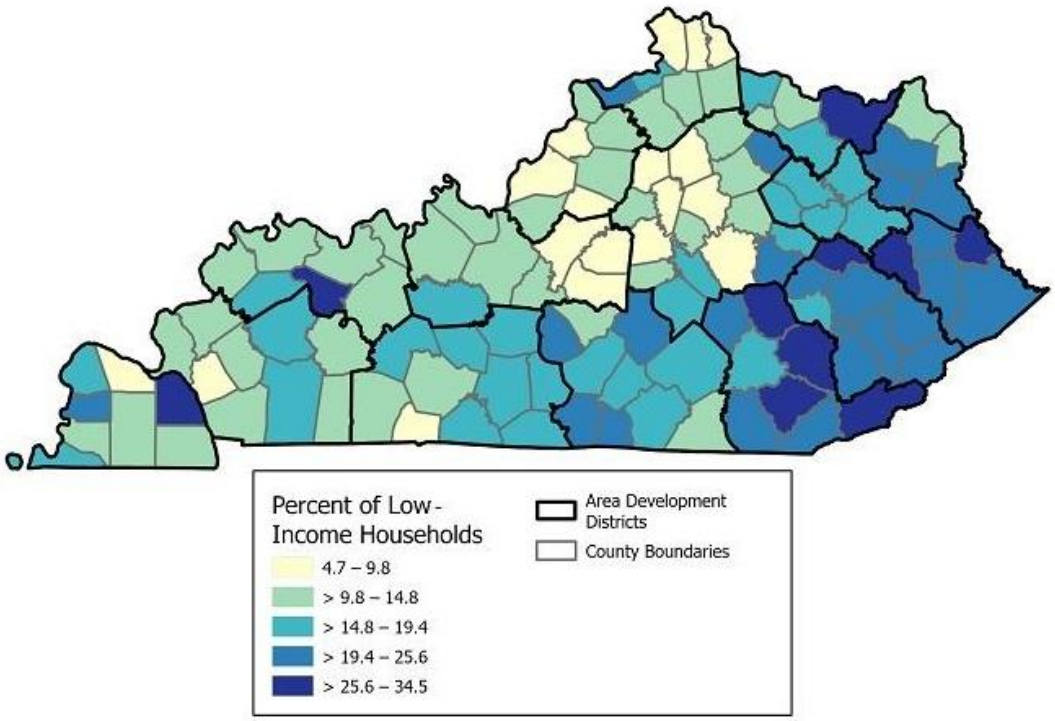
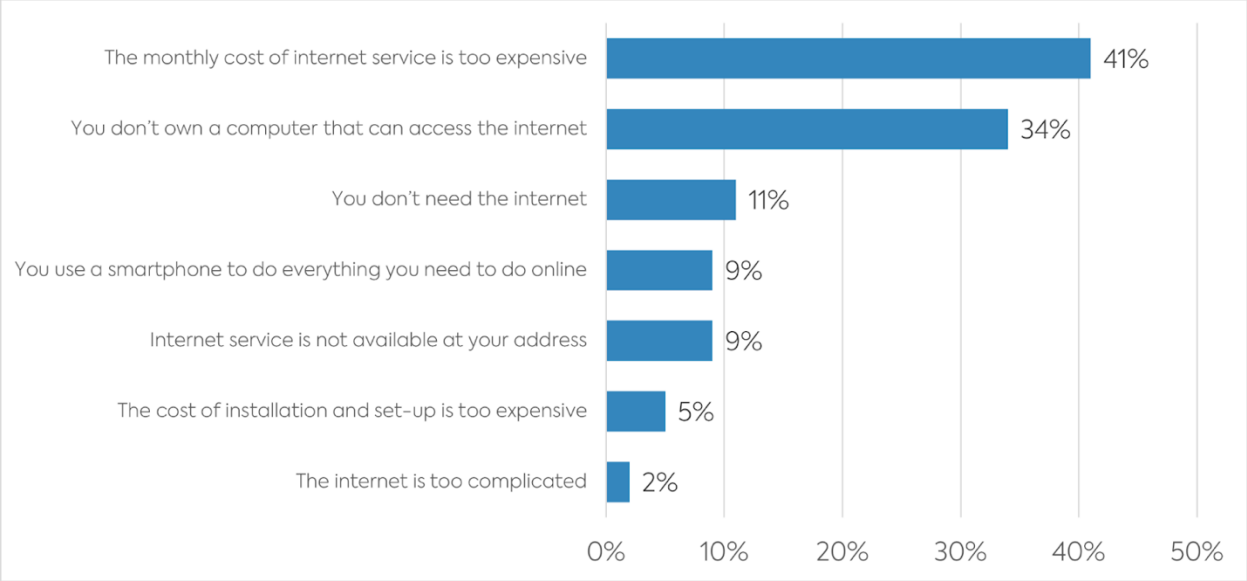


Figure 11 below shows why survey respondents without home internet service do not subscribe. The primary barrier facing low-income households is that the monthly cost of service is too expensive.

Figure 11. Why Low-Income Individuals Do Not Subscribe to Home Internet Service



Alongside the residential survey, ELC partnered with Kristina Scott from the United Way of Greater Cincinnati, Kevin Middleton from the United Way of Kentucky, and Kari Collins from Redbird Missions to conduct a series of focus groups in the state. These discussions, across four cities with 75 participants, highlighted the unique challenges that low-income households face related to broadband.

Responses from focus groups also highlight some of the unique challenges that this population faces. Key takeaways can be found in Table 5 below.

Finding	Quote
For some individuals living in low-income households, the question of affordability comes down to priorities – a household may have the ability to pay for home internet service, but other bills take priority.	"They can afford the $40 a month, but they have to use that $40 … Literally, all they have is money for rent. They can't afford anything outside of that."
While they may need to spend that money on necessities like food, the lack of internet inhibits their ability to participate in the workforce.	"Not a luxury. Essential. Certain populations [have] basic needs like food, but not internet. Could work from home but no internet. Applying for jobs – do you have a computer, internet?"

Programs like the ACP do help with affordability; however, some commented that they do not fully address cost concerns, and information about these programs is not always transparent.	"Well, I was walking, and saw a tent that said if you have food stamps, medical card, or something like that, you're eligible to get a free phone, free service, and that's how I learned about that. But then when I had got in my own place they said, 'Well, you can do the ACP.' And I did the ACP, not knowing that if I did the ACP on my Wi-Fi, my phone would be shut off. Can't get both."
While programs like the ACP exist to provide free or reduced-cost devices to low-income households, maintaining those devices can be expensive, which creates a barrier to future connectivity.	"[Devices are] kind of crappy technology and really expensive to get them fixed, too. I called up and I was gonna fix my screen. They wanted like $120 to fix this. That's really expensive."

Racial or Ethnic Minorities

The map below depicts the percentage of the population that identifies as a racial or ethnic minority in each of Kentucky's counties.

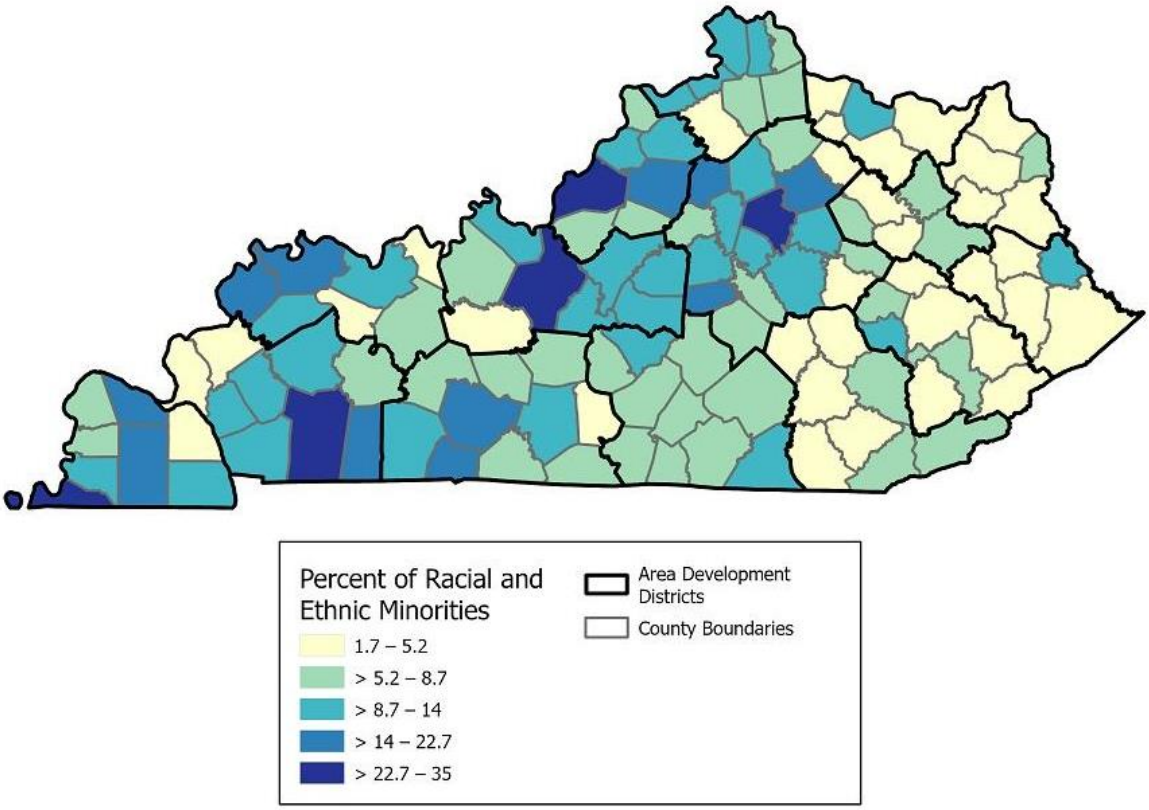
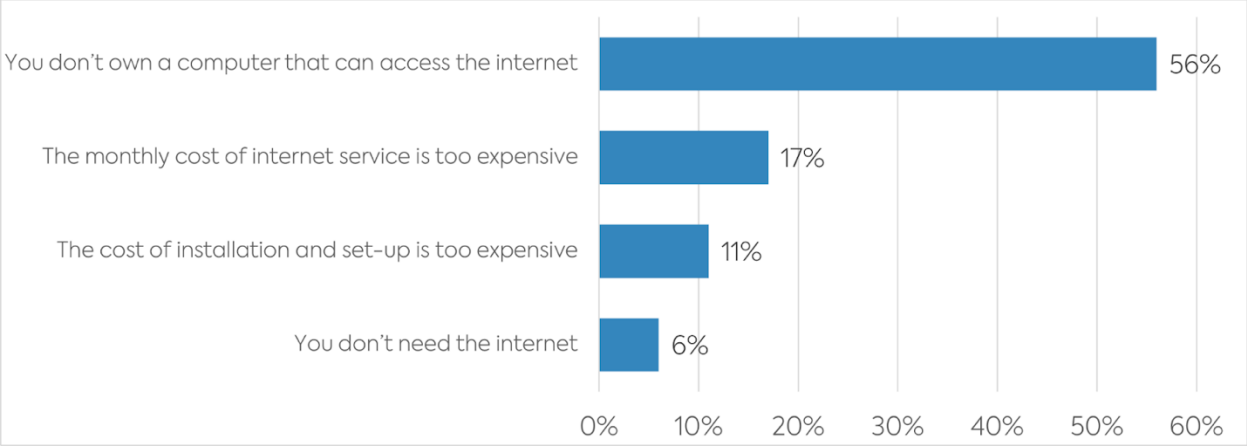


Figure 12 below illustrates why members of racial or ethnic minority groups without home internet service do not subscribe. The primary barrier to subscription is they don't own computers that can access the internet.

Figure 12. Why Racial or Ethnic Minority Groups Do Not Subscribe to Home Internet Service



Among all Kentuckians surveyed, 66.5% owned a computer.

Overall, racial and ethnic minorities had lower awareness about programs that could help them acquire devices and make internet service more affordable; 40.1% of non-white survey respondents had heard of the ACP, compared to 46.3% familiarity among all Kentuckians.

Rural Kentuckians

For the purposes of this plan, the map below identifies which counties are predominantly urban and which counties are predominantly rural across Kentucky.

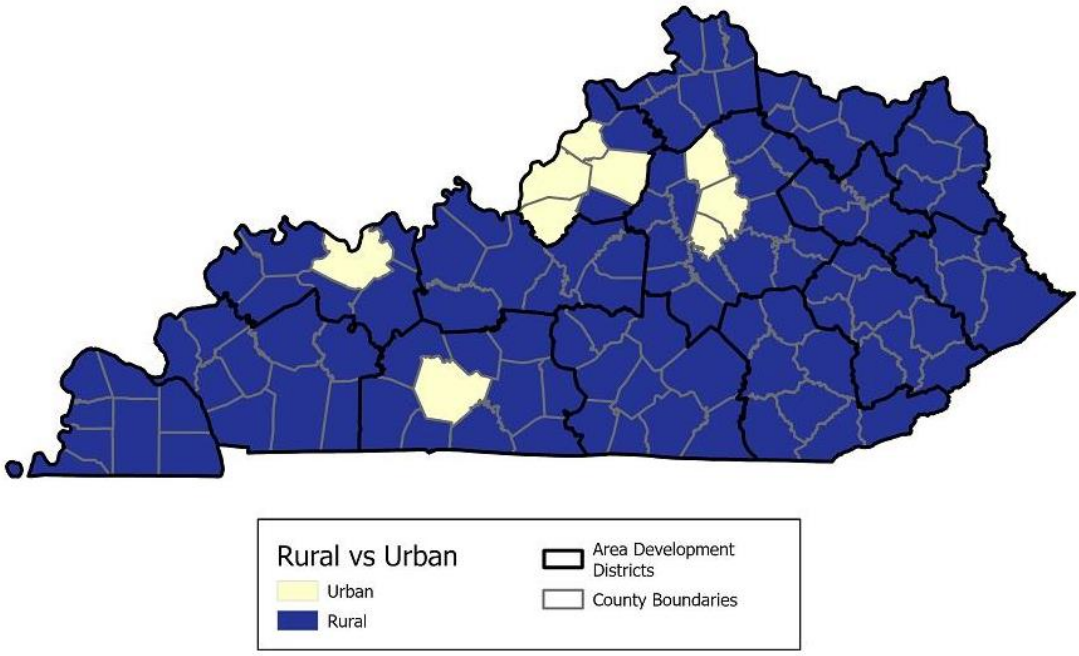


Figure 13 below highlights why rural residents without home internet service do not subscribe. The primary barrier facing this population is that the monthly cost of service is too expensive, closely followed by not owning a computer that can access the internet.

Figure 13. Why Rural Residents Do Not Subscribe to Home Internet Service

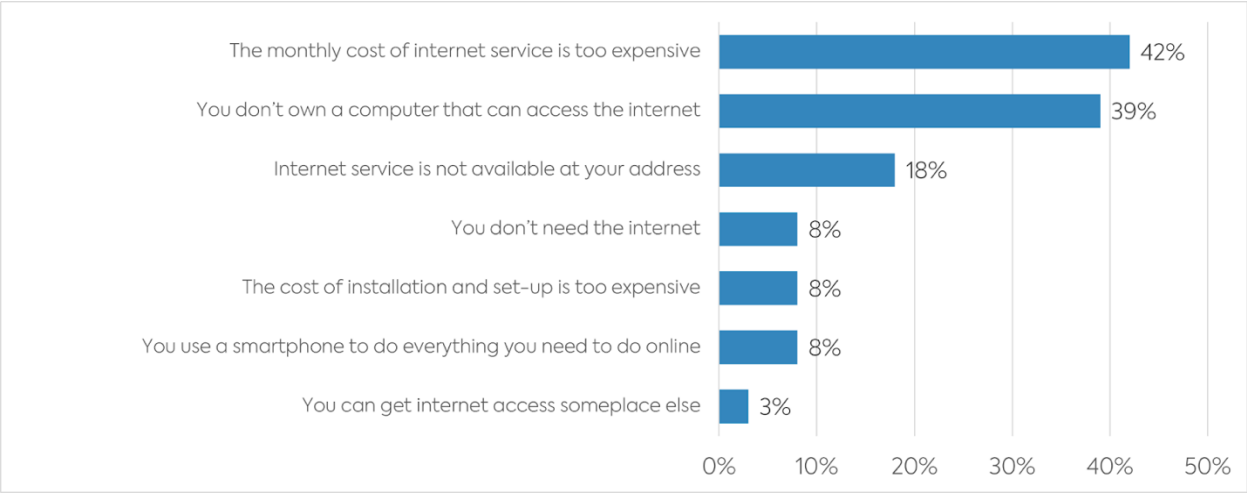


Table 6 below summarizes some of the unique challenges faced by individuals living in rural areas.

Finding	Quote(s)
Rural areas may lack competition between internet service providers – making it easier to charge higher prices.	"I feel like there's not a lot of options for people that live out in the boonies. I have some friends, and there's only one company that works for them, and it's really expensive." "Like I said, we're paying over $100 a month for a basic phone and 5 Mbps internet. We could do satellite internet, but it is not very trustworthy."
In some areas, residents lacked the ability to get reliable internet service at all.	"There is no internet service provider where I live. We have to get satellite internet if we want it."
Being in a remote location also makes it difficult for rural residents without digital skills to access government services. Focus group participants cited transportation time and costs as a barrier, as well as limited staff to accommodate the demand.	"When people needed help to sign up for government programs, they said to go to their local library. The library is 45 minutes away. [People] don't have the gas money or time to drive 45 minutes to go over there, and doing it online is not an option. I drove to the library, and I spoke to him, and I said, 'Are you going to help all the people who would come for help?' They said we have a staff of two, we can't help them."

Persons with Disabilities

The map below illustrates the percentage of the population that has a physical or mental disability in each of Kentucky's counties.

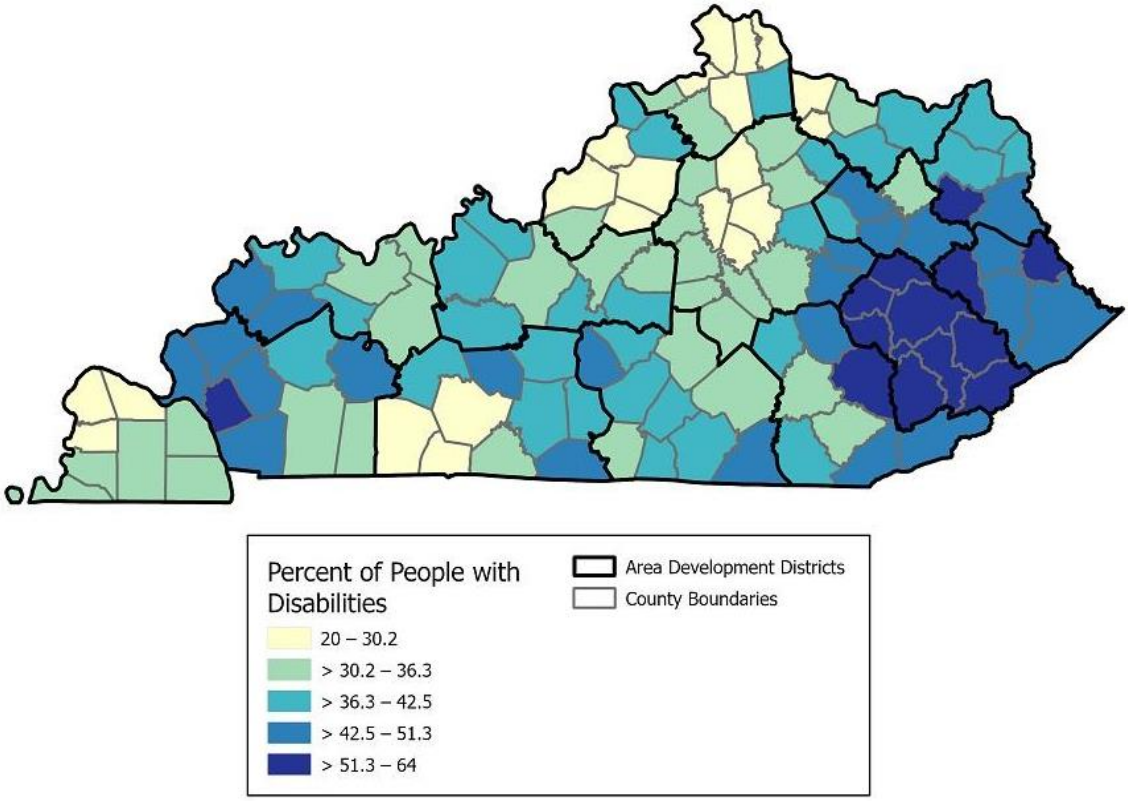
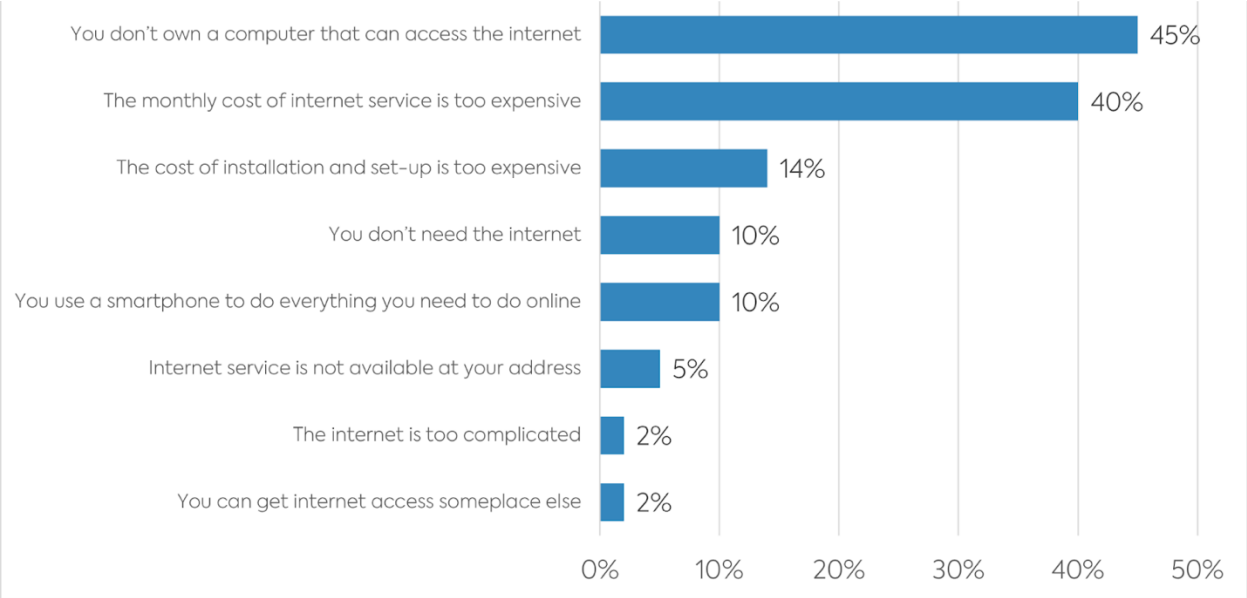


Figure 14 below shows why survey respondents without home internet service do not subscribe. The primary barrier for people with disabilities is not owning a computer that can access the internet, followed closely by the monthly cost of internet service.

Figure 14. Why Kentuckians with Disabilities Do Not Subscribe to Home Internet Service



Open-ended feedback from the Better Together Listening Tour provides additional insights into the unique challenges that this population faces.

Finding	Quote
People with disabilities can sometimes face accessibility challenges, which having reliable internet could help them with – especially with regards to telehealth and telework.	"Accessibility for deaf and hard of hearing is much needed. Internet access will allow them to make phone calls and receive interpreting services for health care."
Having a disability sometimes means that the individual is not able to work, and therefore reliant on a fixed income; as a result, this population may struggle with the ability to afford home internet service and computers.	"I'm on disability, I cannot work, so it's very hard for me to afford a computer."

Veterans

The map presented below identifies the percentage of the population that are veterans in each of Kentucky's counties.

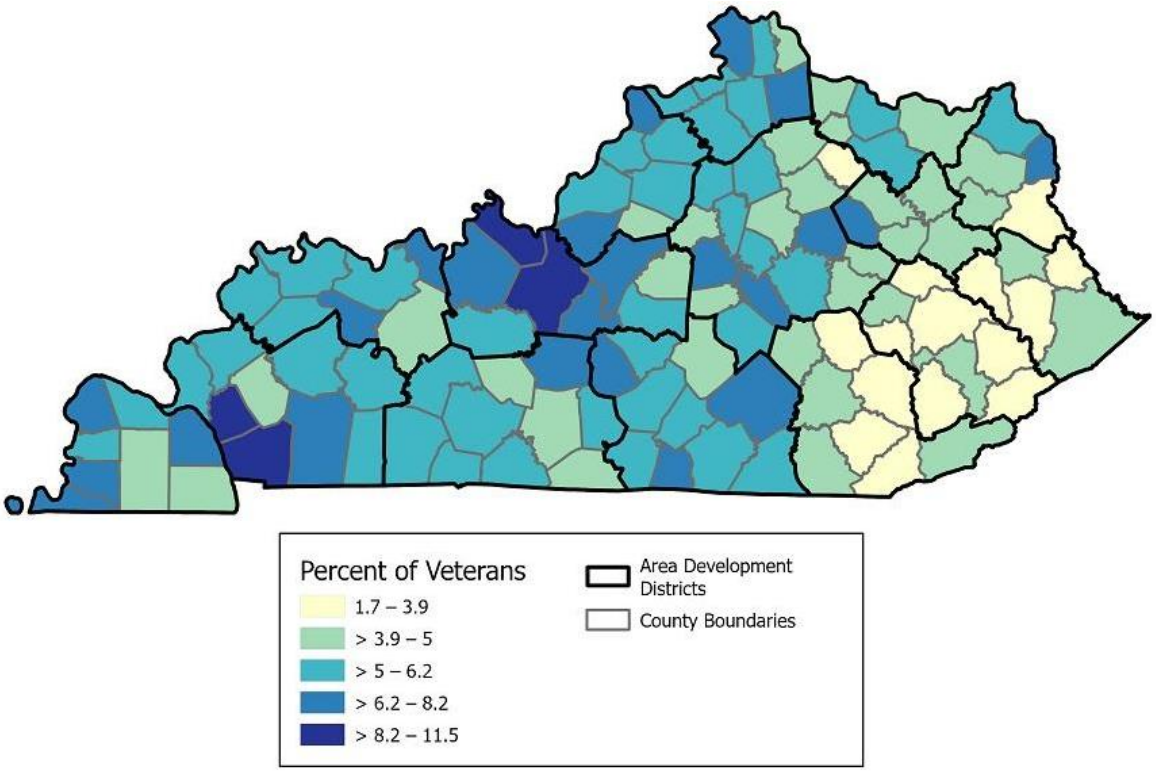
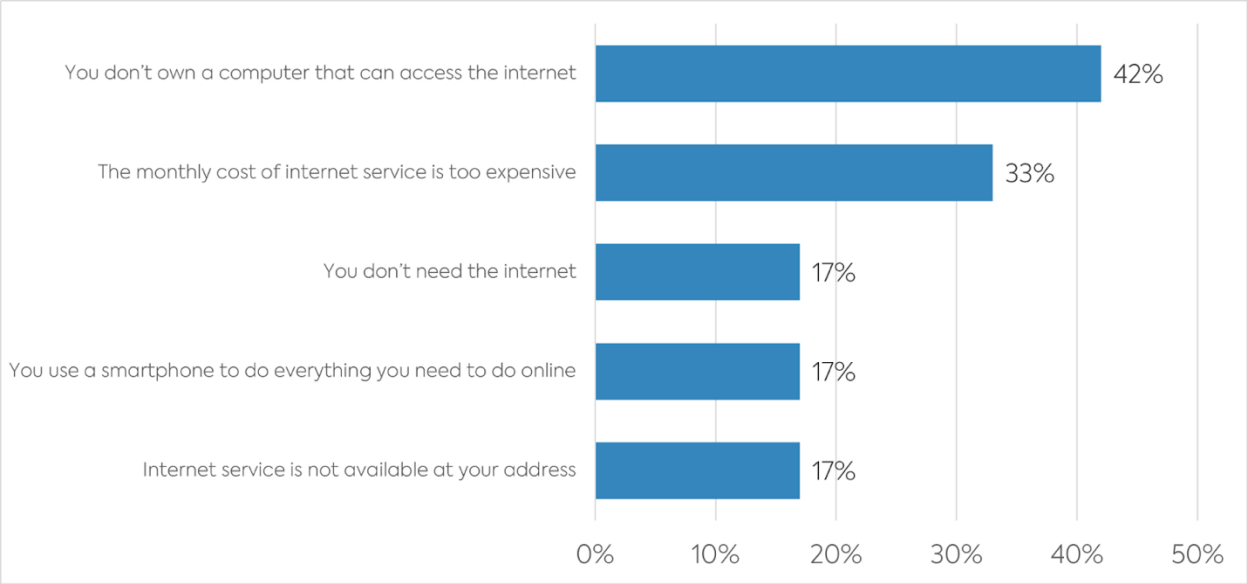


Figure 15 below highlights why veterans without home internet service do not subscribe. The primary barrier facing this population is owning a computer that can access the internet.

Figure 15. Why Veterans Do Not Subscribe to Home Internet Service



In addition to the residential survey results, ELC partnered with Jad Davis from the Jobs for Veterans State Grants (JVSG) program to conduct focus groups that illustrate the challenges

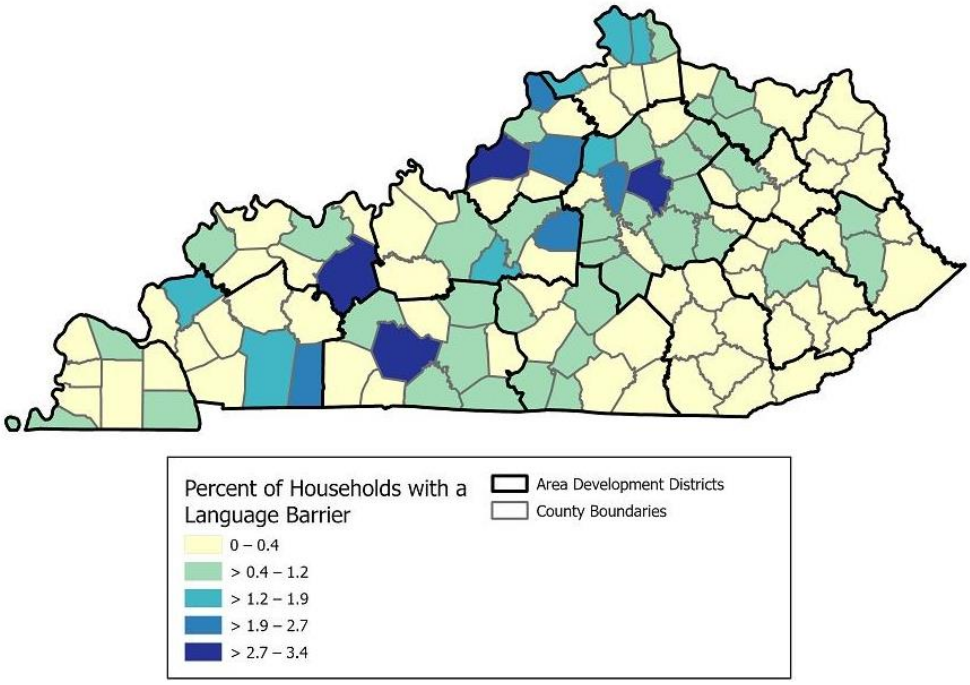
that veterans face in relation to the internet. These focus groups reached 14 individuals across two cities to share their experiences.

Table 7 summarizes key takeaways from the focus groups and illustrates the challenges that veterans face while trying to navigate the internet.

Finding	Quote
In an increasingly digital world, many veterans without digital literacy skills struggle to find services and benefits that can improve their quality of life.	"They're not familiar with Facebook or how to look up stuff from 101st on Facebook because all this stuff is marketed digitally. It's not on billboards. It's not on the newspaper, it's marketed digitally. That's it, that's the biggest challenge, how to get the information to me."
For many veterans, lacking digital literacy skills means taking potentially unnecessary trips to see whether they qualify for benefits.	"And there's a lot of veterans out there that have no clue, and they go into the VA, they wait and then they become disgruntled where if you had a computer, it's all there."
Without digital literacy training, veterans also struggle to file medical claims once they have established their benefits.	"I have a lot of vets that come in because they can't get ahold of anybody or can't get appointments with KDVA and they're asking me to file claims because they know that I am a veteran."

Persons with a Language Barrier

The map below depicts the percentage of households in each county that do not speak English as their first language.



The residential survey did not identify enough individuals facing a language barrier without home internet service to infer why this population does not subscribe. However, ELC partnered with Denise Lyons from the Kentucky Department for Libraries and Archives (KDLA) to conduct a focus group with this population in Lexington to gain further insights. In total, this effort reached seven participants who shared some of the unique challenges that individuals with language barriers face in Kentucky.

Table 8 below identifies some of those challenges.

Finding	Quote
While individuals with language barriers may benefit from digital skills training, communities struggle with offering digital literacy training to non-English speakers.	"[They] tried to offer computer classes in Spanish, [but there was] no one to speak Spanish."
Lacking digital literacy skills can also prevent individuals with language barriers from accessing basic government services.	"Person had to have paperwork for the courts. It was in English. She was told if you want Spanish, you have to go to the website. It's medical problems – the person doesn't have the time [or] skills."
General accessibility issues (because services are only offered in English) can also impact their ability to acquire digital literacy skills on their own.	"In addition to actually getting a device, when you're talking about people's ability to use, a site might offer some content in another language, but it's not consistent between the languages. You click on a link for a Spanish translation to something and that link is empty or it's not complete. And also, some of these sites don't also provide an option for someone to contact someone who can [help]."

4 Collaboration and Stakeholder Engagement

4.1 Coordination and Outreach Strategy

Stakeholder engagement was a critical component of the ELC/DWD's strategy of developing a State Digital Equity Plan that is inclusive, well-informed, and supported by Kentuckians. By involving stakeholders throughout the process, the ELC/DWD created a more effective, sustainable, and equitable plan that addresses the needs and aspirations of the entire state. The ELC/DWD stakeholder engagement strategy included:

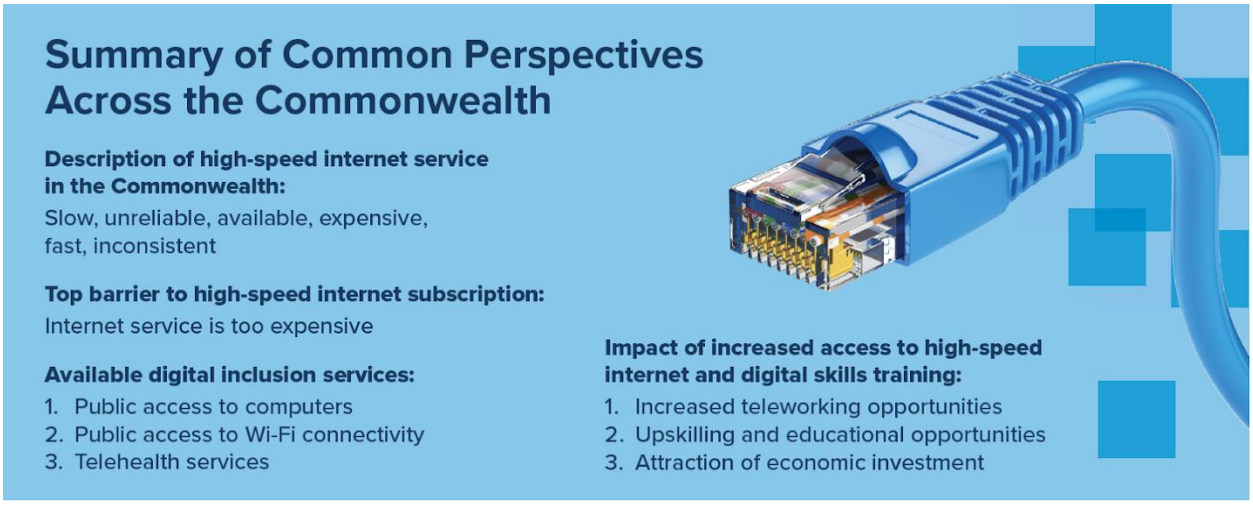
- The formation of a Digital Equity Core Workgroup to ensure that diverse perspectives are considered, that stakeholders have opportunities for input and feedback, and that decisions are inclusive and representative. The workgroup met monthly and participated in a two-day workshop in July to provide input on goals and objectives of the Digital Equity Plan. The following organizations were represented on the workgroup:
    - Kentucky Education and Labor Cabinet
    - Metro Technology Services, a division of Louisville Metro Government
    - Kentucky State University, a historically black college or university (HBCU)
    - Goodwill Industries of Kentucky
    - Kentucky Department of Libraries and Archives state library agency
    - Shaping Our Appalachian Region (SOAR), a regional nonprofit focused on economic revitalization in Kentucky's 54 Appalachian counties
    - Kentucky Office of Broadband Development, the central broadband planning and coordination entity to encourage, foster, develop, and improve broadband within the Commonwealth
    - Kentucky Department of Workforce Development
    - Northern Kentucky University student representative, a lived expert from a covered population
- Launching Kentucky's first digital equity website with the vision of raising awareness about the role that ELC/DWD is playing in developing and implementing the State Digital Equity Plan. This website serves as a platform for promoting understanding of digital equity, sharing assets and resources, and as a platform for ongoing stakeholder engagement.
- Conducted and/or participated in multiple stakeholder events.

- For a list of many of the stakeholder outreach events, please see Appendix III.

- The ELC/DWD collaborated with the Kentucky Office of Broadband Development to host a 14-stop listening tour, launched as a part of the Better Internet Initiative. The tour spanned the state, stopping in every region to gather public input on local broadband challenges, opportunities, and priorities for the State Digital Equity Plan.
    - The tour leveraged Area Development Districts and their role as regional planners and convenors to host stakeholders and the public to attend each meeting.
    - The listening tour allowed the public to participate in the planning process and provide feedback on their connectivity directly to state broadband officials, with leaders from ELC/DWD and OBD at every tour stop.
    - ELC and OBD also hosted a statewide virtual listening tour to allow participation from residents who were unable to attend a tour stop in person.
    - 253 participants from counties across the state attended the meetings to share their local perspective.
    - Public promotion of the tour included outreach to local governments, community anchor institutions, and nonprofits serving covered populations. The ELC was able to activate its extensive workforce development and training networks across the state to spread the word about the events and share an outreach toolkit (sample email and flyer) for organizations to inform their networks as well.
    - ELC/DWD partnered with the Kentucky Commission on the Deaf and Hard of Hearing to provide interpretive services during each stop and provided captioning upon request. During these listening sessions, participants shared insight through a guided conversation and interactive polling about local barriers, solutions, and priorities for expanding high-speed internet access, adoption, and use.
    - This combination of structured conversation and quantitative data collection provided a robust depiction of regional challenges and opportunities, which informed the priorities and recommendations of this plan.
    - Key findings from the statewide analysis of the listening tour indicate that the top barrier to high-speed internet subscription was the cost of the

service, with residents identifying high cost as a key descriptor of service in the state.

- Participants also identified the impact increased access to connectivity would have on their communities, including increased teleworking options, upskilling and educational opportunities, and increased economic investment in the area. These results indicate that accessing and using affordable internet services could increase economic opportunity for Kentuckians and spur economic activity.
- Key state-level findings from the Better Internet Listening Tours:
    - Listening tour participants highlighted digital inclusion programs and opportunities available in their community.
    - Participants provided insight into the most prominent opportunities, with 64% indicating there was public access to computers, 58% indicating there was available public Wi-Fi, and 50% indicating there were telehealth services available in the area.
    - More digital inclusion opportunities available across the state are highlighted in the infographic below.

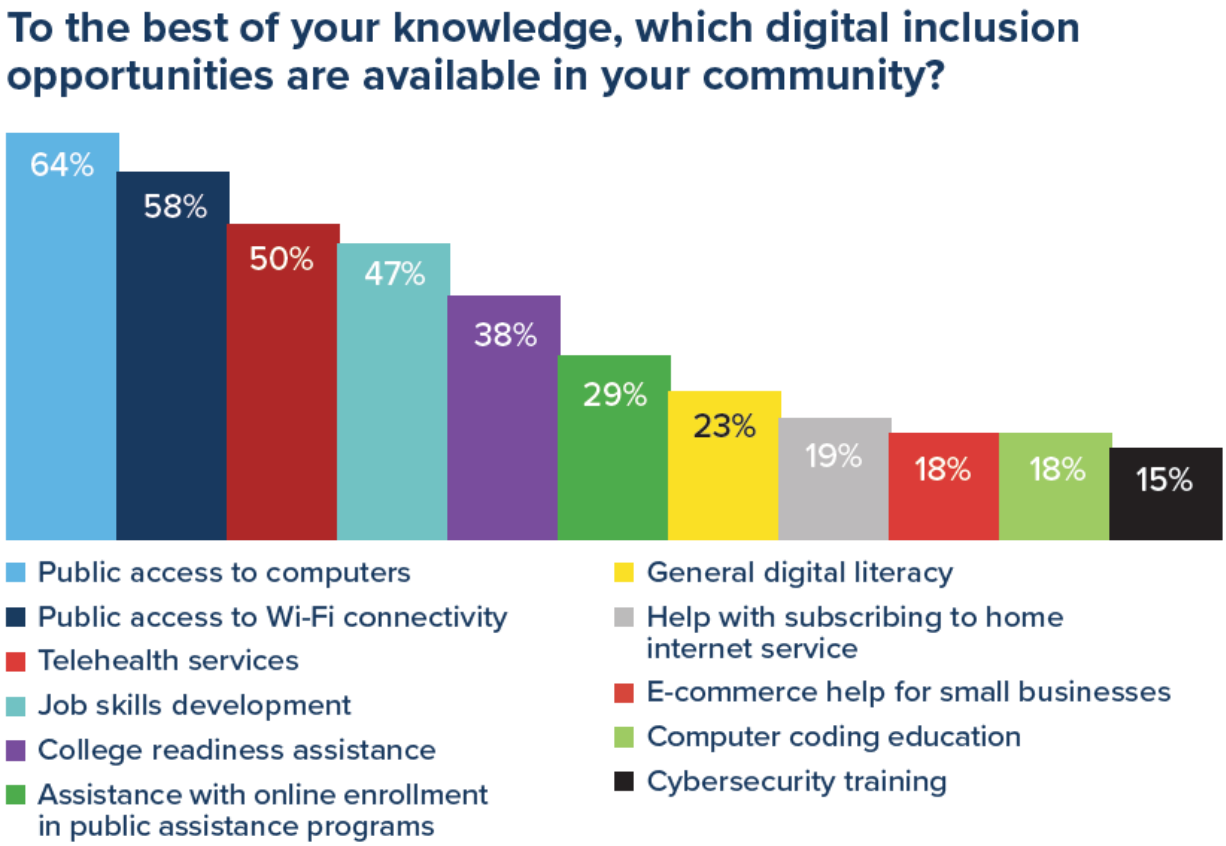


For regional results for each stop of the listening tour, refer to the individual region tour report found in Appendix VII.

- Partnering with the Office of Broadband Development for stakeholder meetings, including meetings with ISPs and county governments to provide information on the digital equity planning efforts and to solicit input on digital inclusion assets and opportunities for collaboration and engagement.
- The Northern Kentucky Digital Literacy Workgroup and ELC have been working together. The partnership provides basic digital literacy and technical support to adults of all ages in the Northern Kentucky (NKY) and Greater Cincinnati region

through collaboration between community partners and Northern Kentucky University (NKU). The workgroup consists of 20 volunteer leaders from NKY community partners and NKU, and they primarily focus on helping adults who are unfamiliar with basic computer skills (using a mouse, computer function, etc.) and those who need digital literacy skills for educational or work purposes. They also provide a variety of assistance to individuals with disabilities, the elderly, and individuals with transportation needs. The workgroup meets monthly to share best practices and strategies, discuss how to continue raising awareness of local digital literacy needs, and how to help individuals connect to digital literacy support services.

- AARP Kentucky has been a critical partner in our residential survey outreach and response efforts valued at over $20,000. This effort resulted in a dramatic uptick in survey responses in three days, going from 848 to 2,301 responses, which is a 368% increase far exceeding our 1,500-response goal.



5 Implementation

Advancing Digital Equity in Kentucky

5.1 Implementation Strategy & Key Activities

To address the challenges faced by Kentuckians in achieving full digital equity, this plan outlines measurable objectives, strategies, and activities to advance digital equity and overcome barriers faced by Kentuckians in accessing digital resources.

Objective 1: Enhance broadband availability and affordability for covered populations.

Many Kentuckians face challenges with affording internet service. The Digital Equity Plan prioritizes addressing affordability barriers to widespread internet use. The Commonwealth's strategies include supporting the Office of Broadband Deployment (OBD) by sharing critical data on covered populations, promoting affordable and low-cost internet programs, and addressing issues and needs in areas where covered populations live such as multi-dwelling units, assisted living facilities, and homeless shelters.

Strategy 1: Optimize broadband deployment in partnership with the OBD by sharing data regarding covered populations to inform the prioritization process and develop strategies.

Actions

- Support and collaborate with the OBD by providing necessary reports and other strategies as needed with regards to connectivity and affordability needs of covered populations. Creating covered population maps is one way the ELC has already begun to create data layers that may be useful to the OBD in prioritizing deployment resources.
- Develop and distribute materials (newsletter, publication, social media, etc.) to provide updates on deployment amongst key digital equity stakeholders, at a minimum, on a quarterly basis. This information will help keep stakeholders informed while providing opportunities for feedback of ongoing local needs and/or opportunities.
- Encourage statewide speed test initiatives in areas populated by covered populations such as multi-dwelling units (MDUs), and support the analysis and distribution of the results.
- Analyze data from OBD and Center for Rural Development (CRD) on statewide speed tests to determine internet usability in areas inhabited by covered populations.

Strategy 2: Detect and alleviate obstacles and barriers preventing broadband expansion and adoption by facilities that provide services to covered populations.

Actions

- Intentionally locate and prioritize providing access to intermittent housing, group homes, assisted living facilities, MDUs, and homeless shelters in partnership with agencies such as the Department of Corrections, the Department of Aging and Independent Living, local nonprofits, and local workforce boards.
- Leverage KYSTAT data collection, stakeholder engagements, and other resources to identify facilities that provide services to covered populations that may be unserved or underserved.

Strategy 3: Build a publicly accessible catalog of state and national subsidies on the digital equity website.

Actions

- Identify and gather resources to promote available resources, particularly those that are free or low-cost, have low barriers to participation, and directly benefit the covered populations (for example, ISPs, local governments, and community-based organizations). These plans must meet or exceed the FCC's definition for high-speed internet and cost no more than 2% of a household's income. This catalog will include eligibility requirements, cost, and available discounts. It should also be updated quarterly and be easily accessible.
- Track penetration rate over time, and audit programs quarterly on participation rates.
- Conduct regional convenings to promote digital equity throughout the state, and encourage local communities to adopt the principles of digital equity.

Strategy 4: Identify and increase participation rates in low-cost or affordable broadband programs such as the Affordable Connectivity Program in targeted communities that have lower participation rates than the national average.

Actions

- To make the most impact and efficiently support our covered populations, ELC will collaborate with local partners, including school districts, libraries, and workforce development boards, to promote low-cost programs to increase participate in the counties experiencing low ACP adoption rates and high covered population concentration:
    - Less than 10% in the first year
    - Less than 20% in the second year
    - Less than 30% in the third year
- Identify and highlight communities or organizations across the Commonwealth that are excelling at promoting affordable programs in creative and unique ways.

Strategy 5: Promote community anchor institutions with free Wi-Fi or hotspot loan programs as a stop-gap measure.

Actions

- Promote entities and programs such as the Kentucky Department for Libraries and Archives (KDLA) bookmobiles, equipment loan programs, school district programs, community-based organizations, and Learning without Limits.
- Collaborate with local Workforce Investment Boards serving covered populations to encourage device distribution or lending programs for people from covered populations.

Measuring Success for Objective 1	
Impact Measures	**Output Measures**
Increase broadband adoption by 4% annually from 74% for covered populations. Conduct three longitudinal residential broadband surveys at the end of Years 2, 4 and 5 to track progress. This data will provide updates on affordability, barriers to adoption, changes in adoption, and internet use trends.	Develop an annual report and analysis on access to broadband for covered populations to be shared with OBD.
Track subscription, conversion rates, list growth rates, open rates, and/or engagement by digital equity stakeholders of newsletters and/or other distributed materials.	Annually update catalogue of state and national subsidies on DE website.
Assess the impact of OBD deployment efforts and on areas concentrated by covered populations in the year beginning one year after deployments have begun.	Resource materials are created and distributed across the Commonwealth.
Track participation in low-cost and affordable programs in communities where ELC is supporting the promotion of programs in partnership with local entities such as school districts.	Create a PSA and/or flyers that promote the work.
A 3% increase in ACP participation in targeted counties.	

Objective 2: Ensure access to affordable devices for all Kentuckians.

This objective prioritizes addressing the device affordability barrier for Kentuckians for internet adoption and use. This is particularly an issue in counties with low household income rates (covered households) such as Owsley County, where up to 31% of households lack computing devices – the highest rate of any county in the state. This plan promotes increased access to affordable devices by not only expanding the availability of such devices, but also increasing opportunities for Kentucky businesses and community organizations to get involved in an expanded device ecosystem.

Strategy 1: Create a sustainable device ecosystem in alignment with local digital equity plans, particularly in areas with low device ownership.

Actions

- Leverage existing partners and organizations to determine common needs and practices within the first six to nine months of the first year.
- Identify any policy barriers to device refurbishments and collaborate with policymakers to remove them.
- Determine best practices to develop a "Learn and Earn" program that provides free devices upon successful completion of digital skills training.

Strategy 2: Identify and promote device refresh programs to deploy/sell low-cost refurbished devices to covered populations in collaboration with local government.

Actions

- Partner with government agencies and schools to develop a framework to sustainably handle the "refresh cycles" (devices nearing the end of their use within the agency but can still be utilized). This will prepare them to become available for safe distribution to covered populations.
- Encourage colleges, universities, area technology centers, and local vocational programs to be involved in the refurbishment of devices.
- Explore opportunities with the Registered Apprenticeship program to expand the workforce available to support device refurbishing.
- Identify, support, and promote nonprofit electronic refurbishing programs in Kentucky to have the capacity to both refurbish and properly recycle devices (end of life e-cycle program) throughout the life of the Digital Equity Act funding.
- Prioritize counties with more than 15% of households lacking household devices.

Strategy 3: Capitalize on funding to drive impact while balancing urgency, universality, and equity.

Actions

- Promote local grant writers to include device funding in grant requests to anticipate device needs when working with covered populations.
- Support local partners on how to apply for waivers from FCC for non-providers to purchase devices for ACP program and recoup a portion or all device cost through the program/voucher.

Measuring Success for Objective 2	
Impact Measures	**Output Measures**

Increase device adoption in the Commonwealth and track progress in device adoption via three residential surveys conducted at the end of Year 2, 4 and 5 to track progress.	Document mitigation efforts in collaboration with OBD based on annual performance data each year beginning in Year 3.
Track the number of new low-cost device programs initiated from Year 2 to 5.	Develop a sustainable device ecosystem with the City of Louisville, Simmons College and SOAR that will serve as a model program with expansion within 2 years. Within the model program will be "Learn and Earn" curriculum and programs.
Evaluate the impact of government and private-sector initiatives aimed at improving device ownership in underserved communities.	Complete an environmental scan and distribution of device refurbishers and make available in all 120 counties.
Monitor the adoption rates of programs that provide subsidies or discounts on devices and internet services to low-income individuals for continuous improvement.	RFPs that address urgency, universality, and equity meeting the needs of covered populations and evaluation rubrics to support them.
Release a best practice report on the "Learn and Earn" program that provides free devices upon successful completion of digital skills training by the end of the second year.	

Objective 3: Increase application accessibility and inclusivity to state and local government programs.

This objective aims to provide easy access to government services and information for everyone, regardless of abilities, disabilities, language barriers, cultural sensitivities, or education levels. Accessible applications lead to efficient interactions, clearer communication, and streamlined processes that benefit all users. Accordingly, this plan provides pathways that existing applications are adequately and readily available to Kentuckians as they are often the pathway to critical resources.

Strategy 1: Conduct an accessibility study on critical state programs that are most frequently used by the covered populations.

Actions

- Identify the most visited and critical state-run programs that serve covered populations.
- Make available the known resources in design and user testing to promote user-friendly design and consistency in government websites, programs, and applications, making digital equity a priority in design.
- Encourage state agencies and nonprofits to create culturally sensitive materials in multiple formats and languages that reflect the communities they serve.
- Conduct biannual open forums for state agencies and local organizations to share best practices on enhancing accessibility and inclusivity of applications.

Strategy 2: Make it easier for covered populations to access government resources and programs online.

Actions

- Collaborate with workforce agencies in developing statewide digital navigators and promote their presence at community events.
- Support community organizations to utilize readily available government websites for community work and serving covered populations.
- Encourage adoption of the following best practices by agencies and community organizations working with covered populations:
    - Websites that render to a mobile-friendly device
    - Simplified access in any format where possible, considering system security
    - Basic readability standard for any language
    - Solicit end-user feedback to ensure continuous improvement
    - Suggest related services within the same screen when applicable and appropriate

Strategy 3: Develop an assessment tool for local governments to improve citizens' overall experience in accessing government services online.

Actions

- Encourage city and county governments and municipalities to have active, accessible, and easily understandable websites.
- Encourage beta testing websites with ADA experts and Digital Navigators, providing resources when available and necessary.
- Develop resources and periodic communications that quantify what constitutes a positive digital experience, for example:
    - Accessibility
    - Translation capabilities
    - Color choices
    - Font size
    - Magnification capabilities
    - Repeating capabilities

- Voice guidance
- Ability to connect with a real person

Strategy 4: Improve civic and social engagement options for covered populations.

Actions

- Engage local community leaders on the importance of inclusivity.
- Promote the Digital Equity Initiative into existing local culture.
- Work to reduce stigma for covered populations utilizing resources.

Strategy 5: Enhance the delivery of other essential services, such as emergency management alert efforts for covered populations.

Actions

- Ongoing digital training/education/awareness for service providers, local and state government services.
- Support a robust communication strategy.
- Provide support to libraries and trusted community partners to ensure they have the appropriate information, supplies, and community knowledge to provide help to patrons and individuals from covered populations.
- Encourage partnership with the public service commission and explore how to authorize 211 and referral hotline available 24/7 365 in all Kentucky counties.

Measuring Success for Objective 3	
Impact Measures	**Output Measures**
Monitor and assess enrollment, participation, and engagement rates in critical state-run programs annually.	Request accessibility studies on critical state-run programs from relevant agencies and/or perform accessibility studies within ELC's jurisdiction annually.
Promote the advancement of the 211 referral hotline in partnership with the Public Service Commission over the five-year plan period.	Conduct annual interviews with lived experts, digital equity and inclusivity stakeholders.
Increase in citizen satisfaction pertaining to improved accessibility.	Completed accessibility study and partner with state programs to address outcomes.
	Annual customer satisfaction survey (in partnership with other agencies) that includes accessibility, and publish results that will be used for continuous improvement.
	Develop assessment tool in Year 1; deploy in Years 2 and 3; assess in Year 4

	Year 1 create a playbook for civic and social engagement. Years 2 to 5 distribute the playbook/resource to community organizations (schools, libraries, community centers).
	Convene covered population round tables with state and local emergency management entities as requested.

Objective 4: Ensure that all Kentuckians are equipped to navigate the internet safely.

This objective involves creating various tools to be used by local community partners to bring awareness to internet safety and prepare covered populations to navigate the internet safely. Critical tools include certifications for internet safety training, using media and public service announcements to raise awareness, and collaborating with law enforcement and cybersecurity experts to develop relevant materials.

Strategy 1: Develop and deliver basic internet safety and internet essentials online resources and post them on the digital equity website.

Actions

- Encourage local partners to utilize curriculum and create pathways to certifications and program completion in areas like basic skills and internet safety.
- Partner with organizations supporting justice-involved individuals to encourage pathways to teach digital skills and literacy, including certificate of completion upon release to assist with re-entry.
- Collaborate with K-12 institutions to engage community efforts to teach digital skills and literacy.

Strategy 2: Create and distribute publicly accessible computer placards/aids, as covered populations frequently utilize public computers and Wi-Fi.

Actions

- Encourage partners to use social media and mobile means of access when developing content to share information, activities, and promotional materials.
- Partner with the local community to distribute information in existing:
    - School correspondence
    - "Welcome to Community" packets, a welcome wagon at DMVs
    - Laundromats, community centers, story times with libraries
    - Bookmobiles
    - Barber shops/beauty salons

    - Job fair packets
    - Local chamber of commerce groups
- Develop ways to incorporate educational training to accessing public Wi-Fi.
- Encourage a "hard-to-ignore" sign-in screen to promote internet safety.
- Encourage the practice of having distributed devices come with pre-installed icons that link to a helpdesk or Digital Navigator portal installed on the desktop for easy access.
- Produce public service announcements (PSAs) around digital skills and benefits.

Strategy 3. Collaborate with the Kentucky Office of Cybersecurity to develop and/or promote best practice resources on internet safety targeting covered populations in their communities.

Actions

- Work with experts at the Kentucky Homeland Security's Fusion Center, libraries, and community partners to develop statewide cybersecurity resources.
- Promote free online tools such as firewalls, antivirus, or full-suite software.
- Collaborate with experts from the Kentucky Office of Cybersecurity to develop countermeasures needed against cyber threats that affect covered populations:
- Stay safe while browsing and shopping.
- Social Security and financial fraud prevention.
- Fraudulent links and phishing awareness.
- Simplify social engineering concepts in training to ensure vulnerable communities understand how to identify risks.
- Promote the adoption of internet of things (IoT) security measures as a standard methodology.

Measuring Success for Objective 4	
Impact Measures	**Output Measures**
Track use of cybersecurity resources and online tools shared via the ELC's digital equity website.	In partnership with community stakeholders, develop PSAs and/or marketing strategies to promote internet safety courses.
Track performance of PSAs by tracking the number of stations airing them, the total number of airings, the total value of those airings, and total impressions.	Develop the placard/aid promotional materials for distribution in cooperation with community partners.
Track quarterly the number of justice-involved individuals who successfully complete training on a quarterly basis.	Update the digital equity website with the identified resources on a semi-annual basis.
Assessment of internet safety barriers via the three residential surveys to be conducted in Year 2, 4 and 5 of the Digital Equity Plan.	

Assess confidence and self-efficacy – provide self-assessment tools to training providers so they can ask participants about their confidence levels in using the internet safely before and after the training.	

Objective 5: Improve digital literacy for all covered populations in Kentucky.

This objective provides a pathway to tackle the basic digital literacy barrier to broadband adoption. For many Kentucky residents, a lack of digital literacy represents a barrier to adopting and using home internet service and is reflected in the number of residents in the survey and focus groups who don't feel comfortable using a computer or going online. This plan will provide tools that will empower trusted local partners to effectively enhance existing programs or begin new programs that are easily accessible by covered populations. The plan also allows the Commonwealth to establish the definition of digital citizenship and get buy-in from stakeholders.

Strategy 1. Define digital citizenship in the Commonwealth and roll out with key stakeholders.

Actions

- Work with digital equity stakeholders and trusted partners to develop the framework surrounding digital citizenship.
- Promote the practice of celebrating achievements through a public ceremony to empower citizens and inspire others.
- Explore how to standardize digital skills and literacy through recognized credentials, much like how GED and high school diplomas are standardized.

Strategy 2. Improve Kentuckian's digital literacy via private-public partnerships to promote or enhance existing programs.

Actions

- Encourage entities such as Area Development Districts (ADDs), Workforce Boards, and County Extension Offices to continue offering digital inclusion resources and community outreach.
- Facilitate meetings with key education and training partners, community-based organizations and stakeholders around developing core digital skills/certifications requirements as needed and share best practices.
- Leverage agencies within the Department of Workforce Development as well as community partners to incorporate digital equity into registered apprenticeships, re-entry, and other workforce talent pipelines.

Strategy 3. Build an interactive digital inclusion map so all Kentuckians can find training resources and support near them.

Actions

- Create an interactive digital inclusion map managed by the Education and Labor Cabinet to allow for research and longitudinal data opportunities.
- Partner with digital inclusion organizations to develop a tool to incorporate the interactive digital inclusion map to determine user experience or skill level.
- Continue ongoing data collection to gather the work being done in communities by ongoing promotion of the asset inventory instrument and interactive digital inclusion map.
- Require that partners complete the asset inventory instrument when applying for future grant opportunities through the Digital Equity Act.

Strategy 4: Enhance the digital aptitude and self-assurance of covered populations in Kentucky by implementing an enhanced program through our collaborative partnership.

Actions

- Encourage local digital inclusion practitioners and digital equity stakeholders to develop or adopt modules that follow a tiered approach to teach digital skills and offer incentives such as certificates of completion.
- Identify opportunities that support having a digital citizenship transcript that records every tier, program, or course completed.
- Support the development and growth of peer-to-peer support programs to continue sharing knowledge within communities, with the goal of developing local lived experts.

Measuring Success for Objective 5	
Impact Measures	**Output Measures**
Assessment of digital literacy levels via the three residential surveys to be conducted in Years 2, 4 and 5 of the Digital Equity Plan.	Development of an inventory of success stories that highlight local lived experiences.
Increase in digital literacy training program opportunities across Kentucky as verified through the asset inventory map on an annual basis.	Establishment and adoption of a framework around digital citizenship within the first 12 months of the program.
Attendance rates – track the number of participants who attended the training sessions provided by partners for the programs funded by ELC Office of Systems Equity.	Development of an inventory of key community-based organizations and stakeholders that offer core skills/certifications requirements and best practices to navigate tensions between shared digital literacy and skills building curriculums and audience/usage specific training.
	Longitudinal studies of the digital inclusion inventory.

	Year 1 define digital literacy. Year 2 create the roll out strategy with key partners. Year 3 and beyond educate and execute.
	Incorporate digital literacy certifications in the Commonwealth's Learning Employment Records (LERs) initiative.

Objective 6: Help Kentuckians develop the digital skills necessary for work and life.

This objective will ensure Kentuckians have the skills necessary to use digital tools to secure jobs, access health care resources, improve educational outcomes, and engage with essential services. This objective allows for alignment of the Digital Equity Plan with Kentucky's economic, workforce development, health care, and education goals, plans, and outcomes. To do this, this plan offers assessments and certification opportunities, partnerships with agencies that oversee education, health care, and essential programs such as SNAP to establish alignment with the State Digital Equity Plan.

Strategy 1: Offer personal digital skills assessments and certifications in Kentucky to all who wish to achieve their goals or attain a basic digital skill level.

Actions

- Offer digital skills and literacy education platforms through Cabinet opportunities.
- Connect outcomes to longitudinal data to inform grant requirements for community-based organizations.
- Utilize pre-assessments to focus on areas of opportunity and growth and awarding of badges to symbolize completion.
- Explore feasibility of connecting digital citizenship milestones to a longitudinal database to ensure success.

Strategy 2. Incorporate digital skills training into existing education, training, and workforce development programs.

Actions

- Collaborate with existing workforce programs and determine the digital skills needed to meet today's skills requirements.
- Partner with state and local agencies to create incentives for businesses to build or adapt digital skills and training programs.

Strategy 3. Expand covered populations' participation in and completion of online targeted-sector training in alignment with Kentucky's economic and workforce development goals, plans, and outcomes.

Actions

- Increase capacity to supplement traditional sites such as libraries and Kentucky Career Centers to support online targeted-sector training.
- Work with trusted community partners and educational institutions to encourage digital skills and digital literacy as part of GED curriculum (or credit hours) rather than standalone certificates that support the needs of the covered populations.
- Explore incentives and support for people coming from covered populations who wish to rejoin the workforce.

Strategy 4. Enhance educational outcomes of covered populations through engagement in online learning platforms along the education continuum from preschool to postsecondary (P-20).

Actions

- Explore models such as the "digital backpack" and the positive impact it can have on P-20 (preschool through graduate schools) with targeted covered populations.
- Encourage match funding from public and private entities for advancing digital equity, such as the Community Reinvestment Act (CRA), private foundation funding, corporate sponsorships, etc.

Strategy 5. Positively impact the outcome and equity gaps for covered populations.

Actions

- Partner with the Office of Employer and Apprenticeship to develop pathways to adopt digital jobs, such as Digital Navigators, to drive their presence in every county/region.
- Create a digital equity outcomes dashboard that captures the outcomes for covered populations.
- Create clear pathways and incentives to promote remote working, particularly for Eastern Kentucky.
- Encourage employer sponsorships of apprenticing their digital jobs.
- Explore how to have KTAP and SNAP participate in wrap-around support to covered populations pursuing digital skills and address any policy issues to combat the benefit cliff.
- Promote best practices by encouraging existing and prospective businesses to hire from covered populations with incentives like the Work Opportunity Tax Credits at the federal level and support for people coming from covered populations who wish to join the workforce.

Strategy 6. Increase participation in telehealth services resulting in improved health outcomes of covered populations.

Actions

- Partner with the Cabinet for Health and Family Services to promote telehealth services.

- Develop maps, data analysis, and other resources to provide health organizations with supportive technologies.
- Promote the practice of collecting and promoting testimonials of success in managing illness through technology throughout the life of the Digital Equity Act to build interest, engagement, and adoption.

Measuring Success for Objective 6	
Impact Measures	**Output Measures**
Increase Kentucky's labor force participation rate by 0.25% beginning in Year 3.	Successful deployment of digital skills and literacy education platforms through Cabinet opportunities in 24 months.
Connect outcomes to longitudinal data to inform grant requirements for community-based organizations.	Based on analysis of the asset inventory instrument, identify gaps in resources.
Track usage of Work Opportunity Tax Credits at the federal level.	Capture the recommendations from facilitated meetings with key partners on digital skills.
Assess changes in educational outcomes over the five-year grant period.	Develop, post, and promote the digital inclusion map on the digital equity website.
Track the number of Digital Navigators across the state via the asset inventory instrument.	Dedicate a portion of the digital equity website to assessments and resources that will be updated annually.
Track the use of telehealth across Kentucky via the Cabinet for Health and Family Services or other publicly available data.	Document programs under the purview of ELC that have incorporated digital skills.
Attendance rates – track the number of participants who attended the training sessions provided by partners for the programs funded by ELC Office of Systems Equity.	Inclusion in the Commonwealth's WIOA state plan for 2024-2028
Establish digital job apprenticeship programs. For example, Digital Navigators.	Document leveraged public and private resources to strengthen education outcomes via online learning platforms through state grant funding opportunities.
Develop PSAs and/or other resources in conjunction with CHFS for distribution to community partners.	Create a digital equity outcome dashboard.

Engaging Stakeholders to Implement Plan

Stakeholder engagement and collaboration is the key to making this plan work. This plan requires collaboration with state agencies, local communities, community organizations, and other community anchor institutions that are connected and able to act in their communities.

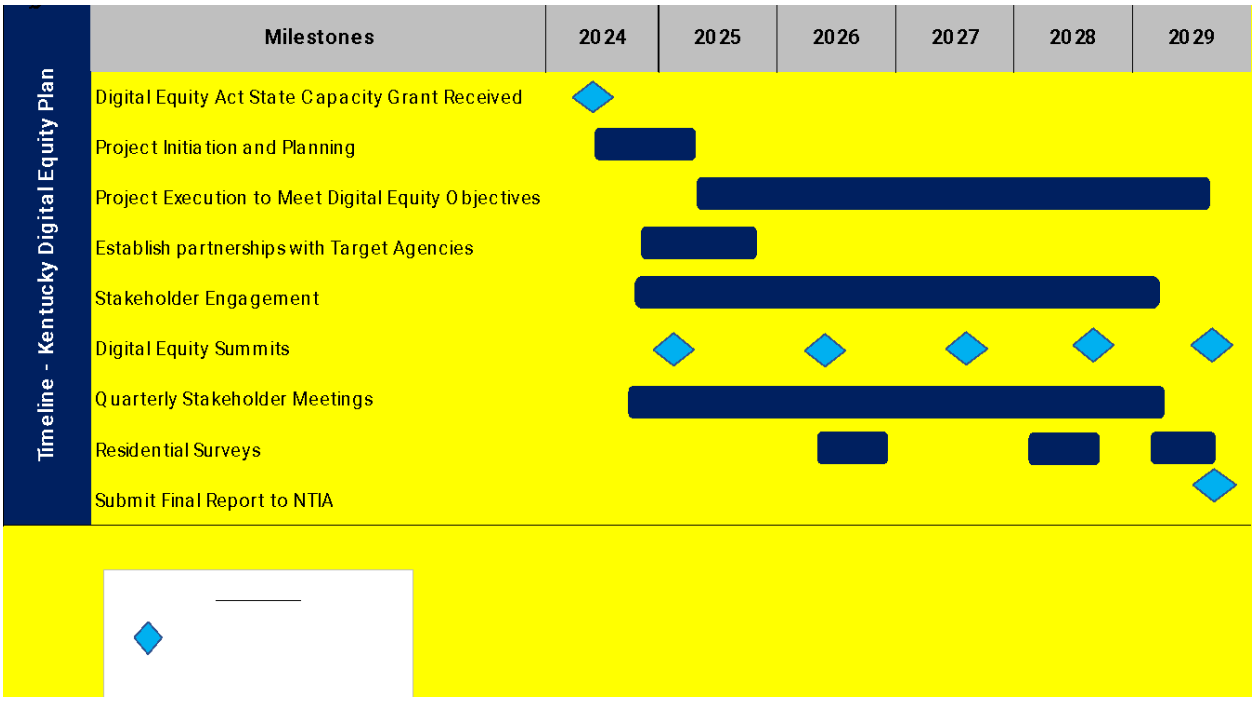
As explained in Section 4.1, this plan was developed with the help of many Kentuckians working together and getting input from interested stakeholders all over the state. ELC plans to rely on these same groups to carry out the plan. All the organizations that care about this issue will be invited to join the annual digital inclusion summits, collaborate on promoting various aspects of the implementation strategies, receive frequent updates via newsletters, social media, the digital equity website, participate in the quarterly meeting, and actively help implement the strategy outlined above. Some key stakeholders include the following:

- The Digital Equity Core Workgroup as described in section 4.1. It will continue to meet to inform the plan implementation strategies and track performance.
- Other government agencies and supporting institutions such as schools, libraries, workforce boards, housing authorities, Area Development Districts, county extension offices, colleges, and universities will play an important role as digital inclusion stakeholders.

To effectively remain engaged with stakeholders, ELC will facilitate the following outreach activities:

- Host an annual Digital Equity Summit to bring together stakeholders to provide updates and solicit input on Kentucky's ongoing activities;
- Host quarterly meetings for key implementation stakeholders;
- Share information via newsletters, email, social media, or website updates, as outlined in the strategies above; and
- Meet with local government, ISPs, and community leaders to advance digital equity goals and objectives, and recruit champions in Kentucky.

5.2 Timeline



6 Conclusion

Kentucky's vision to be a place where all individuals, businesses, and communities have full and equitable digital access to pursue economic and personal opportunities is achievable within the next five years as outlined in this plan. The reality is that access to broadband – affordable broadband – and the devices and knowledge to utilize it are necessities for everyone to fully engage in modern society. The passage of the federal Infrastructure Investment and Jobs Act in November 2021, including the Digital Equity Act, brought new opportunities to achieve true digital equity for all. This Kentucky Digital Equity Plan has been created as a result of those new opportunities. Kentucky has engaged with stakeholders from across the state to help create this plan and it will take collaboration among many individuals, nonprofits, companies, cities, communities, business, organizations, and many more across the Commonwealth to ensure this vision for Kentucky will be realized.

7 Appendices

Please see separate document.