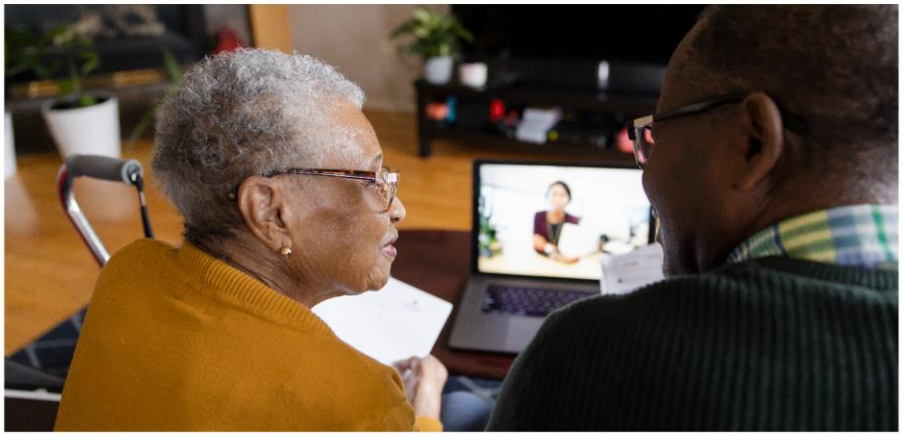


ILLINOIS STATE DIGITAL EQUITY PLAN

Digital Equity Act Programs

Illinois Office of Broadband

March 2024

ILLINOIS BROADBAND LAB

Illinois Department of Commerce & Economic Opportunity
OFFICE OF BROADBAND
JB Pritzker, Governor

University of Illinois System

Foreword

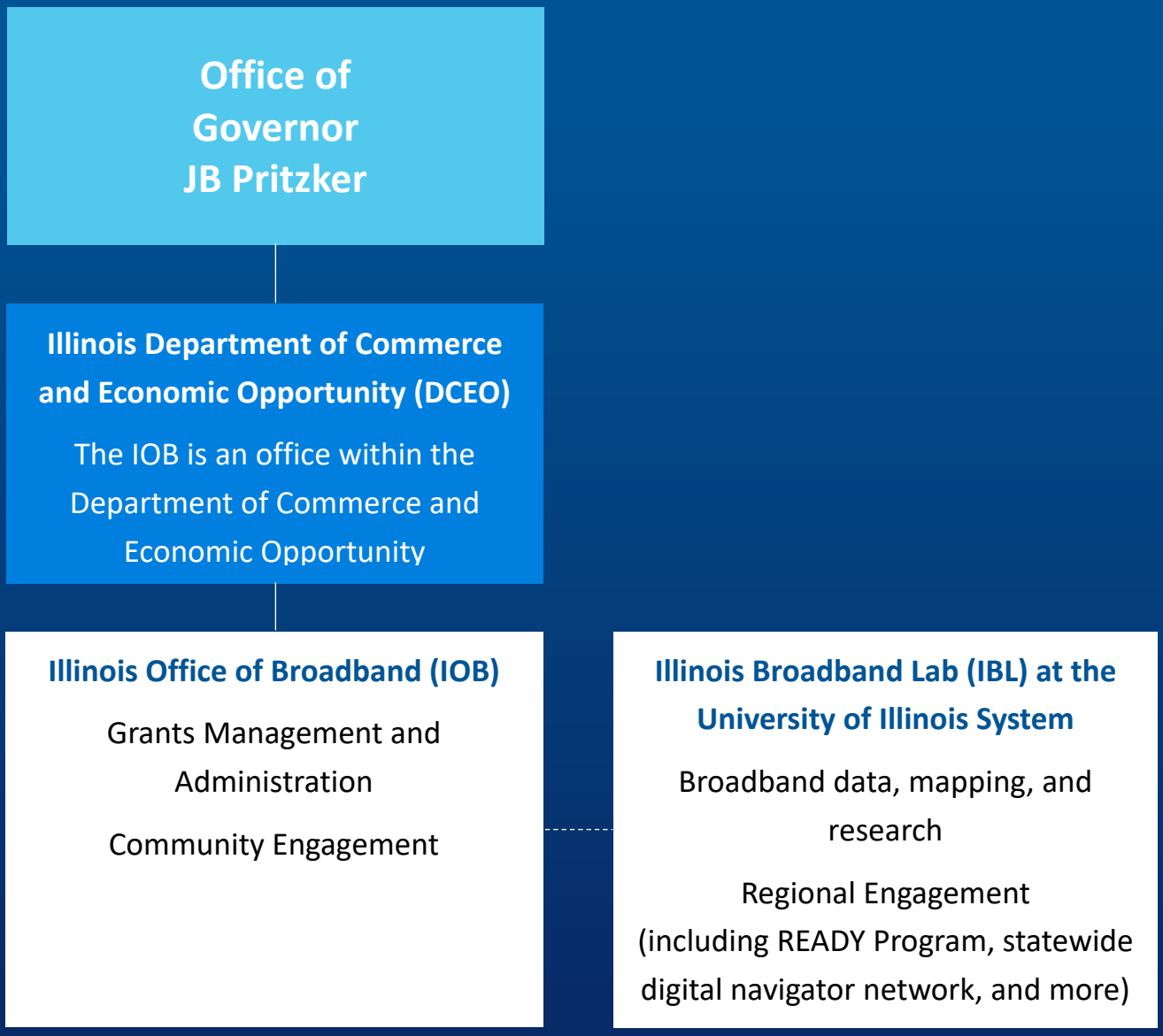
Who we are

Since 2019, the Illinois Office of Broadband (IOB) has served as a single source for all things broadband. Housed within the Illinois Department of Commerce and Economic Opportunity, the IOB partners with a range of state agencies and Illinois organizations to oversee a wide variety of broadband-related work, from infrastructure to utilization, public funding to private deployment. The office strives to be a useful resource to consumers, local communities, state agencies, and broadband providers alike.[1]

The Illinois Broadband Lab (IBL) is a collaboration between the Illinois Office of Broadband and the University of Illinois System. IBL's aim is to expand and advance broadband data and research, explore and tackle the digital divide, and provide thoughtful analysis of the Connect Illinois capital investment and related programming.[2]

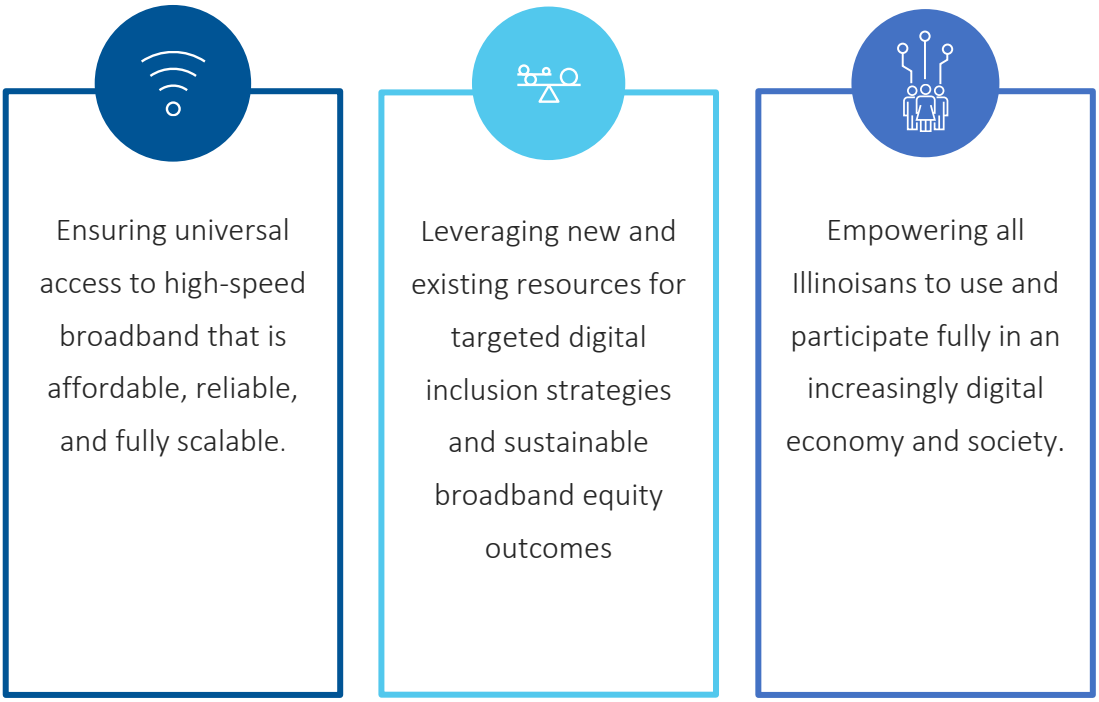
In close collaboration with partner organizations and digital equity practitioners, the IOB and the IBL have developed the following **State Digital Equity Plan** to ensure equitable internet access for all Illinoisians. We cannot execute this plan alone and must work closely and collaboratively with a full set of partners.

The work of the IOB and the IBL is guided by, depends on, and draws from the expertise of local leaders and practitioners, community non-profit members, and volunteers, and their decades of advocacy and influential work to ensure that affordable, high-quality internet service, devices, and digital learning opportunities are available and accessible to all. The IOB applauds and is grateful for their leadership and looks forward to continuing to partner with this important community to close the digital divide in Illinois—with and for all who are affected by it.


Office of Governor JB Pritzker
Illinois Department of Commerce and Economic Opportunity (DCEO)
The IOB is an office within the Department of Commerce and Economic Opportunity
Illinois Office of Broadband (IOB)
Grants Management and Administration
Community Engagement
Illinois Broadband Lab (IBL) at the University of Illinois System
Broadband data, mapping, and research
Regional Engagement (including READY Program, statewide digital navigator network, and more)

Our vision

We envision an Illinois in which all Illinoisans are empowered to use and participate fully in an increasingly digital economy and society. The state is committed to:



Our plan

In the following **State Digital Equity Plan**, we detail the vision for digital equity, our goals for realizing this vision, and the data used to inform it. We also share the strategy for achieving digital equity, including establishing a digital equity source of truth, leading statewide programing and university partnerships, executing a statewide digital equity program, conducting ongoing stakeholder outreach and engagement, and supporting and sustaining a digital equity community of practice.

Broadband READY convening hosted at Southern Illinois University Carbondale

What it means for Illinoisans

We live in an increasingly digital economy in which high-speed internet service in our homes and community institutions is essential for connecting to local and global communities and resources. To take full advantage of available tools, all Illinois residents must have affordable access to high-speed internet and be able to use the internet safely and effectively. This plan details our strategic approach to achieve this vision.

Equity in practice

Illinois defines equity as both a process and an outcome that results in fair, just access to opportunity and resources that enable everyone to participate fully in our society, democracy, and economy.[3] Equity is the driver propelling the implementation of the State Digital Equity Plan and informs the IOB's process and approach every step of the way.

As an outcome, equity is realized when all individuals and communities have the skills and capacity needed to participate effectively in our society, democracy, and economy. While acknowledging the present and historical inequality that persists in our society, we strive toward a future state of equity in which community members facing the greatest barriers

are empowered toward civic and cultural participation, employment, lifelong learning, and access to essential services.

Illinois Broadband Lab Digital Navigator Corps refurbishes computers at PCs for People

As a process, equity requires an approach that prioritizes access and opportunities for groups with the greatest need, thus ensuring that community members who are most affected by digital inequities are included in and at the center of decision-making. This process necessitates cross-sector collaboration among people, programs, and organizations to achieve systemic change and transformation.

Table of Contents

1

1. Executive Summary

Illinois is home to over 12.7 million individuals in approximately 4.9 million families who speak over 20 languages. These families live in 102 counties that range from the dense urban areas found in Cook, DuPage, and Lake counties to the rural areas in Pope and Stark counties; from Illinois's manufacturing centers like the Quad Cities, Rockford, and Greater Peoria regions to the farmlands of Gallatin, White, and Sangamon counties.[4,5,6] Common to all of these communities and geographies is the way we stay connected to each other and to the broader global community; how we access healthcare, education, and other essential services; and, increasingly, **how we sustain our livelihoods within the digital economy: by using high-speed internet in our homes and community anchor institutions.**

Whether parents are helping their child research topics on the internet for a school assignment, recent immigrants are accessing online government services that have been translated into multiple languages, a sick family is connecting with their healthcare provider remotely, a young person overseas is talking to an aging grandparent on a video call, farmers are using internet-enabled precision agriculture to increase their crop yield, or a worker is taking an online coding class to develop skills for new job opportunities**, all Illinoisans must be enabled to use the internet effectively, confidently, safely, and equitably.**

Today, 2.9 million Illinois residents in 1.3 million households lack a subscription to high-speed internet in their homes.[7] This gap may be caused by one or more inter-related factors (see Section 3.2, Needs Assessment):

Availability of broadband infrastructure

5%

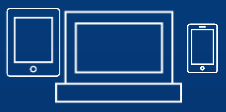
5% of broadband-serviceable locations (BSLs) in Illinois do not have access to 25/3 Mbps internet service and are categorized as "unserved" by the FCC.[8] Some 4% of BSLs do not have access to 100/20 Mbps internet service and are thus categorized as "underserved."[9]

Affordability of internet subscriptions

17%

of Illinois residents find it difficult to afford their internet bill, and 14% have experienced interruptions in service because they had difficulty paying.[10]

Access to devices



~79%

or 3.9 million, of Illinois households have access to either a desktop or a laptop.[11]

Low levels of digital literacy

11%

of Illinoisans report that they have difficulty completing at least one of the surveyed tasks related to the internet.[12]

These gaps are even more stark among Illinoisans who are members of covered populations (Section 3.2.3, Covered Population Needs Assessment[13]):

9.9M or **78%** of Illinois are members of at least one covered population. [14]	**Individuals who live in covered households** are **7%** more likely than the average Illinoisan to believe that having internet service is "not worth the trouble." [15]	**Racial and ethnic minority Illinoisans** are **3%** less likely to have access to broadband internet than white Illinoisans. [16]
Black or African Americans are **5%** more likely than the average Illinoisan to experience service interruptions due to difficulties in paying for service. [17]	**Hispanic Illinoisans** are **14%** more likely than the average Illinoisan to find it difficult to fit a monthly internet bill into their household budget. [18]	**Asian Illinoisans** are **12%** more likely to have access to broadband internet and devices to access internet than the average Illinoisan. [19]
Aging individuals are **14%** more likely than the average Illinoisan to worry about how to use computers and the internet. [20]	**Individuals in rural areas** are **4%** more likely than the average Illinoisan to have trouble getting internet services installed at their residence. [21]	**Individuals with a language barrier** have **limited access** to digital resources for device troubleshooting and digital literacy training. [22]
Veterans are **5%** less likely to adopt broadband as compared to the average Illinoisan.[23]	**Individuals with disabilities** are **15%** less likely to adopt broadband and 15% less likely to have access to internet-enabled devices as compared to the average Illinoisan. [24]	**Incarcerated individuals (including all justice- and system-impacted individuals, per the state's use of this term)** have **extensive needs** for digital learning as part of re-entry into society and to support their efforts to find and acquire jobs. [25]

We envision an Illinois in which all Illinoisans are empowered to use and participate fully in an increasingly digital economy and society.

Illinois is proud that many local governments, libraries, community organizations, non-profits, philanthropies, and private companies have already commenced local initiatives to tackle these disparities. At least 18 counties and local governments have published local digital equity plans for which they assessed their baseline, convened stakeholders, established goals, and developed strategies and roadmaps toward digital equity.[26] Many of those local plans have drawn from the expertise of digital equity practitioners who have been working on the ground and in communities for years. In Illinois, over 62 programs across the state focus on broadband expansion and digital equity (see Section 3.1.3, Existing Digital Equity Programs), and 55 broadband adoption programs support topics ranging from basic digital skills training to device-lending programs (see Section 3.1.4, Broadband Adoption Programs). Moreover, 10 broadband affordability programs offer discounted internet services or raise awareness of the affordability programs (Section 3.1.5, Broadband Affordability Programs). But there is still more work to be done.

To achieve this outcome, we must leverage new and existing resources for adoption and use through targeted strategies for digital inclusion and sustainable outcomes in broadband equity. Doing so will help communities identify and address current gaps in broadband equity. We also must continue to push for universal access to high-speed broadband infrastructure, which is essential to realizing our aspirations for digital equity. The details of that push are articulated in the Illinois Broadband Equity, Access, and Deployment (BEAD) Five-Year Action Plan.

Suburb of Belvidere, Illinois

This push has formed our vision of the future. Over the next 10 years, we intend to measure and track our progress toward meeting these vision statements:(Section 2, Introduction and Vision for Digital Equity):

Ensuring universal access to high-speed broadband that is affordable, reliable, and fully scalable.

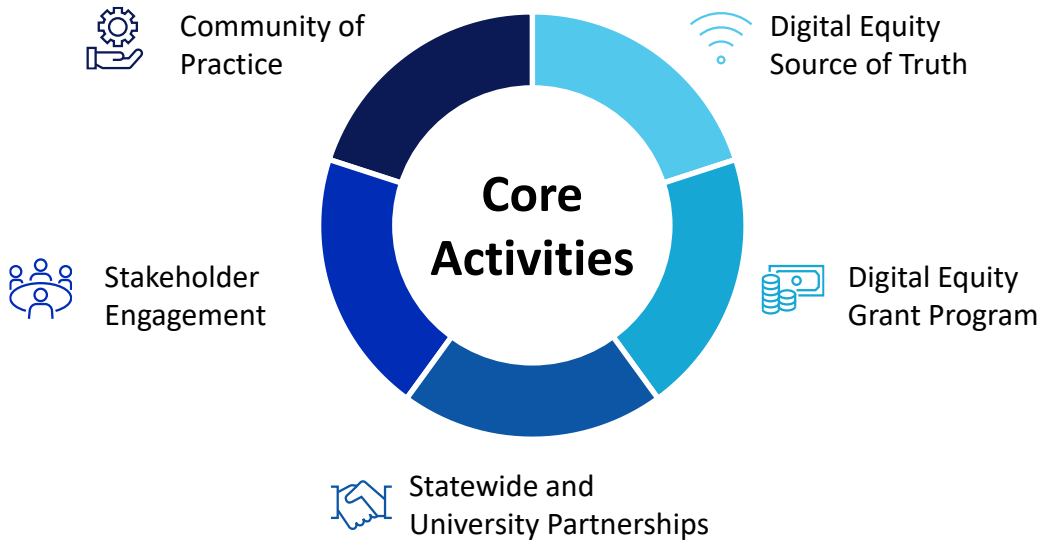
Leveraging new and existing resources for targeted digital inclusion strategies and sustainable broadband equity outcomes

Empowering all Illinoisans to use and participate fully in an increasingly digital economy and society.

- Ensuring universal access to high-speed broadband that is affordable, reliable, and fully scalable for residences, businesses, and community anchor institutions (CAIs) across Illinois by 2030.[27]
- Leveraging new and existing resources to advance the adoption of internet use through targeted digital-inclusion strategies and sustainable broadband-equity outcomes to help communities identify and address current gaps in broadband equity.
- Empowering all Illinoisans to use and participate fully in an increasingly digital economy and society.

These goals have been set with Illinois's current state of digital equity in mind (Section 3.2, Needs Assessment). The current state was assessed by analyzing quantitative data from the American Community Survey, National Telecommunications and Information Administration's Indicators of Need, and data from a statewide telephone and online survey. The goals themselves were inspired and shaped by insights from residents, local governments, digital equity practitioners, non-profits, community anchor institutions, and service providers through statewide listening sessions (Section 4, Collaboration and Stakeholder Engagement), as well as the goals and roadmaps defined in local digital equity plans (Section 3.1.2, Existing Digital Equity Plans).

To fuel and sustain efforts to meet these goals and objectives, and in partnership with the digital equity practitioners and other stakeholders in the state, the Illinois Office of Broadband (IOB) plans to (Section 5, Implementation):



- Maintain and make available Illinois's digital equity data sets to serve as a common source of information. To provide a common fact base for the state's digital equity practitioners, the IOB and the Illinois Broadband Lab (IBL) will create and maintain a publicly available dataset and tools for practitioners around the state; a public-facing dashboard to track key metrics and key performance indicators (KPIs); a public-facing asset inventory; and ongoing updates to the IL State Digital Equity Plan (SDEP).
- Execute a statewide digital equity grant program. The IOB/IBL will facilitate a statewide digital equity grant program to fund and provide resources for digital equity programs around the state.
- Lead select statewide programming and university partnerships. The IOB/IBL will coordinate programming on high-priority statewide and regional projects and establish research partnerships with universities, some of which will be coordinated with other state agencies.
- Conduct ongoing stakeholder outreach and engagement. The IOB/IBL will conduct and support stakeholder engagement across regions and in communities to ensure that the voices of residents and digital equity practitioners continue to be heard and to shape digital equity priorities and approaches.

- Support and sustain a digital equity community of practice. The IOB/IBL will foster partnerships and collaboration between new and existing organizations so that they may share their knowledge and resources to expand their impact.

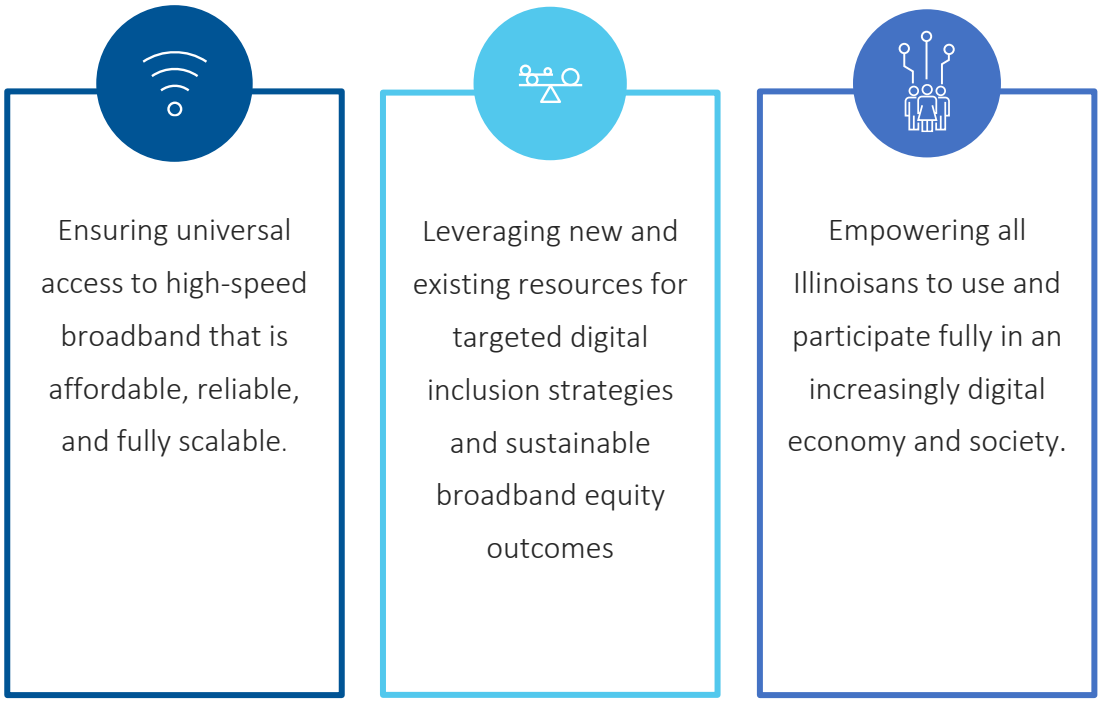
We realize that this vision depends on a wide range of Illinois stakeholders. Most important are the voices of the residents who are most impacted by digital inequities and whom we seek to serve and empower. Also deeply important are the digital equity practitioners who have been working in Illinois communities and have established trusted relationships that can foster connection, learning, and growth. The vision further depends on partnerships with other state agencies whose missions will be enabled by ubiquitous broadband access and digital inclusion, and who will work with us to accomplish digital equity outcomes in telehealth, access to essential services, and economic mobility through technologies like digital manufacturing and digital agriculture. It depends on the work of universities, private companies, and philanthropic partners who will innovate in this space. And it depends on the digital ecosystems that are growing across the state and through these various partners to serve the Illinoisans who are most disadvantaged by historical inequities at the center. Together, we can achieve our vision of universal access, advancement of internet adoption, and empowering all Illinoisans to use and participate fully in an increasingly digital economy and society.

2

2. Introduction and Vision for Digital Equity

2.1. Vision

Illinois's vision for broadband deployment and digital equity is as follows:



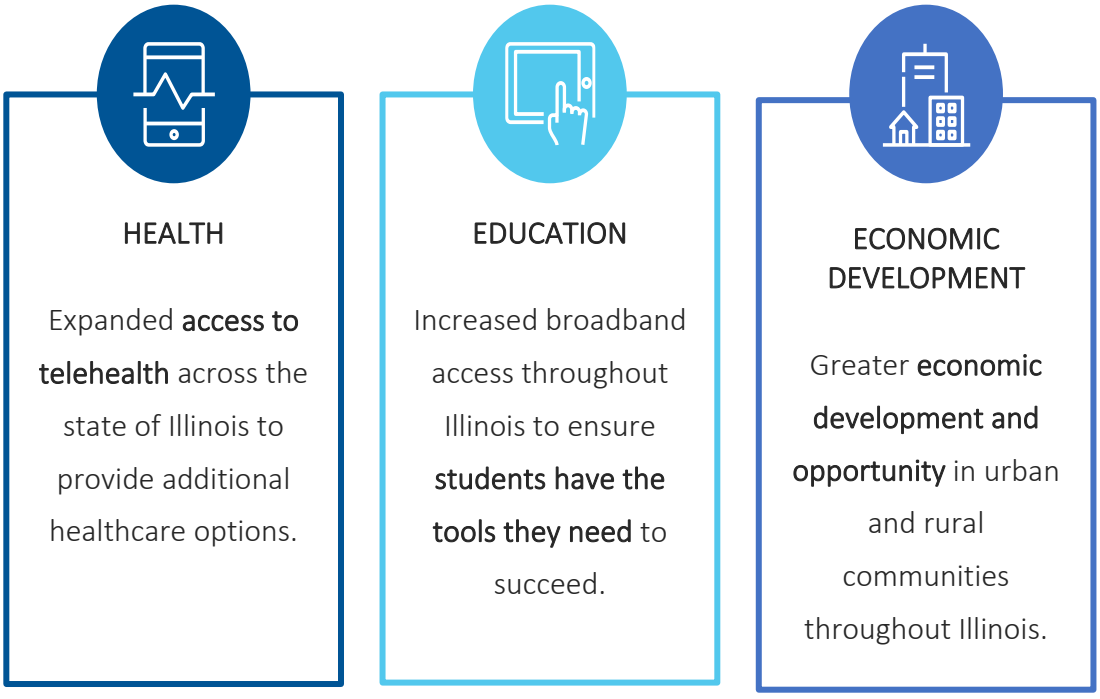
Connect Illinois seeks to **(A) ensure universal access to high-speed broadband that is affordable, reliable, and fully scalable** for residences, businesses, and community anchor institutions (CAIs) across Illinois. At the same time, Connect Illinois plans to promote digital literacy, adoption, and inclusion while leveraging investment in new broadband infrastructure to spur advances in economic development, as well as innovation in healthcare delivery, education, and agriculture.

At its core, the push toward universal access to high-speed broadband infrastructure is one of broadband equity: targeting resources to close gaps and expand opportunity for unserved and underserved communities throughout Illinois, in addition to those impacted by a lack of affordability and by historical disinvestment. The Connect Illinois digital equity programming and collaborations are a comprehensive approach designed to ensure the state **(B) leverages new and existing resources for adoption through targeted digital inclusion strategies and sustainable broadband equity outcomes** to help communities identify and address existing broadband equity gaps, and to **(C) empower all Illinoisans to utilize and participate fully in an increasingly digital economy and society**.[28]

2.1. Alignment with Existing Efforts to Improve Outcomes

2.1.1. Alignment with other state priorities

Digital equity has long been a priority in Illinois, ranging from the governor-appointed Illinois Broadband Advisory Council to multiple state agencies, county and local leadership, and local non-profits and digital equity practitioners. In this section we describe how the SDEP aligns with other state priorities.



The work of the Illinois Office of Broadband (IOB) and the Illinois Broadband Advisory Council (BAC) seeks to drive the following outcomes to support statewide efforts related to telehealth, education, and economic development[29]:

- Expanded access to telehealth across the state of Illinois to provide additional healthcare options to communities in rural and urban Illinois. These options may range from primary care to expanded treatment opportunities in areas such as mental health and opioid addiction.
- Increased broadband access—both for in-classroom learning and remote learning at home—throughout Illinois to ensure students have the tools they need to succeed.
- Greater economic development and opportunity in urban and rural communities throughout Illinois. This investment will support the growth of Illinois's agriculture economy and information technology sector, with the aim of modernizing transportation and facilitating the growth of entrepreneurs and small business owners.

Chicago Digital Equity Coalition convenes at the Chicago Urban League

In addition to the BAC, multiple agency-level strategic plans and goals rely on or anticipate widespread internet connectivity. Table 1 in the appendix details the State of Illinois's other broadband-related, broadband-enabled, and digital equity goals. In March of 2023, the IOB began convening an Interagency Broadband Working Group, which brings together state agency leaders with shared priorities related to broadband and digital equity. The working group includes leaders from multiple state agencies: the Department of Commerce and Economic Opportunity (DCEO), the Illinois Department of Labor (IDOL), Illinois Department of Employment Security (IDES), Illinois State Police, Illinois Commerce Commission, Illinois State Board of Education, Illinois Department of Healthcare and Family Services (HFS), Illinois Department of Aging (IDoA), DCEO's Office of Employment and Training, and more. The IOB plans to build upon this forum, collaborating on broadband and digital equity priorities and programs and ensuring alignment. One partnership has already developed from this working group: a

collaboration with the DCEO Office of Employment and Training, which is leading Illinois's efforts to develop a five-year apprenticeship plan and new four-year WIOA State Plan.

2.1.2. Coordination of use of funds

The IOB plans to coordinate the use of funds received through the State Digital Equity Capacity Grant Program and the Broadband Equity, Access, and Deployment (BEAD) Program to ensure deep impact and the advancement of the state's broadband deployment and digital equity vision.

The IOB and state's vision for broadband deployment is rooted in equity. Similarly, Connect Illinois's comprehensive vision of universal access to high-speed broadband infrastructure is based on broadband equity—on targeting resources to close gaps and expand opportunity for underserved and historically disinvested communities throughout Illinois.[30]

The State Digital Equity Plan shares the same focus on covered populations, digital literacy, and access. Much of the IOB's current effort is built upon the Illinois Office of Broadband's Broadband READY program, with its focus on regional engagement and coordinated activity between higher education institutions and local initiatives.[31] The State Digital Equity Plan depends on local coordination and capacity-building to empower local Illinois communities to expand broadband access. This plan was written in parallel to the state's Five-Year Action Plan to ensure alignment of vision, strategy, objectives, activities, and timeline. One stakeholder engagement process was undertaken to align with the creation of both the Connect Illinois BEAD Five-Year Action Plan and the IL SDEP.

The content in the Vision (2.1), Goals and Objectives (2.2), Existing Programs (3.1), Asset Inventory (3.3), Needs and Gaps Assessment (3.4), and the Stakeholder Engagement Process (5.1) sections of the Connect Illinois BEAD Five-Year Action Plan align with the Vision (2.1), Alignment with Existing Efforts to Improve Outcomes (1.2), Strategy and Objectives (2.2), Asset Inventory (3.1), Needs Assessment (3.2), and the Coordination and Outreach Strategy (4.1) sections of this document, the IL SDEP.

2.1.3. Alignment with local and municipal broadband and digital equity priorities

The State of Illinois reviewed local and municipal digital equity plans that have been published since 2019. Some localities and municipalities have also published broadband strategic plans that were reviewed, as were reports from Broadband READY cohorts.[32] These reports (Section 3.1.2) were used to inform the asset inventory, needs assessment, and strategies developed for this plan. Deliverables from broadband planning cohorts that participated in the Illinois Connected Communities, Accelerate Illinois, and Broadband Breakthrough programs (Section 3.1.3) were reviewed for insights as well. These programs have conducted surveys in their localities and have presented resulting observations of digital equity and broadband deployment barriers and strategies. The program deliverables are referenced throughout this report in the needs assessment—not only to understand the current state of digital equity in the state, but also existing gaps and potential solutions.

Cook County Engagement Sessions

The state has worked to incorporate as many insights from the local and municipal broadband-related plans and digital equity plans as possible, as many of these proposed solutions have been developed by the residents and key stakeholders who are closest to the digital equity obstacles and barriers. Throughout the IL SDEP drafting process, the state prioritized local voices, as Community Anchor Institutions (CAIs), non-profit organizations, community-based organizations (CBOs), and local governments are closest to the residents of Illinois most impacted by digital disparities, and thus understand their needs best.

2.1.4. Impact and interaction of digital equity with broader efforts and goals

In this section, we discuss how the IOB's digital equity goals impact and interact with other Illinois agencies' efforts related to economic and workforce development,

educational outcomes, health outcomes, civic and social engagement, and delivery of other essential services, and how those goals and efforts may impact covered populations (see below).

Economic and Workforce Development	Education
Health Outcomes	Civic and Social Engagement
Delivery of Other Essential Services	

Objectives
All Illinois schools, libraries, and public health-related facilities have at least 1 Gbps symmetrical broadband service by 2030. These anchor institutions serve low-income individuals, aging individuals, veterans, individuals with disabilities, individuals with a language barrier, individuals who are members of a racial or ethnic minority group, and individuals who primarily reside in a rural area.
All Illinoisans possess the digital skills required to participate in the digital economy.
Increased implementation of use cases for precision agriculture.
Increased agriculture throughput due to improved broadband service.
Increased investment in agriculture technology (e.g., purchase of IoT-enabled technology, automated equipment).
Scaled education and training programs for skills development in tech-related occupations.
Increased number of Illinoisans who can work from home.
Scaled education and training programs for skills development in the broadband industry.
Increased job creation in broadband-related roles.
Increased adoption of advanced manufacturing technologies.
Increased adoption of intelligent transportation system technology (ITS).
All Illinois students and teachers have access to reliable internet service and internet-capable devices.
Increased percentage of Illinois school districts offering 1 Mbps per student.
Increased percentage of Illinois school districts providing one device per student.
Increased percentage of Illinois school districts offering parent/caregiver training on technology and remote learning.
Increased access to online courses.
Decreased homework gap among P-20 students.
Higher utilization and satisfaction with remote healthcare among priority populations.

	Improved medical record-keeping and documentation.
	Increased numbers of local government entities and communities engaged on digital equity topics, with programming tailored to the needs of covered populations.
	Increased interaction and communications between local government and all covered populations.
	Improved safety and efficiency of transportation infrastructure in Illinois.
	Increased access to social programs and essential services.

2.1.4.1. Economic and workforce development goals, plans, and outcomes

Broadband is increasingly necessary for business attraction and growth in the economy of today and tomorrow. For instance, broadband access has been proven to reduce transaction costs and improve access to online resources, boosting sales and reducing input costs. In addition, multiple studies suggest that rural broadband access is positively associated with GDP growth, median household incomes, farm revenues, and non-farm rural business growth—with faster broadband having greater impact.[33]

Residential broadband also attracts businesses by improving quality of life for workers and local customers and providing capacity for telework, flexible schedules, and home-based business start-ups that can generate new jobs or expand the property tax base.[34]

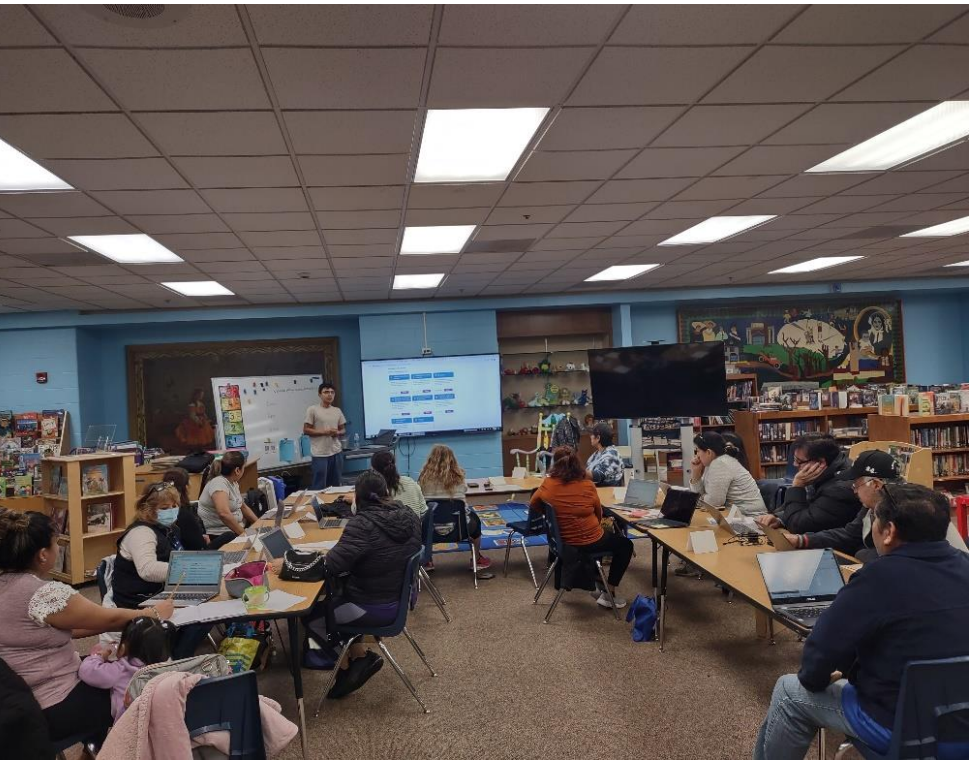
The IOB, which is housed within the DCEO, has identified key industries of focus for Illinois in its economic development plan. These industries include agribusiness and ag tech, energy, information technology, life sciences and healthcare, manufacturing, and transportation and logistics. In addition to supporting the development and advancement of these industries, the state views the investment in broadband as an enabler of job-market growth and capital-building in communities of color.[35] High-quality broadband infrastructure, along with increased adoption and digital skills rates, is foundational to this strategy. In rural economies, companies with high transaction costs or high labor

intensity—such as financial services, wholesale trade, health, or tourism—stand to benefit the most from better broadband.[36]

Aligned objectives.

- All Illinoisans possess the digital skills required to participate in the digital economy.
- Increased implementation of use cases for precision agriculture.
- Increased agriculture throughput due to improved broadband service.
- Increased investment in agriculture technology (e.g., purchase of IoT-enabled technology, automated equipment).
- Scaled education and training programs for skills development in tech-related occupations.
- Increased number of Illinoisans who can work from home.
- Scaled education and training programs for skills development in the broadband industry.
- Increased job creation in broadband-related roles.
- Increased adoption of advanced manufacturing technologies.
- Increased adoption of intelligent transportation system technology (ITS).

The DCEO's Office of Employment and Training views upskilling and reskilling digital literacy skills as key to fostering workforce advancement and wealth generation opportunities among Illinois residents. Together the IOB and Office of Employment and Training can strategically deploy funding to optimize the opportunities available for Illinoisans—especially those with language barriers or who are re-entering the workforce, marginally employed, or disabled.[37]



Digital inclusion convening at Highwood Public Library, courtesy of Reaching Across Illinois Library System (RAILS)

The IOB and the Office of Employment and Training expect the investment in broadband and digital equity (e.g., digital skills training) to enable financial empowerment for Illinois residents, especially individuals who live in covered households, individuals who are members of a racial or ethnic minority group, and individuals who primarily reside in a rural area.

2.1.4.2. Educational outcomes

The Illinois State Board of Education's (ISBE) strategic plan aims to bridge the digital divide in Illinois by increasing equitable access to technology, thereby fostering equitable student outcomes. Technology allows for more personalized learning, more collaboration with peers, development of twenty-first-century workforce skills, and access to resources for student learning at home.[38] The ISBE's strategic plan also seeks to expand future-ready learning models—including online, hybrid, adaptive, and self-paced models—through equitable access to technology that can enhance the learner's experience.[39] The Illinois Community College Board's (ICCB) Strategic Five-Year Plan emphasizes the importance of investment in technologies and the associated learnings to support demand for digital literacy skills in various career pathways.[40] By providing equitable access to devices—especially computers and laptops—for students, along with skill-building through digital inclusion programs, the activities of the IL SDEP are expected to directly improve educational outcomes that are tied to the digital divide, according to education agencies in Illinois. This work is expected to enhance the state's investment in education technology to ensure that all students have access to the broadband services they need—both in and out of the classroom—for such uses as interactive and multimedia curriculum, flip schedules, and distance learning.[41] This effort can particularly encourage equitable student outcomes for members of covered populations who have been disproportionately impacted by digital disparities.

Aligned objectives.

- All Illinois schools, libraries, and public health-related facilities have at least 1 Gbps symmetrical broadband service by 2030. These anchor institutions serve low-income individuals, aging individuals, veterans, individuals with disabilities, individuals with a language barrier, individuals who are members of a racial or ethnic minority group, and individuals who primarily reside in a rural area. (This observation applies to all subsequent mentions of this objective.)
- All Illinois students and teachers have access to reliable internet service and internet-capable devices.

- Increased percentage of Illinois school districts offering 1 Mbps per student.
- Increased percentage of Illinois school districts providing one device per student.
- Increased percentage of Illinois school districts offering parent/caregiver training on technology and remote learning.
- Increased access to online courses.
- Decreased homework gap among P-20 students.

2.1.4.3. Health outcomes

In Illinois, several barriers are standing in the way of expanded health care service and technology through broadband connectivity. Barriers include the need for: 1) clear regulation of and reimbursement for telehealth services; 2) equipment for telehealth services and facilities; 3) training in how to access and use tele-healthcare resources among covered populations; and 4) sufficient bandwidth to enable real-time interaction between patients and heath care professionals.[42] The Connect Illinois BEAD Five-Year Action Plan and IL SDEP prioritize expanding healthcare facilities' access to high-speed broadband, especially for the state's low-income (less than 150% of FPL) and aging covered populations. They also promote adoption of advanced technologies in the healthcare industries in Illinois to enable more equitable telehealth services and healthcare access.

Aligned objectives.

- All Illinois schools, libraries, and public health-related facilities have at least 1 Gbps symmetrical broadband service by 2030.
- Higher utilization and satisfaction with remote healthcare among priority populations.
- Improved medical record-keeping and documentation.

2.1.4.4. Civic and social engagement

By implementing the IL SDEP and Connect Illinois BEAD Five-Year Action Plan, the state plans to expand access to high-speed service and devices to facilitate community engagement in everyday civic and social activities across all covered populations.

Aligned objectives.

- Improved safety and efficiency of transportation infrastructure in Illinois.
- Increased access to social programs and essential services.

Cook County Engagement Sessions

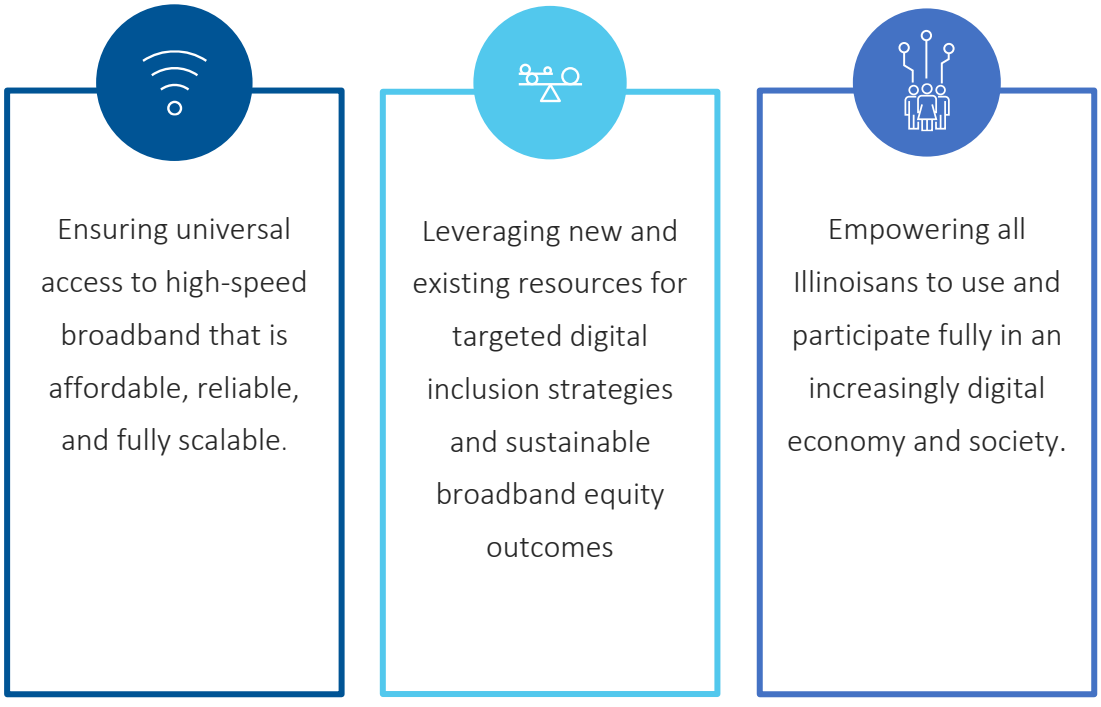
2.1.4.5. Delivery of other essential services

Broadband can be leveraged to deploy advanced technologies in communities that need to increase safety and access to essential services. Working through the Interagency Broadband Working Group, the IOB plans to ensure that essential services provided by state agencies and their local government equivalents are empowered to provide equitable and accessible services to Illinoisans, with a focus on covered populations. And in digital equity funds that are dispersed to partners, IOB will ensure that funded programs enhance the accessibility of essential services to all Illinoisans, with a focus on and tailored to the needs of covered populations.

2.2. Strategy and Objectives

This section provides an overview of the overarching goals in accomplishing the vision outlined above. Strategies and measurable objectives are outlined for each goal.

These strategies and objectives align with the three core vision statements:



A. Ensure universal **access** to high-speed broadband that is affordable, reliable, and fully scalable.
B. Leverage new and existing resources for **adoption** through targeted digital inclusion strategies and sustainable broadband equity outcomes.
C. Empower all Illinoisans to **utilize** and participate fully in an increasingly digital economy and society.

This section aligns with the Goals and Objectives (Section 2.2) of the Connect Illinois BEAD Five-Year Action Plan. Table 2 in the appendix details the overarching goals, strategies, and objectives the state hopes to achieve by implementing either the Connect Illinois BEAD Five-Year Action Plan or the IL SDEP. The Connect Illinois BEAD Five-Year Action Plan focuses on broadband deployment and infrastructure, while the IL SDEP focuses on the implementation of digital equity and inclusion programming across Illinois, as well as related activities. Note that many objectives listed in the Table 2 are essential to Digital Equity but are not intended to be completed using Digital Equity Capacity funding.

3

3. Current State of Broadband and Digital Inclusion

3.1. Asset Inventory

This section describes an inventory of assets across Illinois that promote digital equity for covered populations. Please find the full asset inventory in Appendix 4. These assets are already engaged in the work of digital equity, with the goal of closing the digital divide in Illinois. These include current, publicly, or privately funded resources, programs, and strategies. The State followed the Digital Act of 2021 and DE Planning NOFO definition of "covered populations" when listing the target population of assets included in this inventory.[43] As shown below, while a sizeable and diverse community of digital equity practitioners is engaged in local communities across Illinois, meaningful work is still to be done to make sure that every community has the support needed to fully participate in the digital world. Since there are no federally recognized tribal governments within the State of Illinois, this inventory does not include assets specifically focused on tribal populations.[44]

8

Civic and volunteer organizations that provide volunteer and advocacy assistance for digital equity programs

Organizations that advocate for digital equity or offer volunteer programming related to digital literacy, inclusion, or equity.

13

Public Wi-Fi, networks, and access points

Platforms or programs that provide information about or connection to public Wi-Fi, networks, access points, or sub-devices that enable access to networks.

28

Technical assistance to support digital inclusion

Programs that provide internet-enabled devices or digital literacy assistance to covered populations.

40

Workforce development training and employment services

Programs that offer training and employment resources to community members.

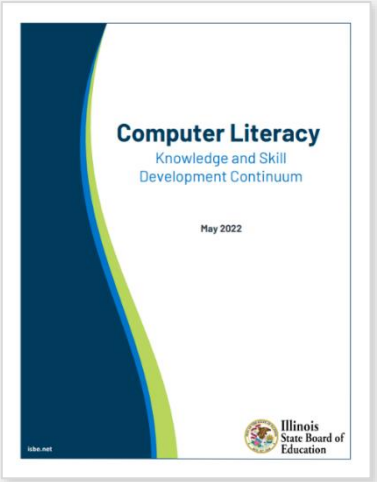
3.1.1. Digital inclusion assets by covered population

A non-exhaustive summary of digital equity asset types that are currently deployed across the state is provided in Appendix 4.

3.1.2. Existing digital equity plans

As detailed in Section 2.2.3, municipal, local, and state digital equity plans were a key input into the drafting of this Illinois SDEP and the development of the state's vision for broadband and digital equity. Multiple communities in Illinois have published formal reports on local broadband deployment and digital equity efforts. These plans have helped to set a baseline for digital equity within their communities, provide a summary of community aspirations and visions, and, in many cases, outline local strategies to achieve their visions. Digital equity plans released by agencies, municipalities, and regional governments are listed in Appendix 5, with snapshots below.

Detailed summaries of digital equity plans released by agencies, municipalities, and regional governments in Illinois are provided below.



Plan: Computer Literacy: Knowledge and Skill Development Continuum[45]

Author: Illinois State Board of Education

Release date: May 2022

Summary: This plan serves as a guide for educators to incorporate computer literacy skills into their teaching and provides a framework for the progressive development of these skills throughout a student's K-12 education.

- The resource aims to support school districts in providing developmentally appropriate opportunities for students to gain computer literacy skills at each grade level.
- Starting from the 2022-23 school year, all districts must ensure students receive computer literacy instruction, and students entering ninth grade and beyond must complete a one-year course focused on computer literacy.
- The continuum covers different areas of computer literacy, including basic operations, concepts, and keyboarding; data management and security; internet searching and online databases; multimedia software applications; and collaboration tools.
- It describes each skill level: the introduction of concepts, developing and applying skills with minimal support, and the independent application of skills.
- The continuum also includes examples showing how computer literacy can be integrated into various subjects, such as social studies, science, ELA (English language arts), and mathematics.
- For each subject and grade level, specific content standards are provided, along with corresponding computer knowledge and skills.

This document demonstrates how computer literacy can be incorporated into learning activities and projects using digital tools, multimedia presentations, online research, collaboration, and more to improve overall digital literacy.

Plan: Broadband READY East Central Preliminary Report[46]

Author: University of Illinois Urbana-Champaign

Release date: August 2022

Summary: This report presents the findings and recommendations from collaborative research coordinated by a team from the Community Data Clinic (CDC) at the School of Information Sciences (iSchool) and the National Center for Supercomputing Applications and Research IT at the University of Illinois at Urbana-Champaign (UIUC). The team represents the East Central Illinois (EC-IL) region, one of 10 state zones for which $50,000 in "pilot" Broadband READY funds for regional research initiatives were distributed from the Illinois Department of Commerce and Economic Opportunity.

Program overview and regional demographics

- The EC-IL team's initiative centered on a cross-entity partnership developed via the CDC with the national non-profit PCs for People and five local civic organizations that serve EC-IL's most vulnerable populations:
  - Project Success of Vermilion County
  - The Housing Authority of Champaign County
  - Cunningham Township Supervisor's Office
  - Champaign-Urbana Public Health District
  - Champaign-Urbana Trauma and Resilience Initiative
- The EC-IL partnership network's efforts focused on developing a multi-phased infrastructure to enable:
  - Distribution of refurbished computers and new hotspot hardware to 500 vulnerable households.
  - Outreach and support for individual households via a new "Tech Buddies" program that addresses ongoing connectivity needs in the months after households receive their hardware.

- Collection of ongoing feedback from heads of households to record their continued needs and concerns about digital connectivity in the months after they receive their hardware.
- Collaborative data review and collection with partner organizations to incorporate their guidance and participation in the research process.

Current conditions summary

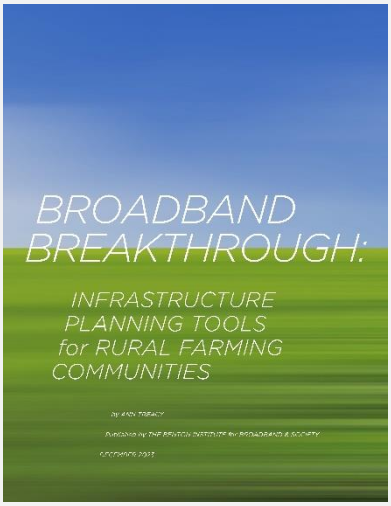
- The EC-IL team's research found that the following are the most common barriers to broadband adoption and use among vulnerable households in the region:
  - Cost
  - Lack of digital literacy
  - Lack of reliable internet service
  - Lack of awareness about available resources.
- The team also uncovered the most common technology challenges faced by vulnerable households in the region:
  - Slow internet speeds
  - Unreliable internet service
  - Lack of compatible devices
  - Lack of technical support.

Digital divide elimination plan

- The EC-IL team's research resulted in the following recommendations for eliminating the digital divide in the region:
  - Provide financial assistance to help vulnerable households afford broadband services.
  - Offer digital literacy training to help vulnerable households learn how to use technology.
  - Expand the availability of reliable internet service in underserved areas.

- Increase awareness of available resources to help vulnerable households connect to the internet.
- Partner with local organizations to provide technical support to vulnerable households.

This program is a first-of-its-kind state initiative for extending an equity-driven infrastructure aiming to "address disparities in broadband access and adoption in rural regions and Black and Brown communities across the state…. while leveraging fully scalable broadband infrastructure."



Plan: Broadband Breakthrough[47]

Author: Hancock County

Release date: 2023

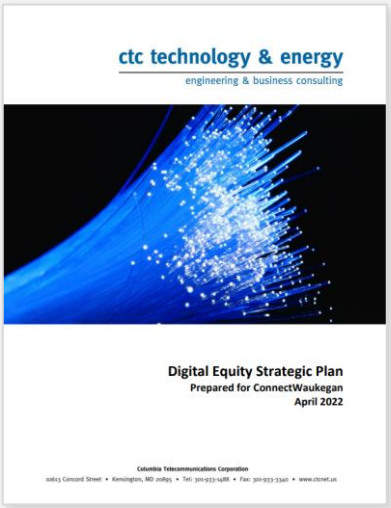
Summary: High-speed internet access will expand and support the education, health, and economic development of Hancock County and will directly impact agriculture via improved crop yields and higher farm efficiency.

- Fiber is the county's central focus because of its speed, durability, low maintenance costs, and longevity.
- Hancock County ranks sixty-second out of 102 counties for access to 100/20 Mbps internet speeds.
- According to IBL, 61% of Hancock County households have access to broadband internet speeds of 100/20 Mbps or greater, but many regions remain unserved, including farming areas.
- Hancock County conducted a survey to identify three priority areas for future development:
  - Support the development and implementation of precision agriculture by providing Hancock County farmers with broadband access.
  - Support education, healthcare, business development, and telework options by bringing broadband access to every home in Hancock County.
  - Better serve Nauvoo, where many residents lack fast and reliable internet.
- Hancock County, in partnership with Illinois State University, identified vertical assets that can be connected to fiber to enable use of fixed wireless as a last-mile option in areas where fiber is hard to deploy.
- Sixty-five percent of farmers and agribusinesses surveyed reported a willingness to host fixed-wireless equipment on vertical assets on their farms.
- Hancock County also generated maps that show service areas by internet service-provider.

- Broadband access will enable precision agriculture in Hancock County to:
  - Use data to improve operations with tractors, combines, fields, and livestock.
  - Use moisture sensors, yield monitors, and see-and-spray technology to reduce herbicide use and Bluetooth livestock biosensors.
- A research study (Katherine LoPiccalo, 2021) found that doubling the number of homes in a county with 25/3 Mbps internet access led to a 3.6% increase in corn yields, a 3.8% increase in soybean yields, and decreases in fertilizer use and seed expenses.
- In Hancock County, it is estimated that employing precision farming technology could lead to increased agricultural productivity of approximately $8.2 million per annum in direct benefits ($4.98 million from corn and $3.30 million from soy) and a total of $12.1 million when indirect and induced impacts are taken into account.
- The McDonough Telephone Cooperative received an $18 million grant from the USDA in February 2023 to deploy fiber in four Illinois Counties, including Hancock County. This network will serve approximately 600 currently unserved Hancock County households.

Approximately 2500 homes will remain unserved after McDonough Telephone Cooperative completes its work. Grow Hancock Broadband will address these gaps by:

- Encouraging support for local matching funds that are required for most grants.
- Working with current and interested ISPs to help them develop grant applications and funding proposals.
- Advocating for state and local funding for broadband expansion.
- Meeting with community groups to provide education and answer questions.



Plan: Digital Equity Strategic Plan[48]

Authors: Connect Lake County

Release date: April 2022

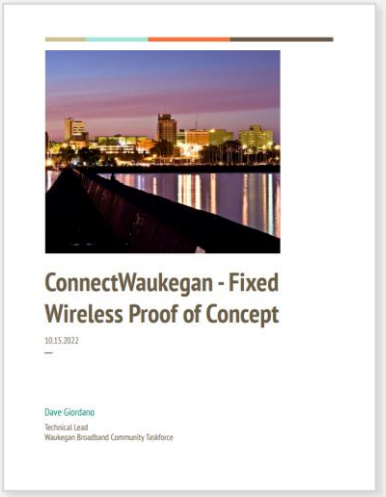
Summary: This digital equity strategic plan makes clear that the dominant issues related to broadband in Waukegan do not stem from lack of infrastructure but from barriers to connectivity—particularly difficulties in enrolling in available low-cost and subsidy programs, as well as substantial gaps in device access and digital skills.

- Recommendations
  - Formalize Connect Lake County as a digital inclusion coalition with leadership from stakeholder groups.
  - Maximize residents' enrollment in the Affordable Connectivity Program (ACP) through digital navigators.
  - Engage with local and state partners to design a community connection center for adoption and utilization support.
  - Consider the feasibility of deploying fixed-wireless services for households that cannot subscribe to existing services.
  - Explore partnerships with Comcast and AT&T for “Internet Essentials” subscriptions and bulk-purchase agreements.
- Local market research
  - Assessed high-speed broadband service availability in Waukegan and found no gaps in infrastructure.
  - Confirmed that barriers to connectivity in Waukegan relate to enrollment, device access, and skills gaps.
- Data on broadband gaps
  - A statistically valid bilingual mail survey was conducted to gather data on broadband gaps (availability, affordability, device access, and skills) in Waukegan.

  - The resulting data repository informs initiatives, grant applications, and policy suggestions to the Illinois Office of Broadband.

- Programmatic efforts
  - Data was gathered on existing programmatic efforts related to enrollment assistance, skills training, and device programs in Waukegan.
  - The magnitude of remaining programmatic gaps was assessed.
- Outreach to broadband providers
  - Broadband providers were engaged to explore partnership opportunities for enrollment assistance, bulk-buy programs, and connecting residents to devices and skills programs.
- Federal funding landscape
  - The evolving federal funding landscape was documented, and opportunities that apply to Waukegan were identified.
- Urban broadband infrastructure models
  - Urban broadband infrastructure models in other cities were examined to provide guidance to Connect Lake County in their decision-making.
- Fixed-wireless design and cost estimate
  - Three models for a high-level fixed-wireless design were developed, as was a cost estimate for filling broadband service gaps.
  - WCUSD #60 buildings and other structures were leveraged to address connectivity issues.

Each section above sheds light on the broadband environment in Waukegan and provides recommendations and insights to address the identified gaps.



Plan: Fixed-Wireless Proof of Concept[49]

Author: Connect Lake County

Release date: October 15, 2022

Summary: Connect Lake County aims to provide equitable and sustainable internet access to all residents, businesses, and institutions in Waukegan, Illinois.

- **Waukegan fixed-wireless opportunities:** The Waukegan Community Broadband Taskforce (WCBT) identified challenges in accessing broadband, particularly for low-income and undocumented residents. They used T-Mobile MiFi devices to provide internet access to students during the pandemic.
- **CBRS fixed-wireless background:** CBRS's fixed-wireless service uses broadcast towers to transmit and receive signals in the 3.5 GHz band. It is a shared spectrum and relies on a central spectrum access system (SAS) administrator for coordination.
- **Connect Lake County fixed-wireless proof of concept:** Connect Lake County conducted a proof of concept with fixed-wireless CBRS, testing range, bandwidth, and customer premises equipment (CPE) devices.
- **Goals of the CBRS Fixed Wireless Proof of Concept:** The goals of the proof of concept were to understand the cost, configuration, and capabilities of CBRS fixed wireless solutions and CPE devices, as well as to test the range and bandwidth capabilities.
- **Connect Lake County Fixed Wireless Proof of Concept Results:** The proof of concept was successful, with a range of approximately 1.2 to 1.5 miles achieved in certain directions. Tree interference affected coverage, and bandwidth issues were resolved. Installation time was around 2 days, and the total cost of components was approximately $20,000.
- **CPE Device Testing and Future Rollout:** Different CPE devices were tested, and the Baicells MiFi and Inseego Gateway were considered the most viable solutions. Public access Wi-Fi locations were not included in the testing but are part of the planned rollout.

- Cost Benefit Analysis and Broadband Alternatives: This section discusses the cost benefit analysis of CBRS fixed wireless compared to other solutions and emphasizes Connect Lake County's approach of providing a variety of broadband alternatives in collaboration with commercial providers and public options.
- Selective Use of CBRS Fixed Wireless: This section suggests using CBRS fixed wireless to fill bandwidth access gaps in low-income neighborhoods or areas where traditional wired or wireless options are unavailable or not cost-effective. It mentions deploying CBRS antennas on strategic buildings or locations with access to high-speed internet and loaning CPE devices to residents.
- Targeted Roll-Out Plan: Instead of a comprehensive CBRS access point deployment, Connect Lake County recommends a gradual and cost-effective roll-out plan on a neighborhood-by-neighborhood basis, based on demand and access to cost-effective back-end broadband. Public locations like schools, libraries, and town facilities are considered as potential deployment sites.
- CBRS Plan and Partnership with Commercial Providers: The CBRS plan aims to fill gaps in different neighborhoods without replacing commercial partners' offerings. Connect Lake County aims to provide open and unrestricted bandwidth access to compete with other options. Coordination of free public Wi-Fi access with operating hours is discussed.
- Affordable Connectivity Program (ACP) and Funding: The Affordable Connectivity Program (ACP), an FCC benefit program, is mentioned as a way to ensure affordability of broadband for eligible households. Connect Lake County has been working with eligible residents to sign them up for commercial broadband and receive the ACP benefit, which would help fund the CBRS solution.
- Payback - Return on Investment Model: This section presents a payback model for the CBRS solution, considering equipment and service costs. The number of households subscribing to the service over a five-year period determines the payback period and surplus generated.
- Technical Detail - Configuration and Installation: This section provides hardware and software details of the proof of concept, including the equipment used, mounting

options, and configuration process for Baicells radios and Cloudcore. It discusses the installation steps and the use of Google Network Planner to assess location suitability.

- Range and Bandwidth Testing: The team conducted tests to assess the range and bandwidth of the CBRS solution using different devices. Initial tests, adjustments, and subsequent testing results are described, along with the advantages of using Baicells MiFi devices for individual users.

Connect Lake County in Waukegan, Illinois, is successfully working towards providing equitable and sustainable internet access. Through their proof of concept using CBRS fixed wireless technology, they achieved positive results and identified viable CPE devices. With a neighborhood-focused roll-out plan and emphasis on collaboration with commercial providers, Connect Lake County aims to bridge the digital divide and ensure affordable connectivity for underserved areas.

Plan: Community Assessment[50]

Authors: Connect Lake County

Release date: August 28, 2020

Summary: The Foresite Group conducted a Community Assessment in Waukegan, focusing on broadband availability for the city's school children. Despite existing coverage, socio-economic issues and remote learning challenges have impacted participation. This summary highlights the identified gaps and recommendations to improve broadband access in Waukegan.

- Foresite Group engaged to conduct a Community Assessment in Waukegan
- Emphasis on broadband availability for the city's 16,000 school children
- Waukegan has good broadband and cellular coverage but lacks participation due to socio-economic issues
- COVID-19 remote learning requirements worsen the situation
- Waukegan School District has a plan to address equipment needs and provide temporary high-speed connectivity
- Multiple options for permanent solutions exist, including federal and state funding programs
- Large municipal fiber network may not be the best solution due to cost
- Targeted spending of public or private funds can be more effective
- Broadband infrastructure planning is absent in Waukegan's city planning documents
- Foresite Group identified eight gaps that can be improved through broadband solutions:
- Demographics Gap:
  - Limited broadband adoption due to socio-economic issues
  - Recommendation: Implement targeted programs to increase broadband adoption among at-risk families

- Access Gap:
  - Lack of broadband access for covered households
  - Recommendation: Utilize federal and state funding programs to expand access to affordable broadband options
- Digital Literacy Gap:
  - Lack of digital literacy skills among certain populations
  - Recommendation: Develop community outreach programs to provide digital literacy training
- Educational Gap:
  - Remote learning challenges for students without broadband access
  - Recommendation: Provide Chromebook computers and Wi-Fi hotspots to all school children
- Community Outreach Gap:
  - Limited outreach to promote broadband adoption and other initiatives
  - Recommendation: Utilize community outreach programs to raise awareness and encourage participation
- Equity Gap:
  - Unequal access to educational resources due to lack of broadband
  - Recommendation: Ensure equitable access to broadband for all students and their families
- Infrastructure Gap:
  - Absence of broadband infrastructure planning in city documents
  - Recommendation: Include broadband infrastructure planning in city's long-term plans
- Technology Innovation Gap:
  - Lack of guidance on broadband infrastructure to support technological advancements

- Recommendation: Incorporate broadband infrastructure requirements into city's technology planning

The Community Assessment identified key gaps in broadband access, including adoption, affordability, digital literacy, and infrastructure planning. Recommendations such as targeted programs, funding utilization, and community outreach can address these gaps and ensure equitable access for students and families. Incorporating broadband planning into the city's long-term vision will foster technological innovation and bridge the digital divide in Waukegan.

Plan: Broadband Infrastructure Engineering Assessment Report[51]

Authors: Champaign County

Release date: March 24, 2022

Summary: Finley Engineering and CCG Consulting were hired to create a broadband master plan for Champaign County. The plan aims to address existing digital inequities and barriers to access, adoption, and utilization of robust broadband by all residents, businesses, and institutions. However, the scope of work changed during the course of the project to leverage the broadband grant monies that will become available at the federal and state levels.

Findings

- Broadband speeds in the county's towns and cities differ sharply from speeds in rural areas.
- Broadband upload speeds are problematic throughout the county.
- Financial analysis shows a need for significant grant funding to build the networks necessary to bring broadband to the county's rural areas.
- The FCC offered subsidies to ISPs to serve a significant portion of rural areas with the Rural Digital Opportunity Fund (RDOF)'s reverse auction in December 2020.
- Any broadband solution must be built for the future and not for today.

Recommendations

- Finley recommends building a fiber network using XGS-PON technology that can deliver 10-gigabit, symmetrical broadband to every home and business in the study area.
- The cost of the needed investments for a fiber network is estimated to be $164.4 million for the whole study area, $71.8 million for the entire rural area, and $54.4 million for the rural areas that are not already covered by tentative RDOF funding.
- The county may identify the staffing needed this year to pursue a broadband solution, find and partner with ISPs to pursue grants, gather more facts such as

conducting statistically valid surveys, educate elected officials and the public on broadband issues, review local policies that might pose obstacles to constructing a broadband network, and tackle other broadband issues, like digital literacy.

Finley Engineering and CCG Consulting's broadband master plan for Champaign County aims to address digital inequities. Disparities in broadband speeds, especially in rural areas, were identified. The recommended solution is to build a future-proof fiber network using XGS-PON technology, requiring substantial grant funding. To move forward, the county may secure staffing, partner with ISPs for grants, conduct surveys, educate stakeholders, review policies, and address digital literacy concerns.

Plan: Broadband Access[52]

Authors: Housing Authority of Champaign

Release date: N/A

Summary: The Housing Authority of Champaign County (HACC) is a public housing agency that provides affordable housing to low-income families and individuals in Champaign County, Illinois. HACC's mission is to provide a quality living environment that will help individuals to achieve their full potential. HACC's vision is to develop sound, affordable housing communities that offer opportunities and support that will maximize individuals' potential and enable their successful transition to self-sufficiency.

A clear need for MTW agencies

- A national report co-released by Housing Action Illinois and the National Low-Income Coalition found that, to afford a modest, two-bedroom apartment in Illinois, renters must earn $20.34 per hour. To afford a two-bedroom home without paying more than 30% of their income on housing costs, a person earning the state minimum wage of $8.25 per hour must work 99 hours per week to make ends meet.

Broadband access

- Communities without reliable high-speed internet service cite a growing gap between the resources and opportunities available to their residents and those in communities that have a robust network. Broadband access can increase household income by an average of 3%.

Current plans

- HACC is strategically planning for the future of broadband access with the goal of expanding access to senior and disabled properties, building workforce readiness through broadband access, and providing basic education and career training.

DCEO Connected Communities Grant

- In June 2020, HACC was the recipient of a $12,000 broadband grant from the Illinois Department of Commerce and Economic Opportunity. The grant allowed HACC to improve broadband access and utilization in the community.

Notable accomplishments

- HACC purchased 20 Chromebooks, a charging cart, projector, and pull-down screen to equip the community room at Oakwood Trace. The space will be used for workforce development training, financial literacy classes, educational workshops, and career development.
- HACC received the EnVision Center designation in October 2020. An EnVision Center is a centralized hub that provides community members with the resources and support needed to excel. Grand funds were used to purchase 10 all-in-one PCs to equip a computer lab.
- HACC partnered with students at the University of Illinois Urbana-Champaign during the pandemic to provide virtual tutoring and homework assistance to students in need.

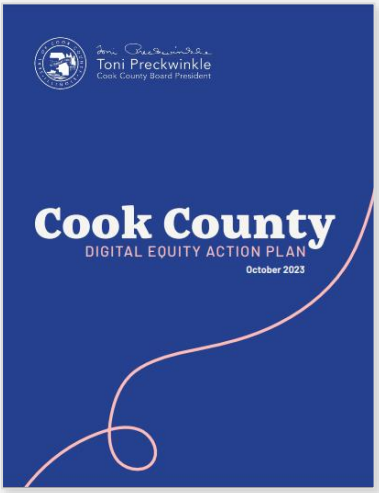
Needs assessment

- HACC conducted a broadband survey to assess the needs of the community. Based on the information obtained, HACC will continue to:
  - Provide training in technology use (particularly with seniors).
  - Provide access to affordable broadband by partnering with providers to enroll individuals and families in the Emergency Broadband Benefit Fund.
  - Help individuals and families gain access to low-cost devices.
  - Provide workforce development and educational opportunities.

Partnerships

- The Steering Committee was an integral part of winning the broadband grant. The committee helped HACC to strengthen existing community partnerships and establish new ones that assisted in efforts to lessen the digital divide. Partners included UIUC Chancellor's Task Force: Accessible Technology, UIUC School of Information Technology: Broadband READY Grant, UIUC School of Social Work, Champaign Public Library, Volo, and PCs for People.
- HACC is committed to providing high-quality, affordable housing and supporting its residents' success. The agency is working to expand broadband access in the

community, to provide training in technology use, and to connect residents with workforce development and educational opportunities. HACC is also striving to strengthen partnerships with other organizations in the community to address the needs of low-income families and individuals.



Plan: Cook County Digital Equity Action Plan[53]

Authors: Cook County

Release date: Oct 2023

Summary: The Cook County Digital Equity Action Plan offers a strategic framework for ensuring that all Cook County residents have equitable access to the digital infrastructure, devices, and tools to thrive in today's economy and society. The plan comprises four digital equity cornerstones: access, confidence, safety, and infrastructure, based on Cook County residents' feedback in the summer 2023 engagement process. For each of these cornerstones, the plan proposes a set of "IMPACT" solutions designed to be effective now and in the long term. The plan specifically focuses on Cook County's suburban and regional areas.

Cornerstone 1: Accessibility

- The accessibility vision is for everyone to have the digital tools and resources they need to fully participate in our twenty-first-century digital society.
- To realize this vision, quality internet services and devices must be available and priced affordably for everyone.
- Three solutions are proposed:
  - Supporting enrollment in low-cost and subsidized internet plans
  - Expanding public Wi-Fi
  - Expanding access to high-quality devices.

Cornerstone 2: Confidence

- The county's vision for digital confidence is for everyone to feel comfortable and confident while using technology and the internet.
- Digital confidence means different things to different people and the community. Using technology to find better job opportunities, learning online, finding services, shopping, banking, and staying connected to family and friends can all be considered facets of digital confidence.

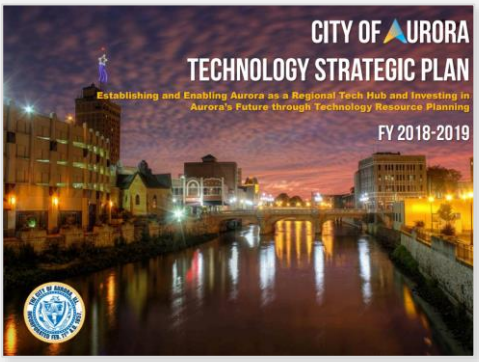
- Three solutions are proposed:
  - Supporting Digital Navigator corps partnership
  - Supporting the workforce of the future by offering opportunities to build digital skills and forming partnerships that provide pathways to good tech-related jobs
  - Building the learning ecosystem using a community-by-community approach

Cornerstone 3: Safety

- The county's public engagement process showed that many community members are concerned about the safety and security of technology use—for themselves, their families, and their communities.
- Cook County's vision is to build a collective culture of consent and safety in technological interactions by instilling knowledge and power in its residents.
- Three solutions are proposed:
  - Supporting a digital safety help line operated by community helpdesks
  - Building awareness of safety and security
  - Increasing communication about digital safety and specific threats to residents (e.g., phishing schemes and online scams).

Cornerstone 4: Infrastructure

- The county's vision for its digital infrastructure is to work with partners to provide internet services that meet the community's needs by making fast, reliable internet service available to all.
- Three solutions are proposed:
  - Creating a plan to improve and strategically expand infrastructure
  - Mapping assets to resolve any inconsistencies between the FCC's broadband map and people's real-life experience.
  - Advocating for accountability among service providers on price and performance.



Plan: Technology Strategic Plan[54]

Authors: City of Aurora

Release date: FY 2018-2019

Summary: The City of Aurora's Technology Strategic Plan outlines the city's vision, mission, guiding principles, and business drivers for technology. The plan also includes a list of 58 short- and long-term initiatives that the city plans to implement to achieve its technology goals.

Vision and mission

- The City of Aurora's vision for technology is to become a strategic IT business partner not only for the city but also the region. Its mission is to deliver innovative, smart solutions and services and to provide first-class customer service.

Guiding principles

The City of Aurora's guiding principles for technology are:

- "One IT": Sharing IT products, processes, people, and partners throughout the city and region.
- Customer experience: Providing effective solutions and services that build customers' confidence and satisfaction.
- Agility/smart sourcing: Through public-private partnerships, using the most efficient and effective blend of resources to meet ever-changing business demands.
- Foundational principles: Achieving excellence in project management, cyber-security, and data security.

Current-state assessment

Until 2017, the City of Aurora's IT structure was decentralized, with separate IT teams supporting the police department and City Hall. In 2017, the city began to reorganize its IT division to centralize all operations and to improve processes and work streams. As part of these improvements, the city also added the following operational assets:

- A project management office (PMO) to manage projects citywide

- Business analysts and project managers
- A cyber-security strategy
- A dedicated chief information security officer.

Accomplishments to date

Within a short period, the City of Aurora's IT reorganization has made several noteworthy accomplishments and received several accolades, including:

- The Smart Cities Council selected the City of Aurora as a finalist for the Readiness Challenge Grant.
- The city has continued to implement its Public Safety Systems modernization by launching a new, computer-aided dispatch system and web-based record management system for the police and fire departments.
- The city has implemented a new, web-based platform to manage, track, and streamline all public information requests.
- The city has brought cyber-security to the forefront by creating a new chief information security officer role.
- The city has set a foundation for increasing its use of data analytics by creating a new data analytics director position.
- The city has saved $2.3 million through contract renegotiations and other substantial changes.
- The city has re-established and strengthened its partnership with Kane County and OnLight Aurora in a mutual effort to align resources and promote economic development throughout the region.

The City of Aurora has adopted a Technology Strategic Plan to improve the lives of its residents and businesses. The plan includes a list of 58 short- and long-term initiatives, and the city has already made significant progress in implementing it.

Plan: Chicago Digital Equity Plan[55]

Authors: Chicago Digital Equity Council

Release date: January 2023

Summary: The Chicago Digital Equity Plan is a community-led plan to achieve digital equity in Chicago. The plan was developed by the Chicago Digital Equity Council, a cross-sector, community-driven effort to understand and overcome barriers to digital equity by engaging those most burdened by them.

Challenge

- Nearly 172,000 Chicago households (over 15%) do not have internet service at home, and nearly 92,000 (roughly 8%) do not have any device, such as a computer, laptop, tablet, or smart mobile device.
- These disparities became more evident than ever during the COVID-19 pandemic, when schools, workplaces, and many aspects of daily life shifted from in-person to remote, leading to an unprecedented reliance on technology and connectivity.
- The pandemic accelerated what was already taking shape in a rapidly evolving, tech-centered world: families need reliable, affordable, high-speed home internet access—as well as related support and skills—to fully participate in Chicago's modern economy and civic life.

Progress since 2020

- Chicago has made historic progress in tackling digital disparities in recent years.
- In June 2020, the city launched Chicago Connected, a first-of-its-kind broadband program that provides no-cost internet service to qualifying Chicago Public Schools families for four years.
- In its first two years, the program has connected more than 60,000 households—equivalent to roughly 100,000 students—to at-home broadband.
- In 2021, the program expanded to City Colleges of Chicago.

- Chicago Connected has also made digital learning lessons and resources available to families free of charge through partnerships with more than 20 community-based organizations.

Funding sources

- The Chicago Digital Equity Plan is funded by a variety of sources, including federal grants, state grants, city funds, and private donations.

Approach

- The Chicago Digital Equity Plan takes a comprehensive approach to addressing the digital divide.
- The plan includes a variety of strategies, including:
  - Expanding access to affordable, high-speed internet
  - Providing digital devices and training to underserved communities
  - Building partnerships with community-based organizations
  - Promoting digital literacy and digital skills.

Findings

- The Chicago Digital Equity Council found that the digital divide is a complex issue with multiple causes, including:
  - Income inequality
  - Racial disparities
  - Disability
  - Language barriers
  - Geographic isolation

Existing assets

- The Chicago Digital Equity Council found that several existing assets can be leveraged to address the digital divide, including:
  - Public libraries
  - Community-based organizations

  - Nonprofit organizations
  - Government agencies

Recommendations

- The Chicago Digital Equity Council makes several recommendations to address the digital divide, including:
  - Expanding access to affordable, high-speed internet
  - Providing digital devices and training to underserved communities
  - Building partnerships with community-based organizations
  - Promoting digital literacy and digital skills
  - Tracking progress and measuring impact

The Chicago Digital Equity Plan is a comprehensive and ambitious plan to address the digital divide in Chicago. The plan could potentially have a significant impact on Chicagoans' lives and is a model for other cities across the country.

Plan: Broadband Strategic Plan[56]

Author: City of Harvey

Release date: September 2021

Summary: The City of Harvey's Broadband Strategic Plan is built on facts about the needs and gaps city residents face, including obstacles related to access, adoption, and use. The plan aspires to provide residents with access to affordable, high-speed broadband so that they can participate fully in the digital age, especially after the changes wrought by COVID-19.

The plan outlines the following needs and gaps for the City of Harvey:

- Only 72% of households in Harvey have a broadband subscription.
- 17% of Harvey households do not have access to a computer.
- 25% of households in Harvey have no internet access.

The plan lays out nine specific goals and applicable strategies for improving broadband access, adoption, and use in the city. The plan also emphasizes the need to measure success through metrics. Key components of each goal include:

- Access—building the infrastructure necessary to deliver affordable, high-speed internet to residents, businesses, and anchor institutions.
  - Goals:
    1. Expanding the reach of the Chicago Southland Fiber Network within Harvey
    2. Ensuring that Harvey's residential areas have access to broadband services by 2026
    3. Establishing a city-wide network of free Wi-Fi hotspots, with a minimum of one hotspot in each ward.
  - Strategies:
    1. Working with local and regional partners to expand the fiber-optic network in Harvey and the broader Southland region

2. Encouraging and offering incentives to ISPs and wireless carriers to provide affordable, high-speed internet to Harvey's residents, businesses, and institutions
3. Establishing an array of programs, hotspots, and public computer centers for residents to access broadband.

- Adoption—ensuring equitable distribution and delivery of broadband infrastructure and services
  - Goals:
    1. Decreasing the digital divide between the city and the greater Chicago region by 50% by 2026
    2. Increasing the percentage of households with a computer by 10% by 2026
    3. Increasing the percentage of households with a broadband subscription by 10% by 2026.
  - Strategies:
    1. Securing and leveraging governmental, private-sector, and civic-sector resources to increase residents' access to discounted computers and laptops
    2. Continuing to participate in regional initiatives and collaboratives that focus on improving digital literacy, expanding broadband access, and addressing the digital divide
    3. Prioritizing and advancing policies, programs, projects, and public-private partnerships that support the equitable distribution of broadband infrastructure and services to end-users.
- Utilization—increasing digital literacy by maximizing the benefits and value generated by the use of broadband
  - Goals:
    1. Supporting the expansion of programs that provide digital literacy education and training to Harvey residents
    2. Increasing residents' participation in tech-focused workforce development programs

3. Establishing a grant program that expands access to high-tech careers for Harvey's youth and students.

– Strategies:

1. Supporting the expansion of digital literacy education and training at Thornton Township High School, Harvey Public Library, South Suburban College, and other educational institutions
2. Ensuring that youth and other residents are well-equipped for careers in the twenty-first century through partnerships with workforce development organizations
3. Promoting and cultivating a high-tech industry cluster in Harvey by leveraging the city's economic development efforts and infrastructure investments.

To implement the plan, the City of Harvey is prioritizing:

- Partnerships and community engagement in implementing this plan
- Collaboration with local and regional partners from the public and private sector, which is essential to leveraging necessary resources and expertise
- Mechanisms to measure success through metrics such as increased broadband subscriptions, distribution of computers and routers, and an increase in digital literacy among residents.

3.1.3. Existing digital equity programs

Illinois is proud to have many statewide programs that focus on broadband expansion and digital equity. (See Appendix 6.) These programs work to build the capacity for broadband deployment and to advance digital equity in their localities. In addition, many municipalities and local organizations have started their own digital equity programming.

Shown entities (Left to Right): Latinx Digital Leaders Now, Lead for America & PCs for People, Chicago Public Schools, ConnectLakeCounty, Coalition for a Better Chinese American Community

3.1.4. Broadband adoption

The National Digital Inclusion Alliance defines broadband adoption as "residential subscriptions to high-speed internet access and the digital capacity of communities."[57] Illinois used this definition when conducting its inventory of broadband adoption assets. The following types of broadband adoption assets are currently deployed across the state:

1. Computer refurbishing programs are device-reuse or recycling programs.
2. Digital Navigator programs offer technical assistance to support broadband adoption and the use of devices.
3. P-20 school system one-to-one computer programs are run by individual schools or school districts that offer one internet-enabled device to each student so that everyone has his/her own computing device for learning.
4. Loaner computer/hotspot programs offer device or hotspot loans on a temporary basis.
5. Data tracking programs track broadband adoption statistics.
6. Programs that conduct awareness and outreach activities related to digital inclusion programming and resources, including research, marketing, and awareness campaigns intended to encourage broadband adoption.
7. Programs that provide digital literacy and digital skills training and/or training in using internet-enabled devices.
8. Programs that provide subsidized or low-cost internet-enabled devices to eligible individuals at little or no cost.
9. Public computing labs are public spaces offering open use of internet-enabled devices.

3.1.5. Broadband affordability

This section inventories the programming that supports Illinois families in accessing monthly broadband services that they can sustainably afford as part of their monthly budgets.[58] These assets and programs are categorized into two types:

1. **Discount or subsidized broadband service and equipment programs**—programs that offer subsidies or discounts for broadband services or internet-enabled devices.
2. **Efforts to increase enrollment in affordable plans or future subsidy programs**—programs that focus on boosting enrollment in affordable plans by eligible families and individuals.

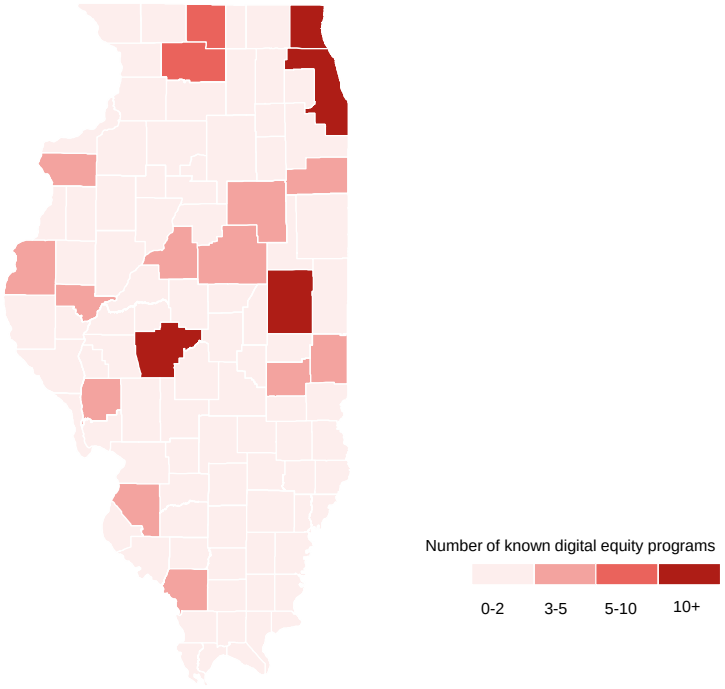
The state plans to continue to prioritize affordability measures as an assessment criterion in the Connect Illinois grant program and explore policy solutions to further enable affordable broadband.

3.1.6. Gaps in asset inventory

The State of Illinois recognizes that a sizable number of digital equity practitioners and partners are working in local communities across Illinois. Nevertheless, there is still work to be done to ensure that every municipality, region, and local government or community has sufficient digital equity or a broadband plan or program providing residents with needed support.

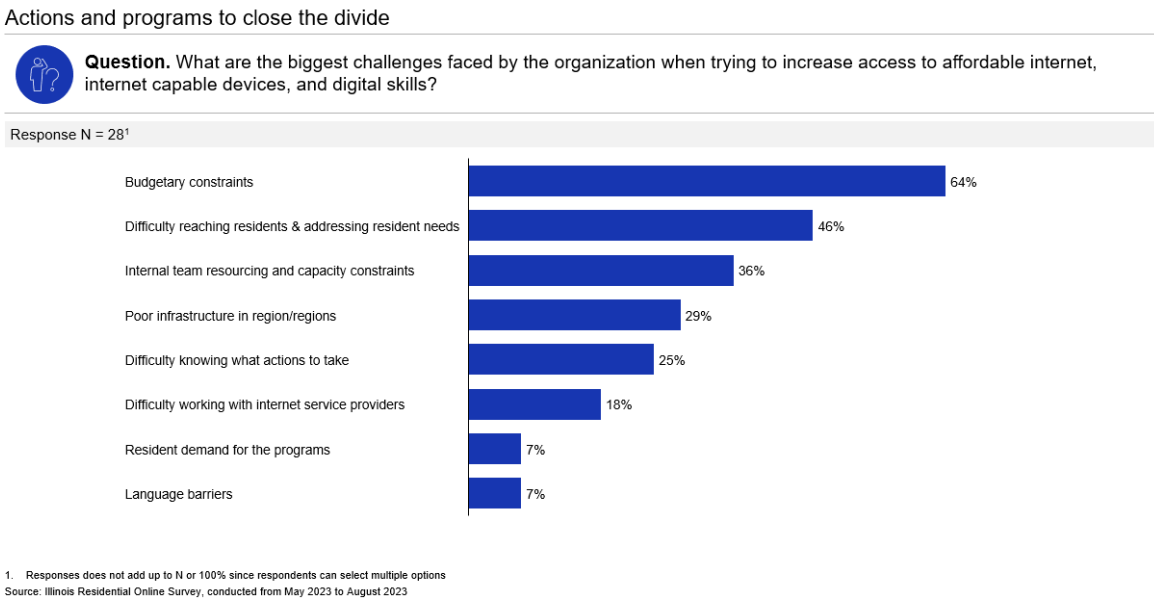
The figure below shows the geographic distribution of these existing assets. As may be expected, assets are currently clustered in counties with large population centers. In areas of the state with low population density, most counties have only a limited number (fewer than two) of known digital equity programs.

Figure 1. Distribution of digital equity assets by county: Visualization of coverage for all known Digital Equity programs (from Section 3.1) per county in Illinois.[59]



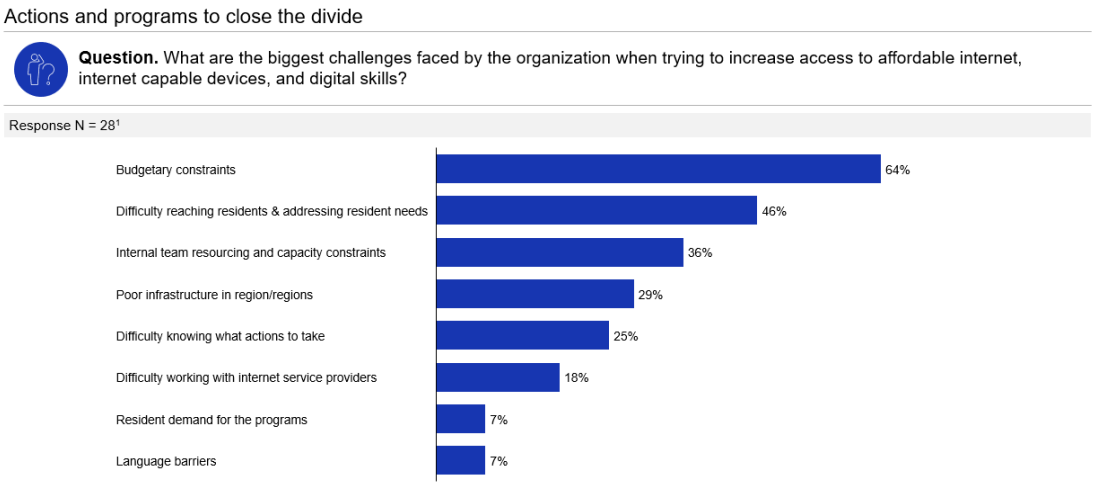
In the IBL's survey of non-profits and community organizations, respondents said that their biggest challenge in efforts to increase access to affordable internet, internet-capable devices, and digital skills is **budgetary constraints**, which affect 64% of surveyed organizations (Figure 2).[60] Participating organizations indicated that they would like to receive support from the state in the form of **grant funding** (88% of surveyed organizations) and **device donation** (62%).[61] The survey showed that closing gaps in funding and support is essential to the success of many existing programs (Figure 2.)

Figure 2. Challenge faced by organization, based on Illinois non-profit and community organizations web survey as of September 1, 2023



1. Responses does not add up to N or 100% since respondents can select multiple options
Source: Illinois Residential Online Survey, conducted from May 2023 to August 2023

Figure 3: Partnership and support from IOB, based on Illinois non-profit and community organizations web survey as of September 1, 2023



1. Responses does not add up to N or 100% since respondents can select multiple options
Source: Illinois Residential Online Survey, conducted from May 2023 to August 2023

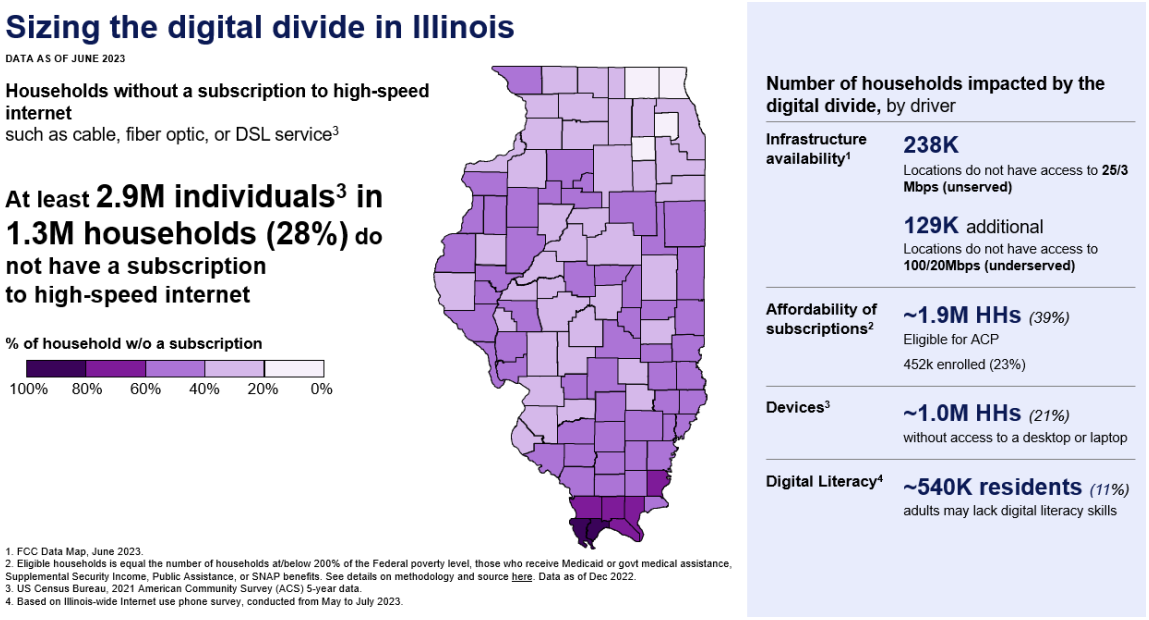
In addition to gaps in geographic coverage, capacity gaps persist, even in large population centers with a high number of programs. Community program leaders have reported that they lack sufficient capacity to serve all community members in need. In the City of Chicago Listening Sessions, participants maintained that the Chicago Public Library did not have enough staff to support the device-loan and digital learning program. Similarly, respondents in the Aurora Listening Session noted that, while their local public library lends out hotspots, community members need to request these loans nearly a month and a half in advance. These examples indicate that closing gaps in coverage and program availability will be insufficient if capacity gaps remain unaddressed.

3.2. Needs assessment

At the state level, 2.9 million Illinoisians in 1.3 million households do not have home access to high-speed internet.[62] (See Figure 4 for more details.) This gap in adoption may be caused by a lack of:

- Available broadband infrastructure: 5% of broadband-serviceable locations (BSLs) in Illinois do not have access to 25/3 Mbps internet service and are categorized as "unserved" by the FCC. Some 4% of BSLs do not have access to 100/20 Mbps internet service and are thus categorized as "underserved."[63]
- Affordable internet subscriptions: 17% of Illinois residents find it difficult to afford their internet bill, and 14% have experienced interruptions in service because they had difficulty paying.[64]
- Access to devices: Just 79%, or 3.9 million, of Illinoisans have access to either a desktop or a laptop.[65]
- Sufficient digital literacy: 11% of Illinoisans report that they have difficulty completing at least one of the surveyed tasks related to the internet.[66]

Figure 4. Overview of the digital divide in Illinois



In this section, we further detail the baseline from which Illinois is working to address broadband adoption, affordability, device access and digital literacy, as well as the information that residents have communicated about their underlying needs and the barriers they face to becoming fully digitally enabled. This information was shared in both listening sessions and surveys. Later in this section, we provide details on each of these topics as they specifically pertain to Illinois's covered populations: individuals who live in covered households, aging individuals, incarcerated individuals (defined by the state to include returning residents and justice- and system-impacted individuals), veterans, individuals with disabilities, individuals with a language barrier (including individuals who are English learners; and have low levels of literacy), racial and ethnic minorities (e.g. Black or African Americans, Hispanic individuals, and Asian individuals are the three largest minority populations facing particular barriers to broadband access and usage) and individuals who primarily reside in a rural area.[67] Given that there are no federally recognized tribal governments within the State of Illinois, this plan does not specifically focus on the needs of tribal populations within the state of Illinois.[68]

3.2.1. Broadband adoption

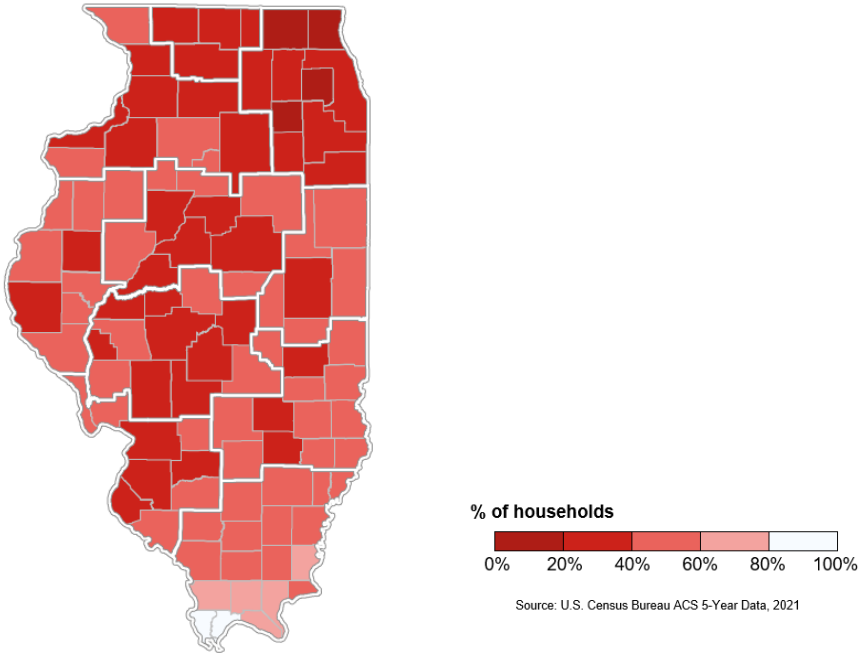
This section describes the current state of Illinoisans' broadband adoption, device access, and digital literacy rates, as well as the feedback gathered from residents and non-profits on the barriers they face. We also discuss multi-sector strategies for increasing broadband adoption in the agriculture, education, and healthcare sectors.

3.2.1.1. Improved household broadband subscriptions

Current state of broadband subscription rates in Illinois

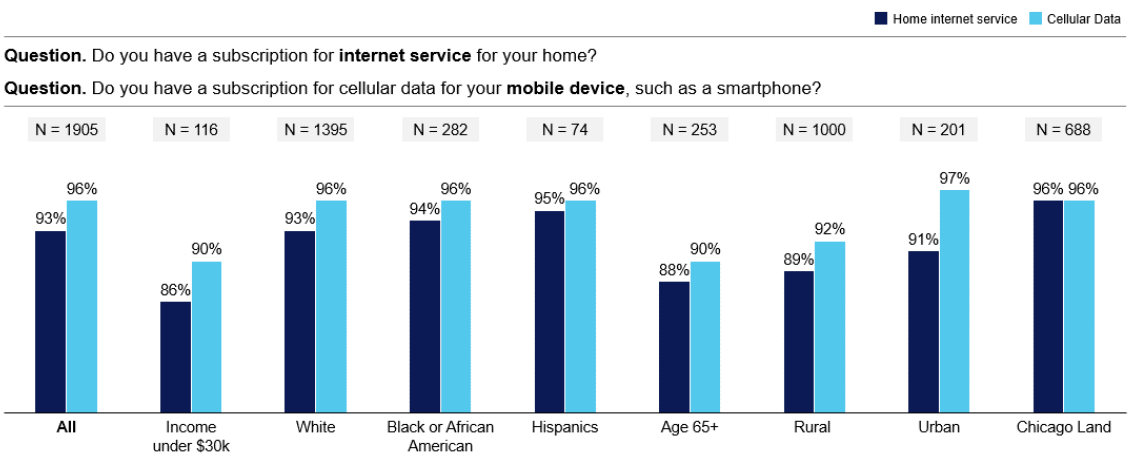
According to the **American Community Survey 5-Year Data** (2021) estimates, **3.5 million households** (72% of all households in Illinois) **subscribe to fixed broadband services** such as cable, fiber-optic, or DSL services. The rate is lowest in Illinois's Southern region, where only 49% of households subscribe to broadband. The Southern region is followed by the Southeast region at 58%, the West Central region at 60%, and the Central region at 63%. Among counties, the five with the lowest subscription rates are all in the Southern region: Alexander County (15%), Pulaski County (19%), Pope County (31%), Union County (32%), and Johnson County (33%). **Figure 5** below plots broadband subscription rates by county.

Figure 5. Broadband adoption in Illinois. Percentage of households in Illinois with broadband subscriptions—such as cable, fiber-optic, or DSL—by county



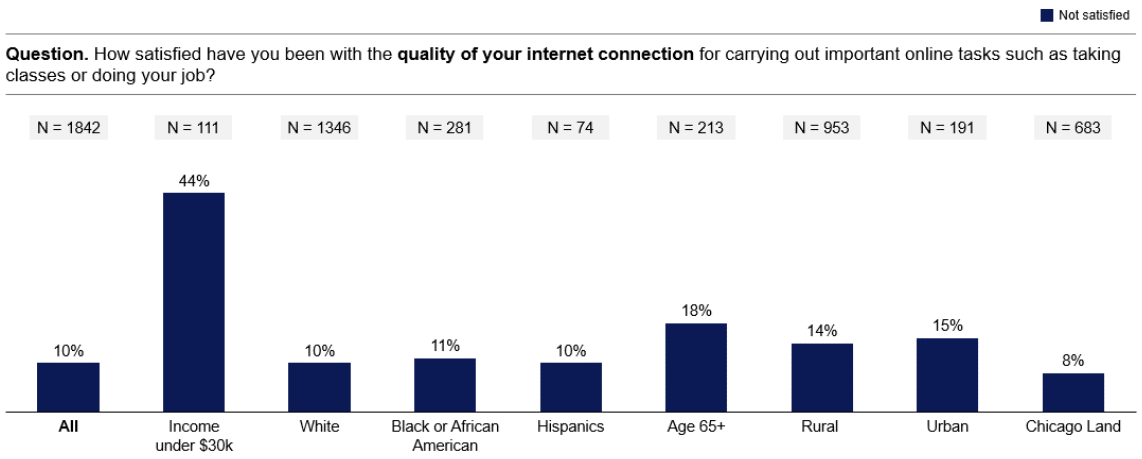
According to the Illinois-wide phone survey on internet use, 93% of Illinois residents have a home internet subscription, and 96% have a mobile data plan. The rate of internet subscription may be higher in the Illinois-wide survey than in ACS data, since the survey did not ask about fixed-broadband internet services (such as cable, fiber-optic, or DSL services only). Among covered populations, individuals with an annual household income under $30,000, aging individuals, and individuals in rural areas reported significantly lower rates of subscription than the average respondent. Subscription rates for individuals with an annual household income under $30,000 reported a 6% lower subscription rate in mobile data, and a 7% lower subscription rate in internet service at home. A detailed breakdown is shown in Figure 6 below.

Figure 6. Internet access-related questions asked and results in the Illinois Residential Phone Survey



When **asked how satisfied they have been with the quality of their internet connection** when it comes to completing important online tasks—such as taking classes—**10% of Illinois residents reported that they were not satisfied**, 17% reported being neither satisfied nor dissatisfied, 29% reported being somewhat satisfied, and 44% reported being very satisfied, according to the statewide internet use phone survey. The rate of dissatisfaction is highest among lower-income individuals (44% dissatisfied), followed by aging individuals (18% dissatisfied). See **Figure 7** below for details.

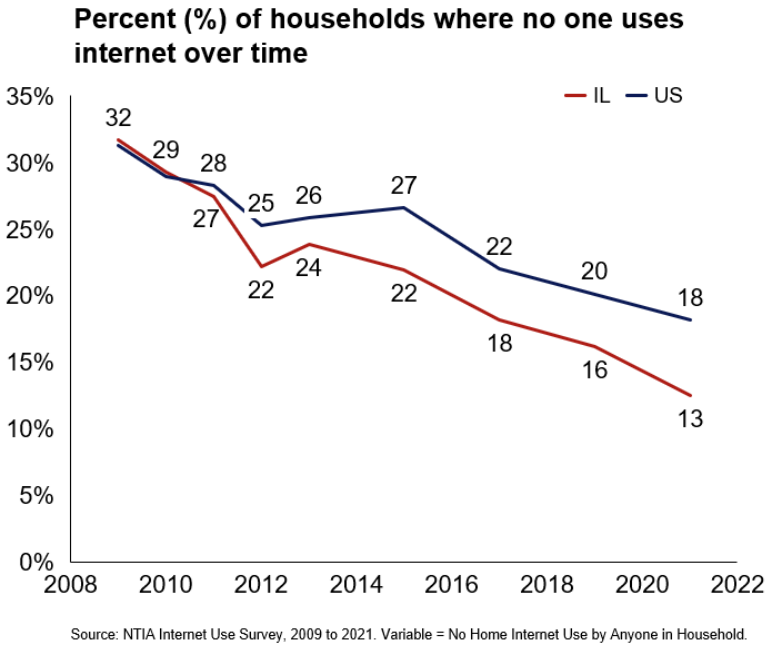
Figure 7. Internet access-related questions asked and results in the Illinois Residential Phone Survey



Internet use in Illinois over time

Data on internet use over time from the NTIA Internet Use Survey reveals that the share of households where no one uses the internet at home declined from 32% to 13% from 2009 to 2021 (Figure 8).[69] This rate of decline is faster than the average U.S. rate (from 32% to 18% in the same period).

Figure 8. Households where no one uses the internet at home in Illinois, with the entire U.S. divided by total households. [70]



Source: NTIA Internet Use Survey, 2009 to 2021. Variable = No Home Internet Use by Anyone in Household.

As shown in Figure 8, the share of households in Illinois where no one uses the internet at home declined from 32% to 13% from 2009 to 2021.

Broadband subscription-related needs and barriers

At multiple stakeholder engagement events and in regional and local government-led digital equity plans, affordability is cited as the primary barrier to adoption. See Section 3.2.2.2 for an analysis of broadband affordability.

In local government surveys, many residents reported dissatisfaction with the speed and reliability of offered services. Many local governments have conducted surveys to understand the quality of broadband services in the regions and localities they represent:

- 59% of respondents in Livingston County were not satisfied with the speed of their current service, and 56% were not satisfied with the reliability of their current service, according to 393 survey responses received by the Livingston County Broadband Team.[71]
- 72% of respondents in Kankakee County were not satisfied with their service's speed, and 70% were not satisfied with its reliability, according to the Kankakee County Broadband Plan.[72]
- The Jackson County Broadband Plan reports that 51% of Jackson County respondents are dissatisfied with the reliability of their local internet connection, and 54% are dissatisfied with their local internet speed.[73]
- In the Champaign County Internet Survey, the internet service index—which combines data on reliability, download and upload speeds, customer service, and the value for the money of the current internet service providers (ISPs) in Champaign—was determined to be 3.67 on a 1 to 5 scale.[74]
- The Village of Elsah's Accelerate Illinois Final Report states that 74% of the Village's residents are unhappy with their internet service. Sixty-seven percent of survey respondents reported that they are less than satisfied with the reliability of their service, and 63% are dissatisfied with the speed of their service.[75]
- According to the Knox County Broadband Plan, 65% of respondents said that they have experienced service interruptions in the past. Only 24% of respondents were "extremely satisfied" with their internet service's reliability. For 13% of respondents, unreliable service was the reason they had no internet service.[76]
- According to the Lake County Broadband and Digital Equity Action Plan, although Lake County has a broadband subscription rate of over 92%, adoption is not uniform, and certain pockets within the county have rates lower than 75%. Approximately 19,400 households (8%) do not have a broadband subscription of any kind. Approximately 47,600 households (19%) do not have a non-cellular broadband subscription such as cable, fiber, or DSL. Some 4% of households in Lake County only have access to the internet through a dial-up connection. Dial-up internet has slow speeds and hence limits households' use of the internet.[77]

- In the Peoria-Woodford Broadband Planning Report, 46% of Peoria respondents and 47% of Woodford respondents reported dissatisfaction with their internet service's speeds. Fifty percent of Peoria respondents and 36% of Woodford respondents reported dissatisfaction with their internet service's reliability.[78]

The same dissatisfaction with speed and reliability was echoed in numerous listening sessions conducted during the IBL's statewide listening tour. A participant in the Effingham listening session noted, *"I'd be waiting to download farming programs and critical reports because my kid's homework chokes our internet until 11:00 p.m."*[79]

Many residents and community organizations reported difficulties in dealing with internet service providers during the statewide listening tour. Community organizations said that ACP-participating ISPs can be particularly difficult to deal with, citing long wait times, a lack of customer service representatives, and unclear instructions/assistance from ISPs on outages, maintenance requests, and other issues.[80]

The City of Chicago's Digital Equity Plan highlights a need to support the customer experience in navigating broadband subscriptions. Many customers find that available support does not meet their accessibility needs. They find it hard to meet providers' restrictive policies and are sometimes confused by the various consumer options for internet service.[81]

Participants in the IBL's statewide listening tour also reported that installation appointments for residents in rural areas often last multiple hours due to difficulty in obtaining a connectivity signal. As a result, residents sometimes have to miss work or take time off. One participant in the East Central listening session noted,

"It took me two months to get someone from the internet service provider to come out. Someone told me over the phone that I would be covered, but it wasn't true."[82]

- A participant in the Effingham listening session

"We live in a neighborhood with many multi-unit houses, so density is an issue; there are lots of paying customers there, but I haven't heard of one family being able to use more than one device at home."[83]

- A participant living in a multi-dwelling unit building

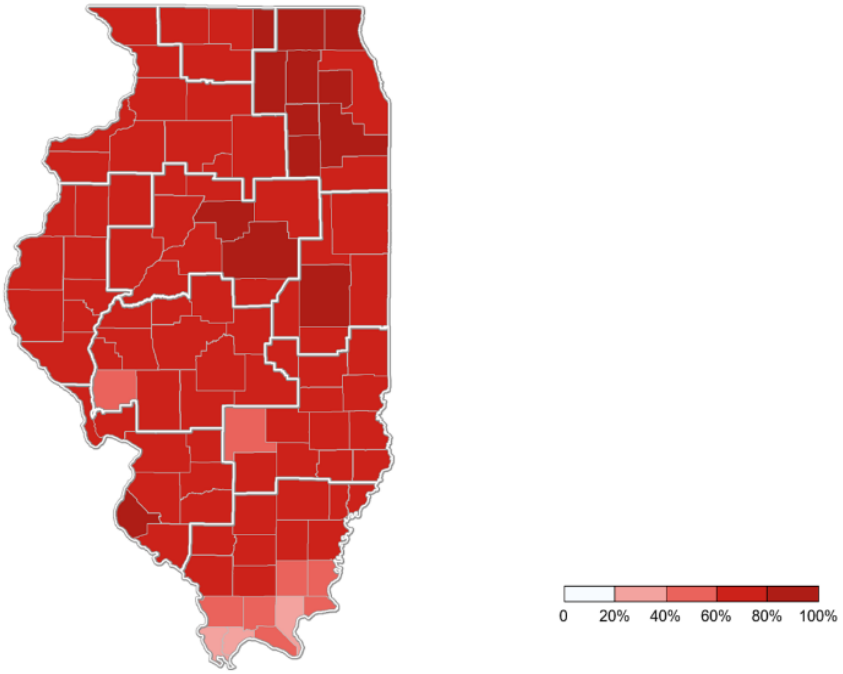
"It feels like towers in underserved communities are never working, and you never know when they are coming for maintenance. They will give you a date when you ask, but that date is rarely accurate, and there can be long periods of no internet on full blocks in neighborhoods."[84]

3.2.1.2. Increased households, businesses, and CAIs with access to internet-capable devices

Device access in households in Illinois

Based on the American Community Survey 2021 5-Year Estimates, 79% of Illinoisans, or 3.9 million, have access to either a desktop or laptop. The Southern region (64% have access), West Central region (70%), and the Southeast region (70%) have the lowest rates of access to a desktop or laptop. The Northeast region of Illinois leads the state in desktop or laptop access at rate of 82%. Among counties, the five with the lowest subscription rates are all in the Southern region: Alexander County (32% have access), Pulaski County (33%), Pope County (40%), Massac County (48%), and Gallatin County (50%).[85] See Figure 9 for more details.

Figure 9. Percentage of Illinois households with access to internet-enabled devices—either a desktop or computer—by county.



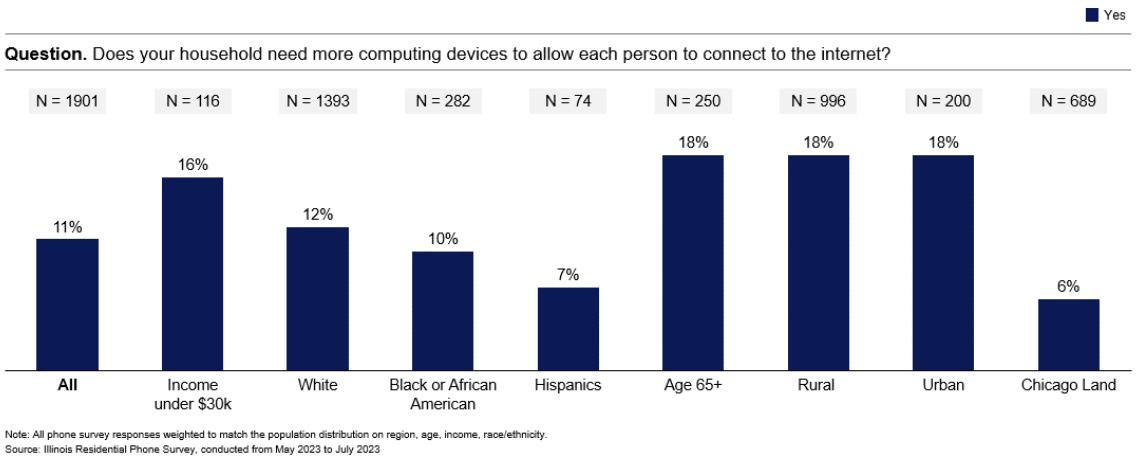
Illinois-wide phone survey results showed that 11% of all households need more computing devices—desktop, laptop, tablet, and smart phone—to allow each person to connect to the internet. Among the demographic groups and covered populations, individuals with annual household income under $30,000, individuals 65 and older, and respondents in both rural and urban areas outside the Chicago Land region are significantly more likely to report that they require additional devices to provide all household members with consistent access to the internet:

- Among residents with annual household incomes under $30,000 per year, 16% cite the need for more devices to allow each person to connect to the internet.

- Among residents ages 65 and over, 18% cite the need for more devices to allow each person to connect to the internet.
- Among residents living in rural or urban communities (compared to individuals in Chicagoland), 18% cite the need for more devices to allow each person to connect to the internet.

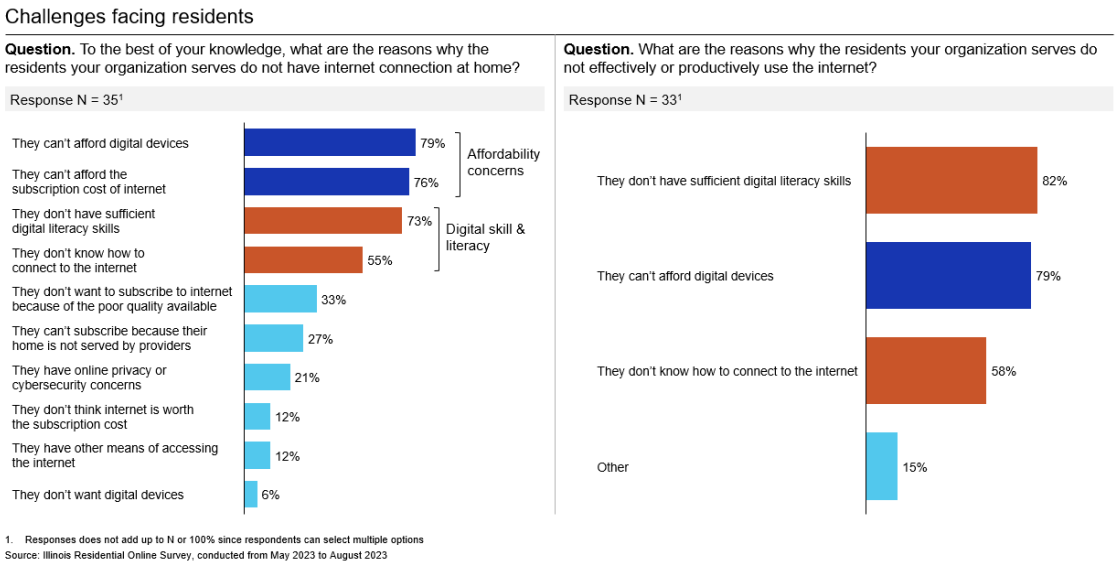
See details on these survey findings in Figure 10.

Figure 10. Device access-related questions asked and results in the Illinois Residential Phone Survey.



Illinois non-profits and community anchor institutions (CAIs) were also surveyed and cited **gaps in access to digital devices as the primary reason why the Illinoisans they serve do not use the internet at home.** Affordability is one of the main issues hindering at-home internet use, as 79% of responding organizations stated that the residents they serve cannot afford the digital devices needed to enable internet connection at home. See **Figure 11** for more details.

Figure 11. Causes of residents' low adoption rates cited in survey of Illinois non-profits and community anchor institutions.



Device access-related needs and barriers

Limited access to devices was mentioned throughout the listening tour and echoed in many regional digital equity reports. The issue is more severe for certain covered populations. In the City of Chicago Digital Equity Plan, the need for devices and inadequacy of devices were two recurring themes in community conversations. Twenty-nine percent of participants said that they needed devices, and 14% stated that their current devices did not meet their needs. In the Connect Lake County Digital Equity Strategy Plan, device access has a clear equity divide, as 98% of survey respondents with an annual income of over $50,000 had a personal computing device, while only 70% of households with an annual income of less than $25,000 per year had such a device.

Households with multiple members may need more than one device, as device access is especially challenging for households with multiple children. The Tazewell County ICC Planning Team issued a county-wide household survey to explore residents' current broadband needs. When asked about device access, 72% of respondents indicated that they had two to five devices including tablets, laptops, or smart phones that needed to connect to the internet.[86] The need for each member of a household to have a device was also brought up in listening sessions. At an East Central listening session, a participant observed, *"If the person does not have internet [service], they may not have a device beyond their smartphone. Programs may need to provide internet access coupled with improving device access, especially if you think about households with single mothers. If you have multiple children that need devices, you need reliable internet coverage and device access to ensure adoption."*[87] One participant in the Chicago listening session noted, "*Every single child needed a device that was reliable, and then they also had to train the parents on how to use it*."[88]

Device access is critical to students, and a failing computer could be the deciding factor between finishing school or dropping out. Students—especially those with low incomes, those pursuing a GED, and English-language learners—rely on their educational institutions for internet access and devices (such as school-provided Chromebooks and other laptops).[89]

"Students live on really thin margins. A failing computer could be the deciding factor of being able to finish the semester or dropping out.

- A listening session participant

Devices are expensive, and we can't expect them to be able to buy a new one immediately."[90] As mentioned above, some students get internet access and devices (e.g., Chromebooks, laptops) through their courses, but many community colleges do not have the resources to distribute devices to all eligible students.[91]

Beyond access to devices, in regional reports Illinois residents highlight a need for convenient means of repairing and maintaining devices. The Champaign County Broadband Infrastructure Assessment Report noted that computers are short-lived electronics that must be replaced every three or four years. This puts a cost burden on covered households that must pay for not only a device, but also its maintenance.[92] The Connect Lake County Digital Equity Strategy Plan found that 11% of its survey respondents could not replace their computer if it became unusable, and 31% expected that replacing their device would take six months. In short, 42% of Lake County households would not be able to use broadband for extended periods due to computer problems rather than internet connectivity issues. Moreover, 75% of low-income survey respondents were not able to use broadband for extended periods due to computer problems.[93]

Many residents find device-lending programs helpful, but also cite challenges in programs' capacity, terms of use for the devices, and the need for digital skills programs to supplement the devices:

- The limited capacity of lending programs is often mentioned by residents. Public libraries have an insufficient number of computers or have a set amount of time in which residents may use devices.[94] One participant in the Bloomington-Normal listening session said that the local library's device-lending program includes 13 hotspots and 11 Chromebooks, but all of these devices are typically checked out due to lack of access in the area. [95]
- Programs need to match the right devices to the population that needs them. One participant in the City of Chicago Listening Session noted, "*Some people need a cell phone or tablet because they're mobile in the day with their job, while others need a desktop or laptop because they might be a student. To have continued use and*

learning, you have to provide the device that meets their needs; otherwise, they won't be used." [96]

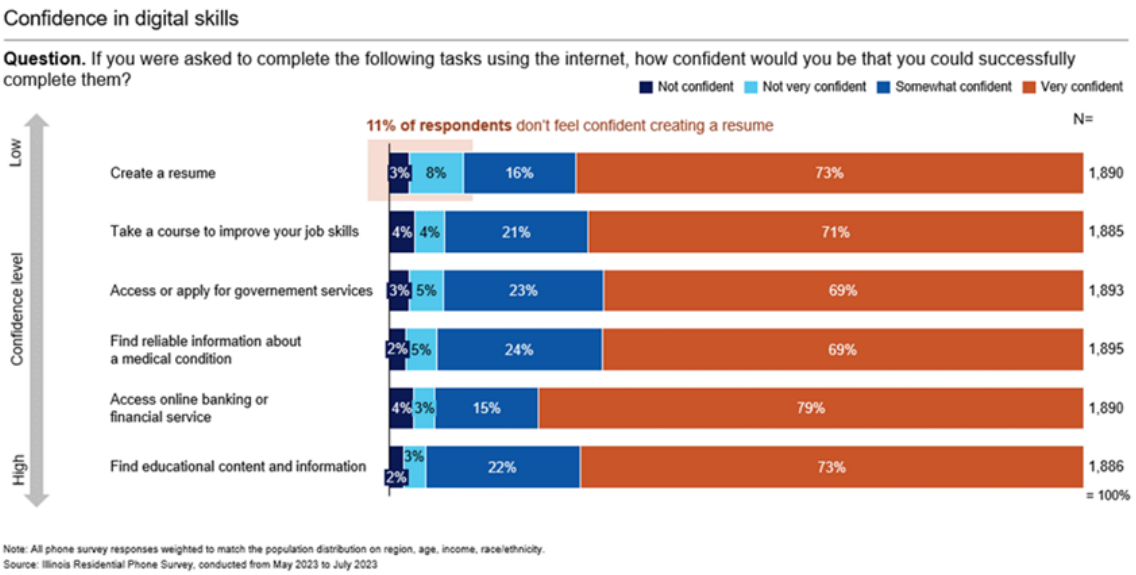
- **Data collection requirements from local and state-funded programs can limit community organizations' ability to serve hard-to-reach populations.** One community organization that participates in device-access and literacy programs in Chicago noted, "*We have children that are homeless who come into our program for help, but they don't have an address to put [in]. We need to be mindful in what data we're pulling*."[97]
- **Lending programs should be combined with the digital literacy training needed.** One representative from scaleLIT suggested that community organizations offering digital literacy programs connect with organizations providing device-lending programs to ensure that those receiving devices can access available training and resources.[98] The **City of Chicago Digital Equity Plan** offers four recommendations for getting devices into the hands of residents, two of which are paired with digital skill-building programming.[99]
- **Privacy concerns can make residents reluctant to use loaner devices**. A participant who receives internet service and devices from the Chicago Public Schools program noted that certain constraints—including limited hours of service and a lack of privacy—significantly inhibited the participant from conducting certain activities (e.g., online banking, viewing health records) via the library's internet service.[100]

3.2.1.3. Improved digital literacy

Current state of digital literacy in Illinois

Based on the Illinois-wide internet use phone survey, at least 11% of Illinois residents (or 1.3 million residents in 0.54 million households) have low digital literacy skills, which is defined as not feeling confident about completing at least one of the surveyed basic tasks via the internet.[101] Of all the skills surveyed, residents feel least confident about creating a resumé (11% not confident) and taking a course to improve digital literacy skills (8% not confident). See **Figure 12** for more details.

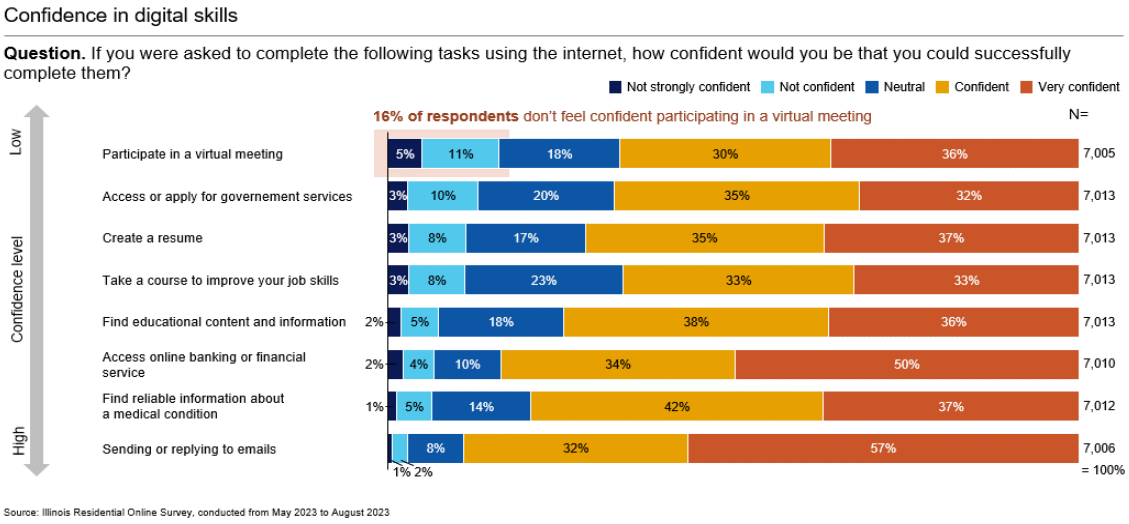
Figure 12. Digital literacy-related questions asked and results from the Illinois Residential Phone Survey.



Similar findings are observed in the Illinois-wide internet use online survey.

Approximately 3 to 16% of respondents reported not feeling confident about completing basic tasks on the internet. Survey respondents feel least confident about participating in a virtual meeting (16% do not feel confident), accessing or applying for government services (13%), creating a resumé (11%), and taking a course to improve job skills (11%). See Figure 13 below for more details.

Figure 13. Digital literacy-related questions asked and results from the Illinois Residential Internet Survey.



Among demographic groups and covered populations, individuals in covered, low-income households reported the lowest level of digital literacy. Two times more individuals whose annual household income is below $30,000 reported feeling not confident about almost all tasks surveyed. Individuals whose annual household income is between $30,000 and $50,000 per year also reported feeling less confident about most tasks. Hispanic respondents reported feeling less confident about using the internet to access information (e.g., finding reliable information about a health or medical condition and accessing online banking or financial services.) See **Figure 14** for more details.

Figure 14. Digital literacy-related questions asked and results from the Illinois Residential Internet Survey.

Confidence in digital skills: by demographics

Question. If you were asked to complete the following tasks using the internet, how confident would you be that you could successfully complete them?
Heat map showing % of respondents that are not confident or not very confident on each task

	All	Income <30k	Income 30k-50k	White	African American	Hispanic	Age 45-54	Age 55-64	Age 65+
	N=7013	N=514	N=1773	N=818	N=4429	N=993	N=5568	N=586	N=285
Sending or replying to email communication	3%	5%	3%	2%	3%	4%	2%	3%	3%
Find reliable information about a health or medical condition	6%	12%	8%	6%	6%	10%	5%	7%	6%
Access online banking or financial services	7%	11%	9%	6%	6%	9%	4%	6%	7%
Find educational content and information	7%	13%	10%	7%	7%	7%	6%	8%	7%
Create a resume	11%	22%	15%	11%	11%	13%	6%	11%	12%
Take a course or training materials to improve job skills	11%	19%	14%	11%	7%	10%	8%	12%	11%
Access or apply government services	13%	21%	18%	12%	11%	13%	11%	14%	13%
Participating in a virtual meeting	16%	28%	21%	16%	10%	15%	12%	15%	17%

2%-5% higher all respondent
>5% higher th respondents

Digital skills that are especially important for individuals to skil up and obtain better jobs

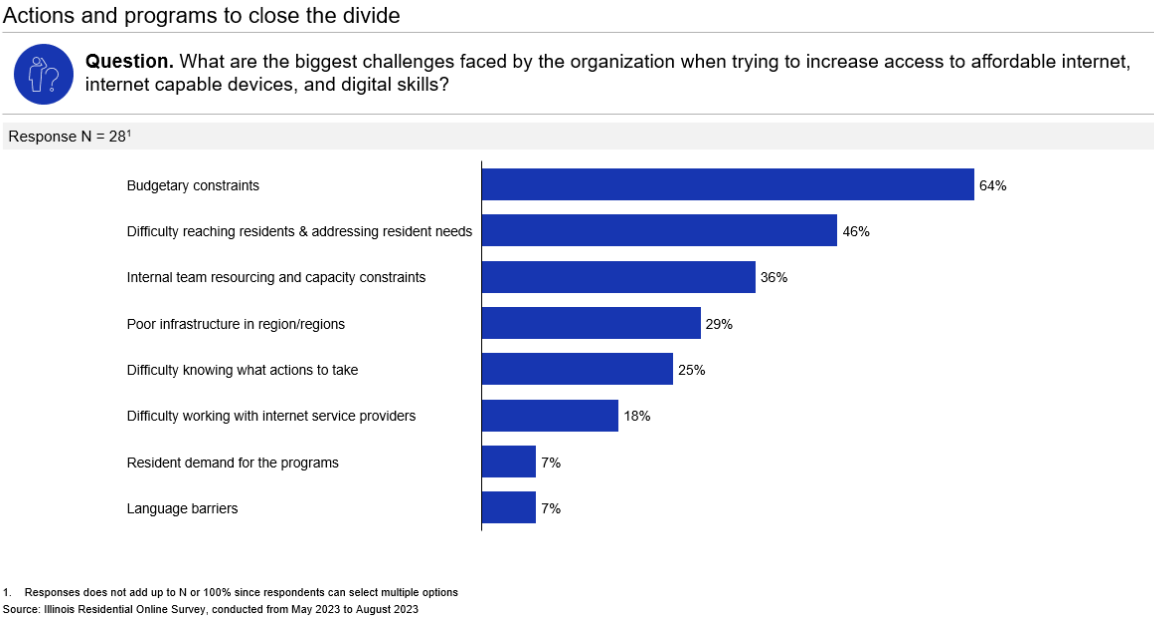
Local organizations and local governments were asked to share insights on the current state of digital literacy in their communities. When asked why the residents they serve do not have internet service at home, 73% of responding local organizations cited a lack of sufficient digital skills as a factor. When asked why the residents they serve do not effectively or productively use the internet, 82% of responding local organizations cited a lack of sufficient digital skills as a factor. See **Figure 14** Digital literacy-related questions asked and results from the Illinois Internet Survey above for more details.

Local organizations and local governments across the state also were asked to share insights about the current status of residents' confidence in accessing and applying for government services. When asked, 13% of residents felt confident in their ability to access or apply for government public resources and services. See **Figure 14**.

Digital literacy-related needs and barriers

The statewide listening tour and the multiple regional and local digital equity plans developed by regional and local governments provide further insights into the digital literacy-related needs and barriers faced by residents in different regions of the state. These insights are synthesized below.

Figure 15. Challenges faced by non-profits and community anchor institutions according to the statewide survey.



1. Responses does not add up to N or 100% since respondents can select multiple options
Source: Illinois Residential Online Survey, conducted from May 2023 to August 2023

Existing digital literacy programs are frequently constrained by limitations in staff capacity and budget. As shown in Figure 15, when asked about the challenges they face in achieving their respective missions, the non-profits and CAIs surveyed said that budgetary constraint is the most common challenge they, as 64% of participating organizations face this challenge. Internal team resourcing and capacity constraint is the third most challenge faced (cited by 36% of the participating organizations.)

The accessibility of digital literacy programs is a barrier to increasing digital literacy skills for all. Stakeholder engagement sessions with non-profits revealed that programing needs to be available in communities where residents live and to be: (1) accessible by public transportation, (2) provided in multiple languages, (3) scheduled at feasible hours for working families, and (4) offered with child-care options. An attendee at the City of Chicago listening session observed, "*Classes, call centers, tech support should be in different languages, including Spanish, but also Polish and others. The languages offered need to meet community needs; right now, they don't.*"[102]

Anxiety associated with digital skill-building hinders Illinoisans from acquiring digital skills. A participant in the City of Chicago listening session mentioned that, during the pandemic, such skills became essential, but many residents were left behind. These residents now feel anxious when they consider further technological advancement. To improve digital literacy, practitioners may have to address these negative feelings, perhaps by developing curricula that cover the full range of internet-related activities, including such basics as how to turn on a personal computer or device.[103] As another participant in the City of Chicago listening session commented, *"There is importance to addressing the shame and embarrassment that goes along with not knowing these things. Working at a mental health facility, there is a lot of shame with saying you struggle with anxiety or depression. But if you aren't able to say this to others, you may not be able to access the services you need. The same goes for digital literacy."*[104]

Aging individuals would benefit from targeted digital literacy courses to improve digital skills. An attendee at the City or Arora listening session observed, "*My parents have trouble navigating online services. My mom cannot do online banking on her own because she cannot access her account, or she forgets her passwords. My parents also do not understand the importance of cybersecurity. I have to tell them they cannot use the same password for every service. Internet companies should be responsible for providing some type of basic cybersecurity protection, just like electric companies make it hard to touch hot wires.*"[105] Another attendee at the North Central listening session commented, "*Some parents feel ashamed that they do not already know how to use the internet, but, like reading, it is something we all had to learn.*"[106]

Training needs to go beyond simply using the internet to include essential trouble-shooting skills related to internet access. [107]Another attendee at the virtual webinar observed, "*We're fortunate to provide hotspots to some of our students. But when they had issues, they didn't have the basic knowledge (e.g., digital skills) to correct and troubleshoot.*"[108] An attendee at a North Central Region listening session who represented a local organization commented, "*When we give away computers, we hear from people that they had to have their relatives come help them set the device up. We do not have anyone to go to their houses to help them set up and connect the device, which is a barrier*."[109] It has become evident that digital literacy barriers have impact even before devices are turned on; one attendee at the Northeast listening session observed that, even when devices are provided through free programs—such as the one run by Chicago Public Schools—"*a lot of people didn't know how to connect to their modems, or update the devices, or troubleshoot when they opened the wrong email, got a virus. A lot of the devices eventually became useless.*"[110]

"If you don't understand how to run speed tests or understand the aspects of the internet—like download and upload speeds—you can't advocate for yourself to ISPs or communicate what issues you have with your service."

- City of Chicago listening session attendee

The inability to discern and navigate potential scams inhibits residents—especially elderly individuals—from using digital platforms to complete daily tasks.[111] Those who are not deterred by security concerns are often unequipped to navigate potential scams. An attendee at the Central listening session noted that not only the elderly but also students are susceptible to security issues. After providing devices to students, the participant said, "We

found that support became a central challenge… iOS updates, security updates, how to evaluate phishing scams—all are a huge challenge for many families."[112]

Residents of all ages would benefit from advanced digital skills training, particularly as it relates to cybersecurity. According to listening session attendees, community-based organizations have observed that younger age groups—especially in higher education—benefit from more advanced digital skills training, particularly if it addresses cybersecurity concerns or distinguishing between credible and non-credible sources of information.[113] As the role of the internet and technologies in healthcare, education, farming, and entertainment continues to expand, listening session participants noted, tailored training can enable community members to build upon fundamental digital skills to meet increasingly complex technology needs.[114]

3.2.1.4. Increased emphasis on multi-sector strategies to broadband adoption

During the statewide listening tour and in regional and local digital equity plans, the value of internet adoption was often noted, especially in education and healthcare. Several mentioned internet adoption as an enabler of multiple use cases in agriculture. The broadband needs related to these use cases and strategies are described below.

Broadband-related needs and barriers in agriculture

The successful implementation and economic benefits of multiple agriculture use cases depend on access to high-speed internet. Illinois State University projects that robust broadband infrastructure could increase average yields by 4% for corn and soybean acres in five participating counties participating in *Accelerate Illinois: Broadband Breakthrough*: Edgar, Hancock, McLean, Ogle, and Schuyler. The increased crop yield could net a return of over $42 million per year. This impact could be extended throughout the state through comprehensive broadband deployment.[115] Some counties participating in *Accelerate Illinois: Broadband Breakthrough* currently have difficulty accessing the internet; for example, in Schuyler County, 66% of the population does not have access to adequate

internet service, and only 38% have access to fiber-optic internet service.[116] **Studies have found broadband expansion to positively correlate to farm productivity, as mentioned above, as well as broader economic gains (e.g., employment growth).**[117, 118] The Illinois Farm Bureau (IFB)—whose voting membership represents three of every four farmers in the state—has stated publicly that statewide solutions are needed to encourage broadband adoption by farmers and rural communities.[119] The IFB maintains that its members want better, faster, more reliable, and more affordable broadband service, which improves economic development, education, and healthcare in rural areas.

Strong internet connectivity is needed to support evolving farm operations in rural communities. According to the Champaign County Broadband Infrastructure Engineering Assessment Report, interviews with farmers revealed that the industry uses smart machinery—mostly John Deere equipment—that relies on broadband. The farmers interviewed use fixed-wireless broadband and expressed a need for upgraded technology, as current DSL and fixed-wireless services are too slow.[120] In Broadband for All – Plan for Ogle, Lee, Boone, and Putnam Counties, strong internet connectivity was reported as an urgent need in rural communities to support evolving farm operations. Lack of robust broadband severely hampers enhanced innovations on farms.[121] Investments in broadband infrastructure have reaped a significant return for Illinois farms.

In addition to broadband infrastructure, farmers need devices to support their farm operations. A participant in the East Central listening session commented, "*From a business perspective, farmers are doing pretty well with utilizing applications on their smartphones to conduct their business operations, but it is so much easier on a laptop or computer interface.*"[122]

Providers must work with farmers and landowners on broadband installation projects to protect their property rights. [123] A Farm Bureau representative who attended the listening session in Southwest Illinois contended that internet providers should check in with farmers and landowners during broadband infrastructure installations to make sure that private property rights are not infringed upon.[124] In the East Central listening session, a

resident mentioned that residents' skepticism about the land easement process is warranted due to fiber companies' previous intrusions onto private property during service installations. The resident said that county-wide oversight in the funding distribution plan could help to ensure cohesiveness and coordination in installation efforts.[125]

The IOB received a public comment stating that certain cybersecurity programs may also be important for farmers when implementing new broadband infrastructure. The commenter noted that new agriculture technologies (e.g., autonomous vehicle technology) could present challenges to data privacy and protection, as they will transmit sensitive data that can be used to affect market price.[126]

Broadband-related needs and barriers in education

According to the **2020 Illinois School District Technology Survey, unreliable home internet access and lack of access to devices directly affect remote and hybrid learning by disrupting the continuity of learning and preventing access to digital resources**. Survey results show that 99.3% of school districts said that students face obstacles to home connectivity, highlighting the need for any adoption solutions to involve the education sector. The main three types of barriers reported were (1) unavailable internet access (reported by 25% of districts), (2) monthly or ongoing internet expenses (32% of districts), and (3) limited bandwidth (23% of districts).

Unequal access to the internet and devices exacerbates the educational divide among covered populations. One participant in the Central region listening session commented, "*There are a number of low-income college, GED, and English language learning students who have said that they sign up to take a class every single term so that they can check out a school Chromebook or laptop that they can use for home, for work, or for other uses. Many community and four-year colleges have trouble supplying and servicing enough devices to meet all their students' needs*."[127] In an East Central listening session, a participant noted that applications for financial scholarships at community colleges are frequently online, making them inaccessible to some students. The same participant had

a friend who had to visit a restaurant parking lot daily to complete a master's program due to lack of internet service at home.[128]

Repeatedly during listening sessions, residents shared experiences of having to travel to parking lots to complete homework and coursework at the height of the COVID-19 pandemic. During COVID-19, some schools in southern Illinois have tried to turn buses into static connectivity centers, a Southeast listening session participant said, but the effort has seen little success due to reliability issues.[129] To obtain the internet access needed for their schoolwork, many students had to travel to public parking lots with Wi-Fi service, which raises safety concerns. [130]

Broadband-related needs and barriers in healthcare

Healthcare services are becoming increasingly digital, but without broadband access residents cannot take advantage of them. An East Central listening session participant commented, "*Many things are digitally based, such as virtual healthcare. Many rural residents are unable to access these services.*"[131] A Bond County resident shared with the Bond County Broadband Initiative that they had a parent with diabetic equipment that depended on internet connectivity—which their unreliable internet service made challenging.[132] In the **Knox County Broadband Plan**, a resident shared, "*We had to up the amount of data due to the amount of devices we have, and it slows down the speed and reliability greatly on a daily basis. We have medical devices hooked to it as well, and I don't like that it's not reliable.*"[133]

Reliable internet access is essential to the operation of hospitals. Hospitals need a reliable and low-latency connection for telehealth visits and to outsource specialties, remotely diagnose and treat patients, and promote the use of digital health devices, all of which have become increasingly important since the advent of COVID-19. In Southwest Illinois, a listening session participant noted that even hospital systems in the region pay two internet providers to ensure access when one provider's service goes out.[134]

3.2.2. Broadband affordability

3.2.2.1. Affordable Connectivity Program: Increased financial assistance for low-income consumers

Status of the Affordable Connectivity Program (ACP)

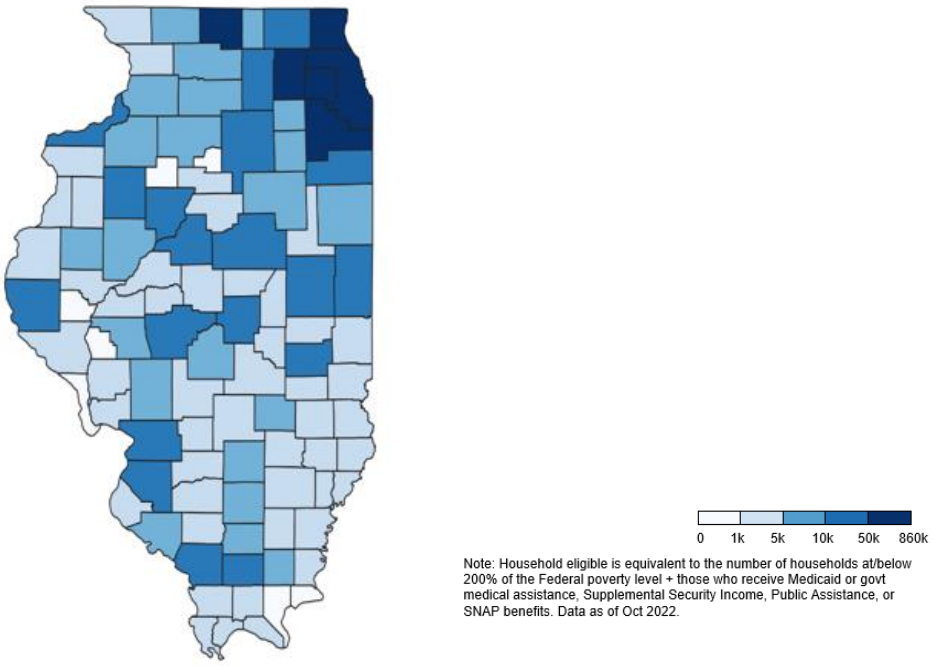
As of February 2024, over 23 million households were enrolled and receiving the ACP monthly benefit.[135] Without additional funding from Congress, the $14.2 billion allotted through the Bipartisan Infrastructure Law is projected to run out in April 2024 (estimated date, subject to change).[136] As a result, the FCC has begun taking steps to wind down the ACP and is no longer processing applications and enrollments as of February 8, 2024.[137] Insights regarding the households eligible for and enrolled in ACP indicate the need for affordable broadband and offer information that can be applied to future programs.

ACP-eligible population in Illinois

Based on the methodology a professor at USC Annenberg applied in estimating participation in the Affordable Connectivity Program (ACP), **1.9 million eligible households in Illinois (49% of all households in the state) could enroll in ACP.** [138,139] Counties with the largest ACP-eligible population are concentrated in the Northeast region of the state; the top five include: Cook County (863,000 eligible), DuPage County (77,000 eligible), Lake County (72,000 eligible), Will County (58,000 eligible), and Winnebago County (57,000 eligible). See **Figure 16** below for information on all counties.

Southern regions of the state have a higher share of population that is eligible for ACP. The top five counties in the state with the highest share of ACP-eligible population—Alexander County (69% eligible), Jackson County (63% eligible), Pulaski County (58% eligible), White County (58% eligible), and Saline County (57% eligible)—are all located in Illinois's Southern region.

Figure 16. Number of households eligible for ACP by county.



Current ACP adoption in Illinois

As of September 1, 2023, 621,000 households, or 33% of eligible Illinois households, were enrolled in ACP, ranking Illinois 23rd in ACP enrollment among all 50 states. [140,141,142] The enrollment rate is highest in the Southwestern region of the state (with 55% of the eligible population enrolled), followed by the Northeast region (33%) and Central region (32%). The enrollment rate is lowest in the West Central region (with 23% of the eligible population enrolled), followed by the Northwest region (25%) and the East Central region (26%). See the full breakdown by region in Table 1 below.

Table 1. ACP eligibility and enrollment rate by region. Data as of September 2023.[143]

Region	# of households	# of eligible households	% households eligible	# of households enrolled	% eligible households enrolled
Northeast	3,320,187	1,198,874	36%	393,412	33%
Southwestern	268,583	101,790	38%	55,904	55%
North Central	259,549	104,322	40%	29,341	28%
Central	219,765	92,344	42%	29,682	32%
Northwest	201,108	83,919	42%	20,845	25%
Northern Stateline	174,161	81,589	47%	26,154	32%
Southern	148,152	78,179	53%	24,567	31%
East Central	142,814	70,537	49%	18,314	26%
Southeastern	109,612	50,500	46%	14,107	28%
West Central	86,324	40,115	46%	9,335	23%
TOTAL	4,930,255	1,902,169	39%	621,661	33%

When the size of the eligible population and the enrollment rate are combined, **roughly 1.3 million households in Illinois are eligible but have not enrolled in ACP.** Most of this population is concentrated in the Northeast region (with 805,000 households eligible but not enrolled), followed by the North Central region (74,000) and Northwest region (63,000). At the county level, Cook County has the highest number of eligible-but-not-enrolled population (554,000), followed by DuPage County (61,000), Lake County (54,000), Kane County (44,000), Will County (40,000), Winnebago County (37,000), and Champaign County (32,000).[144,145]

Current ACP availability in Illinois

To assess the availability of ACP programs, the state sampled the top 10 statewide and top 10 regional providers to see if they offer ACP on their websites. The sampling shows that only three of the 20 providers do not offer ACP on their websites. These three providers combined have a market share of less than 1%, suggesting that the low

adoption rate of ACP is not caused by lack of provider offerings.[146] See **Figure 17** below for more details.

Figure 17. Breakdown showing whether ACP is offered by one of the top-10 providers, whether statewide or regional, in Illinois.[147]

Top state-wide providers (serving five or more regions)

Provider	Share[1]	ACP	Price[2]
T-Mobile US	26.1%	✓	$50
Xfinity	18.0%	✓	$30
AT&T Inc	16.4%	✓	$60 – 70
VERIZON	9.4%	✓	$50
RCN	6.1%	✓	$30
US Cellular	5.8%	✓	N/A
FRONTIER	3.7%	✓	$55 – 60
Mediacom	2.5%	✓	$30 – 50
Charter Communications Inc	1.7%	✓	$30 – 50
Rise Broadband	1.0%	✓	$80
Sparklight	0.8%	✓	$65
W A T C H TV	0.7%	✓	$120

Top regional providers (serving four or fewer regions)

Provider	Share[1]	ACP	Price[2]
Metronet Holdings	2.2%	✓	$40
i3 Broadband	0.7%	✓	$40
Royell Communications, Inc	0.4%	✗	$55
Cass Cable TV Inc	0.3%	✓	$75
Surf Internet	0.3%	✓	$55
IllinoisNet.com	0.2%	✗	$89
Harrisonville Telephone Company	0.2%	✓	N/A
Adams TelSystems Inc.	0.2%	✓	$75
Wabash Communications	0.2%	✓	$76
Mid Century Telephone Cooperative	0.2%	✓	N/A
DNA Communications	0.1%	✗	$100
Campus Communications Group	0.1%	✓	$70

1. Share defined as number of locations provider offers internet divided by all provider offerings in the state.
2. Full price for 100Mbps based on provider website checks. N/A indicates either provider does not offer 100Mbps or full price is not available on website. Range indicates different prices are offered in different locations checked.

Source: Provider share and region categorization based on FCC Data Map, March 2023. Price and ACP categorization based on provider website check in April 2023.

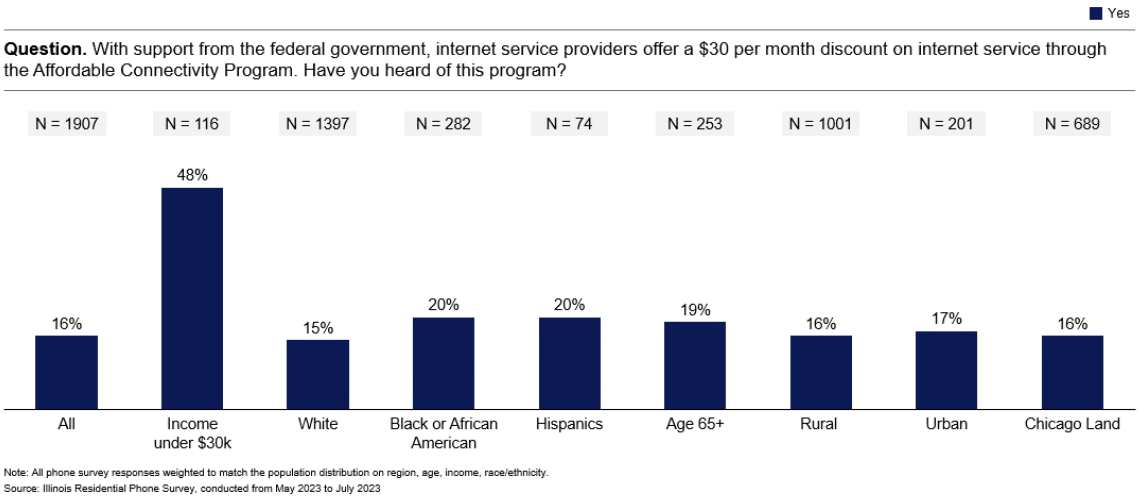
ACP awareness

In the statewide resident phone survey, respondents were asked if they had heard of the ACP program. Only 16% of respondents answered that they had. Awareness is higher among low-income individuals (48%), suggesting that prior outreach efforts may have succeeded in reaching the target population of ACP, but there is still room for improvement.

Of the 16% who are aware of the ACP program in the statewide survey, 33% indicated that they have signed up for the ACP program, 45% indicated that they did not meet the qualification guidelines, 10% indicated that they were unable to show that they qualify, 7% noted that they already receive free internet services, 4% stated that it is too difficult to sign up, and the remaining 1% said that they do not need internet services. The survey data highlights the importance of programs that increase awareness of ACP among

targeted demographic groups, as well as programs that assist individuals in signing up for ACP. In both the phone and online surveys, libraries, schools, and non-profits are rated as the most trustworthy source of information about benefit programs. See details of the survey data in **Figure 18** below.

Figure 18. ACP-related questions asked and results from the Illinois Residential Phone Survey.

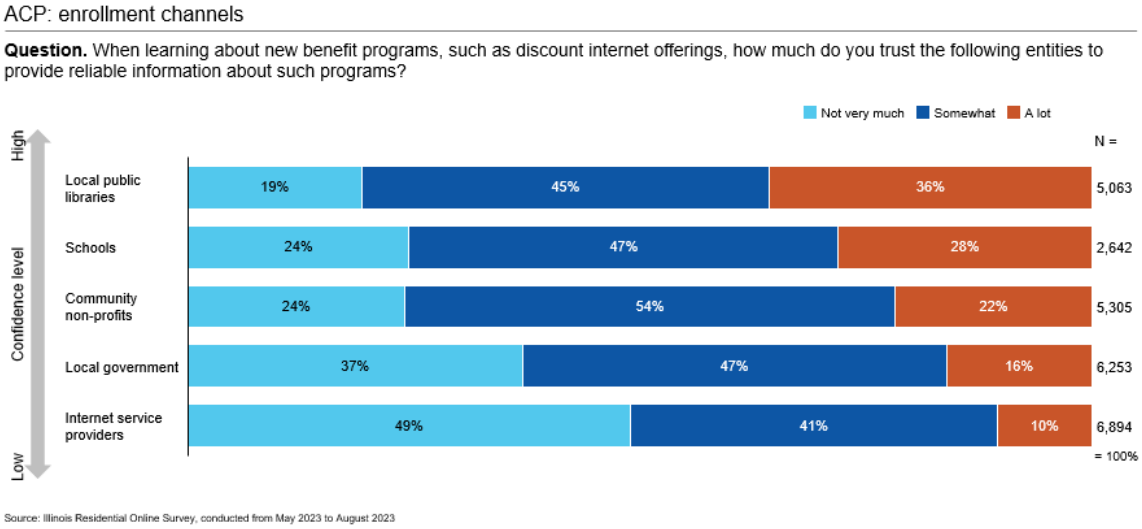


Similar themes on ACP awareness emerged in regional and state plans for digital equity and/or broadband and in the listening sessions. About 77% of survey respondents were not aware of any internet service subsidy program in Whiteside County, according to the Whiteside County Broadband Plan.[148] During listening sessions, the state observed that few participants had heard of the ACP. At one of the sessions in Southwest Illinois, only three participants indicated previous knowledge of the program.[149] One attendee at the Central region listening session observed, "*Providers need to share more. They have programs, which provide smaller devices and cheaper forms of service, but they don't do a good job of reaching the entire community. Advertising is often just for existing customers*."[150]

Other needs and barriers in ACP enrollment

The statewide survey results showed that many residents feel mistrust and hesitancy toward government-sponsored subsidies, which inhibits ACP enrollment and subsequent broadband adoption. In the statewide resident survey, local governments are rated as the least trustworthy source of information about benefit programs. (See **Figure 19** below for more details.) Similar sentiments were expressed in multiple listening sessions in the East Central, Northeast, and West Central regions. One participant in the City of Chicago listening session commented, "*Lots of people don't sign up because they are concerned about revealing their immigration status, even though that won't happen with us. I have to reassure them many times or show them that another family got internet access without any problems."*[151] The same issue was brought up by another participant in the same listening session: "*People don't trust programs from the government—and they have reasons not to. People need to know exactly what they will be getting, and what for. The messaging being clear and direct is a first place to start.*" [152]

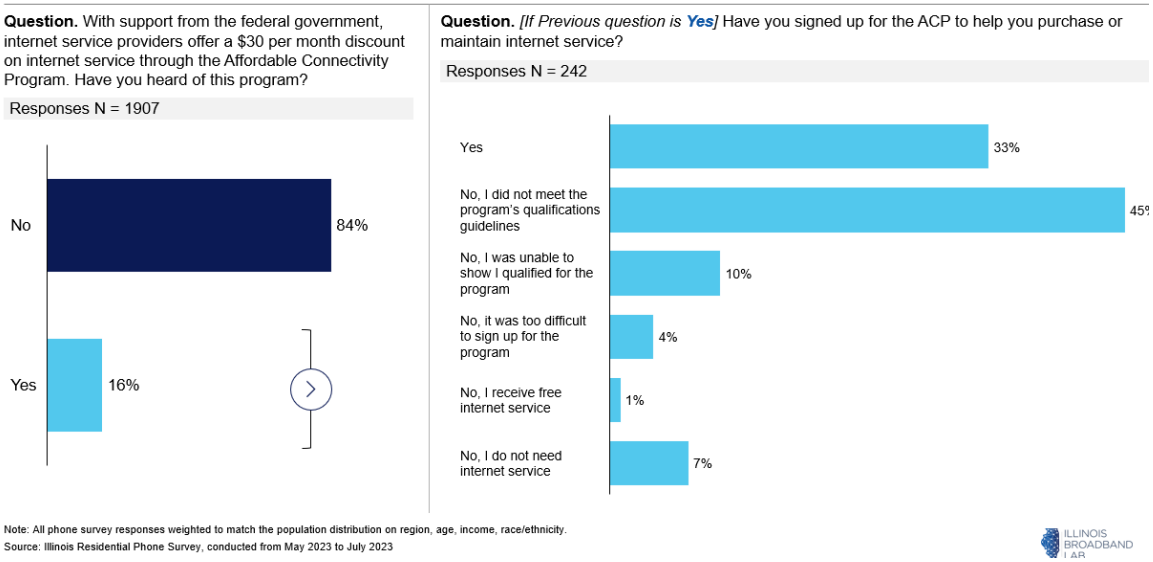
Figure 19. ACP-related questions asked and results from the Illinois Residential Web Survey.



Lack of robust and accessible communication emerged as another reason for low ACP adoption. Community organizations cited a need for more resources (e.g., staff, print materials) that account for language, generational, and cultural differences in communities. Listening session attendees reiterated that ACP programs should include robust, accessible customer support functions. ACP participants reported receiving unclear, inconsistent information about internet plans, subsidies, equipment needs, and customer support services. Residents emphasized that many internet services supported by ACP subsidies go unused because information about accessible support is not clearly communicated.[153] A City of Chicago resident noted that the language used in ACP outreach might alienate residents: "*When you start a conversation with, 'Hey, you need this,' they can shut down because the message might seem patronizing.*"[154]

Based on survey results in the **Connect Lake County Digital Equity Plan, residents who need ACP the most may not have the necessary documentation or digital skills to enroll in ACP**. The plan points out that residents without Social Security numbers typically require four to six hours of support per enrollment. Likewise, ACP enrollment requires applicants to upload their documents and manage emails—digital literacy skills that not all residents have.[155] Residents experienced difficulties in showing qualifications and signing up for ACP. In the statewide resident survey, 10% of respondents who have heard about ACP were unable to show qualifications for the program, and another 4% indicated that it was too difficult to sign up. (See **Figure 20** below for more details.)

Figure 20. ACP-related questions asked and results from the Illinois Residential Web Survey



Subsidies from ACP may not go far in areas where the average price of internet service is much higher. As a Northeast listening session attendee noted, the subsidy may help people connect to the internet, but "*ACP does not go very far if your internet bill is $300 per month*."[156] North Central participants reiterated this position, noting that families with multiple children who need multiple devices usually require plans that will cost more than the $30 ACP subsidy. Even with PCs for People programs, an internet subscription may still be out of reach for these families.[157]

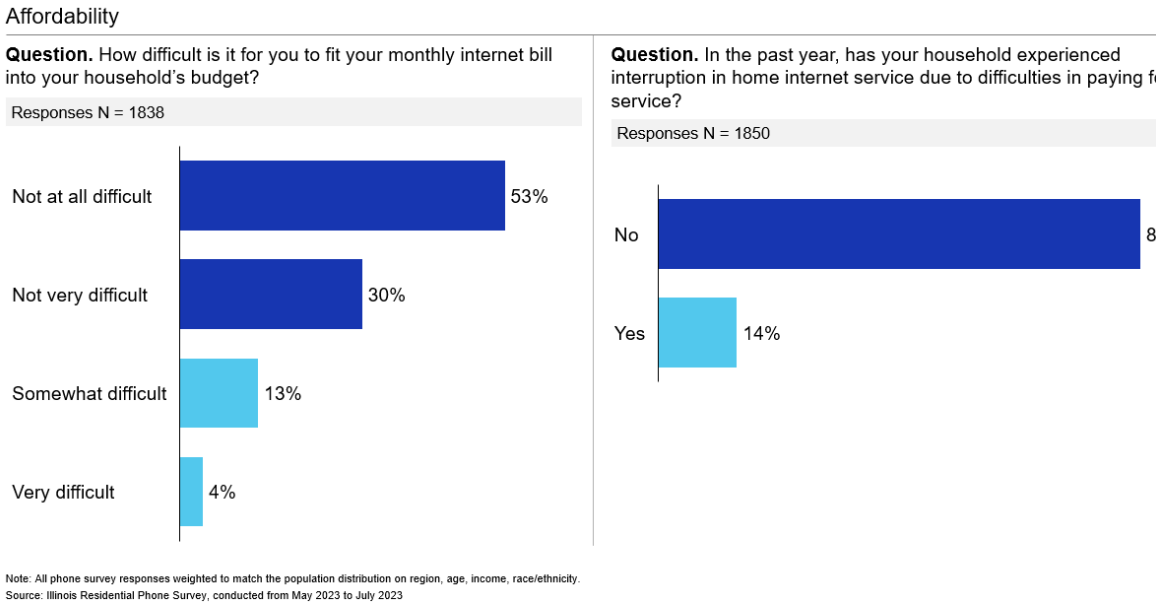
3.2.2.2. Increased financial assistance for low-income consumers

Need of financial assistance

In the statewide resident phone survey, 17% of respondents said they found it difficult to afford their internet bill, and 14% experienced disrupted service because they had

difficulty paying. About 29% were categorized as “subscription-vulnerable” due to affordability concerns and/or difficulties in paying. (See details in **Figure 21**.)

Figure 21. Affordability-related questions asked and results from the Illinois Residential Phone Survey.



The need for financial assistance is much higher for low-income individuals. Individuals with an annual household income under $30,000 have a much harder time paying for internet services; 67% of surveyed individuals in this group find it difficult to pay for service, versus 17% of the general population. They are 15% more likely to experience service interruption due to difficulty in paying, and 40% more likely to be subscription vulnerable. (See **Figure 22**, **Figure 23**, and **Figure 24** for a survey breakdown by covered population.)

Figure 22. Affordability-related questions asked and results from the Illinois Residential Phone Survey.

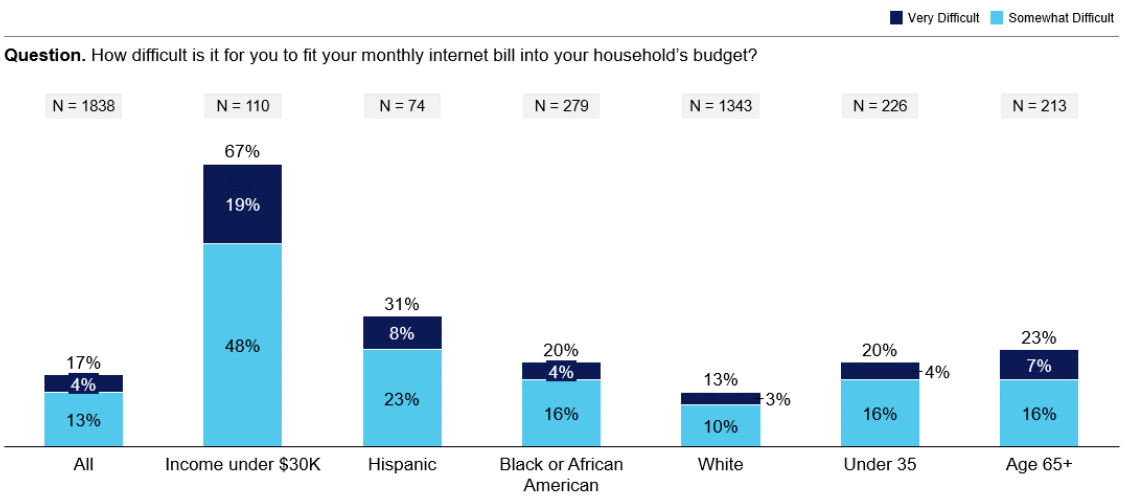


Figure 23. Affordability-related questions asked and results from the Illinois Residential Phone Survey.

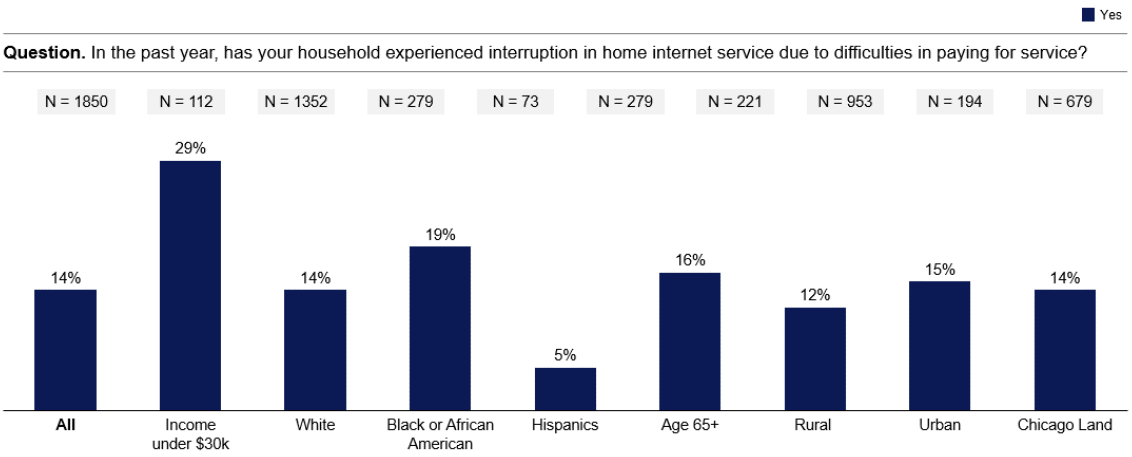
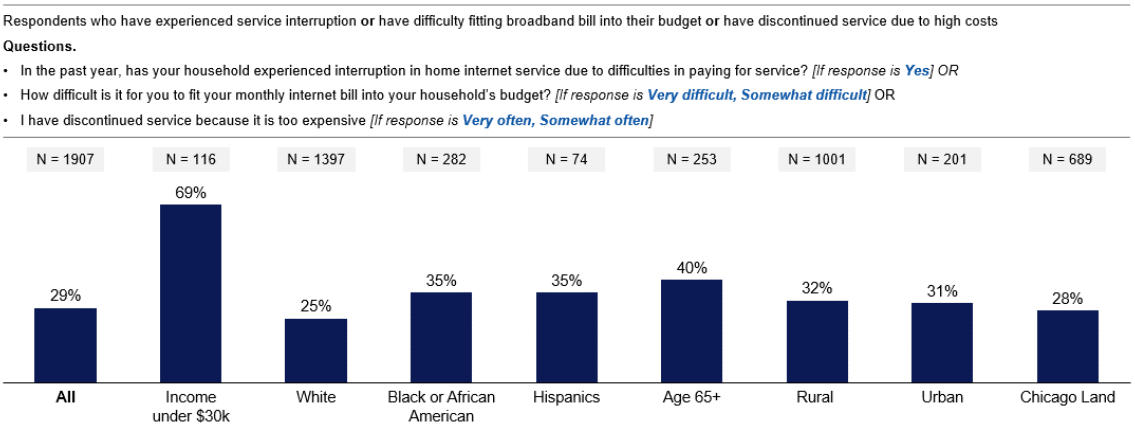


Figure 24. Affordability-related questions asked and results from the Illinois Residential Phone Survey.



Other programs and digital equity plans likewise noted the need for assistance programs for low-income consumers.

- The **Connect Waukegan Broadband Assessment** completed by what is now known as the Connect Lake County Taskforce noted that no active public-private partnerships are working with internet service providers on broadband assistance programs for low income or at-risk households.[158]
- The **City of Chicago Digital Equity Plan** noted that, while 21% of respondents with incomes under $20,000 aim to get a job, and 21% are interested in starting a business, nearly 20% do not have internet service at home to pursue these professional goals.[159]
- The **County Digital Equity Action Plan** found that community members with cost concerns face several facets of digital inequity, as affordability barriers prevent people from buying internet subscriptions, buying an adequate computing device, or paying for tech training or tech support services if no free programs are offered in their area.[160]

The feedback received during the listening sessions indicated the need to provide more assistance to low-income consumers. Across all regions, a lack of affordable internet options—especially for covered, low-income households—was cited as one of the main barriers to internet adoption. A participant in the Joliet Listening Session noted, "*Internet is expensive, but it is something that is needed. However, a lot of people are living off a limited income and [internet services] are not affordable for them*."[161]

Programs to provide financial assistance to low-income individuals

- **Several publicly funded broadband initiatives have launched across Illinois over the past decade.** The IOB hopes that implementing the Connect Illinois BEAD Five-Year Action Plan will facilitate the deployment of affordable, high-speed, and high-quality wireline or wireless networks.[162] The Illinois General Assembly has been considering a broadband subsidy program since 2021, indicating that legislators recognize a need for additional low-cost options for low-income families in Illinois.

Moving forward, the state plans to continue advocating for ACP to be re-funded by Congress. Should ACP be refunded and FCC Outreach Grant Program continue, the state will promote the ACP program using its ACP Outreach Grant. The FCC awarded seven Affordable Connectivity Outreach Grants to applicants across Illinois in March 2023. Through the DCEO's IOB, the state secured $700,000 in ACP Outreach Grants from the FCC and, should the program be re-funded, plans to use this money to facilitate increased ACP enrollment, targeting an additional 150,000 households from 102 counties over two years. This plan will be executed through a competitive subgrantee program.[163]

In addition to the IOB, six more entities—including the City of Chicago and City of Waukegan—have received funding awards from the competitive national outreach program. These funds represent 3.1% of all ACP outreach grants made through the program. In total, 197 grants were awarded across all 50 states.[164] These awards indicate widespread interest in ACP outreach and suggest that, should the program be refunded, the state can expect substantial forthcoming support for low-income consumers.

Many local governments have launched or plan to launch additional programs to aid low-income individuals. Note, these plans were developed in 2023, prior to the FCC's Feb 8, 2024 pause on ACP enrollment:

- According to the City of Chicago's Digital Equity Plan, Chicago will conduct a coordinated, citywide campaign to increase ACP sign-ups among eligible populations. Community organizations and government institutions will serve as bases for the program. The City of Chicago also plans to work with the Chicago Housing Authority to support enrollment in the Affordable Connectivity Program through funding received from the FCC Affordable Connectivity Program Grants.[165]
- The READY Cohort in the North Central region plans to enlist and train local library staff and non-profit stakeholders to help library patrons sign up for the ACP, according to the North Central Region Broadband READY Report.[166]

  Kids First Chicago's Defeating the Digital Divide Report identified four factors prohibiting ACP adoption: (1) limited awareness of the program, (2) a lack of clarity about the offerings and processes, (3) mistrust in the available services, and (4) structural limitations. The report recommends that staff be trained to address these factors, as community-based organizations (CBOs) have served in the past as critical navigators for eligible families. These organizations can raise awareness about the program, answer questions about the sign-up process, share details about the program's robust consumer protections, and help serve as advocates if any service issues arise between families and ISPs. The report also notes a need for budgetary support for CBOs so they can hire and train staff to lead community conversations about the root causes of low ACP adoption rates.[167]
- The Connect Lake County's Digital Equity Strategy Plan states that Lake County residents have previously faced challenges enrolling in the ACP due to language barriers or a lack of digital navigators to assist them. This finding indicates a need for enrollment assistance that a digital navigator can directly provide. Lake County plans to deploy more digital navigators to support outreach and enrollment efforts in communities and overcome the difficulties posed by complex applications.[168]

3.2.2.3. Increased options for broadband services, including a wider range of low-cost services

Current broadband pricing in Illinois

The IOB conducted a statewide analysis to learn more about the affordability of broadband subscriptions in Illinois. Using provider data from the March 2023 FCC National Broadband Map, the office identified providers offering broadband subscriptions in Illinois. For each combination of providers, technologies, and speeds, the office randomly sampled 10 locations for price checks on provider websites. Combining the price data with availability data from the FCC, the IOB established a preliminary understanding of prices for internet service with advertised download speeds of 100Mbps+ (**Figure 25**) and 25Mbps+ (**Figure 26**).

Figure 25. Broadband subscription prices for download speeds of 100+ Mbps.

DATA AS OF 03/21/2023

Region	% of BSLs	Price of internet for advertised download speed of 100Mbps+			
		Less than $25	From $25-50	More than $50	Not Available
Northeast	56%	0%	97%	1%	2%
Northern Stateline	4%	0%	82%	7%	11%
Northwest	6%	0%	38%	39%	22%
North Central	6%	0%	59%	27%	14%
East Central	3%	0%	51%	39%	11%
Central	6%	0%	53%	31%	16%
West Central	3%	0%	45%	36%	18%
Southeast	3%	0%	12%	60%	28%
Southern	5%	0%	11%	61%	29%
Southwest	7%	0%	74%	13%	13%
Total	**100%**	**0%**	**77%**	**15%**	**9%**

Source: Provider distribution based on FCC Data Maps, accessed Mar 21, 2023. Internet price based on desk research.

In aggregate, residents must pay at $25 to $50 per month for download speeds of 100 Mbps in most of the state. Nowhere in the state were residents able to access 100Mbps internet service for less than $25; 77% of state residents have access to 100Mbps internet service for less than $50, 15% of residents pay more than $50 for 100Mbps service, and 9% do not have access to 100Mbps internet service at all—the unserved and underserved locations of the state. There are significant disparities among different regions in Illinois: The Northeast region, home to 56% of the population in the state, offers the most affordable internet service. Regions where internet prices are the highest include the Southern region (where only 11% have access to 100Mbps internet service for less than $50), the Southeast region (12%), the Northwest region (38%), and the West Central region (45%).

In some but not all regions of the state, residents can choose to subscribe to a lower-cost plan that offers 25 Mbps download speeds. Figure 26 below documents the price distribution of internet plans with download speeds of 25Mbps. Compared to the price of 100Mbps internet service, 25Mbps internet service is more affordable on average. Sixty-seven percent of state residents have access to 25Mbps internet service for less than $25 per month—a cost that could be reduced to nothing with the assistance of programs like the ACP. Eighty-five percent of residents have access to 25Mbps service for less than $50, and only 10% of residents must pay more than $50 for such services. However, some regions of the state do not have access to such affordable plans: almost no residents in the state's three southern regions (Southeast, Southern, and Southwest regions) can access 25Mbps internet service for less than $25. Almost half of the residents in the Southeast and Southern regions must pay more than $50 for 25Mbps.

Figure 26. Broadband subscription prices for download speeds of 25+ Mbps.

DATA AS OF 03/21/2023

Region	% of BSLs	Price of internet for advertised download speed of 25Mbps+			
		Less than $25	From $25-50	More than $50	Not Available
Northeast	56%	94%	4%	1%	1%
Northern Stateline	4%	72%	25%	1%	2%
Northwest	6%	23%	57%	14%	6%
North Central	6%	56%	25%	14%	6%
East Central	3%	47%	13%	32%	8%
Central	6%	46%	21%	25%	8%
West Central	3%	43%	45%	7%	6%
Southeast	3%	0%	27%	49%	24%
Southern	5%	2%	18%	56%	24%
Southwest	7%	0%	81%	10%	9%
Total	**100%**	**67%**	**18%**	**10%**	**5%**

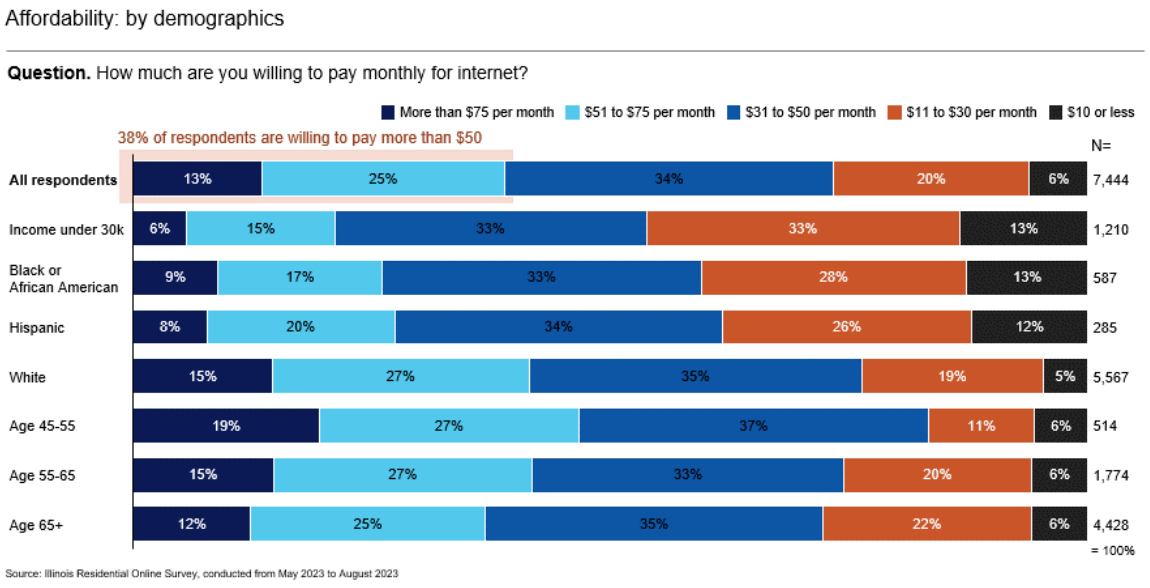
Source: Provider distribution based on FCC Data Maps, accessed Mar 21, 2023. Internet price based on desk research.

Similar concerns about subscription prices were frequently mentioned in the listening sessions conducted in the state's Southern regions. In Southeast Illinois, listening session participants reported paying between $90 and $200 a month for service.[169] In Southern Illinois, one resident pays $500 for both satellite and phone services. Another resident pays over $300 for speeds under 100 Mbps.[170] In Southwest Illinois, residents said they had to pay over $100 for monthly service, in addition to paying hundreds of dollars for installation.[171] Another participant in the same region noted that internet costs vary by neighborhood, forcing residents to frequently negotiate their internet rates back down to their original prices.[172]

Illinois residents' willingness to pay for internet service

When asked about their willingness to pay, **38% of respondents to the statewide survey about internet use reported that they are willing to pay more than $50 per month**, while 34% are willing to pay between $31 to $50, and $26% are willing to pay $30 or less. The gap between internet prices and residents' willingness to pay—that is, 32% of state residents lack access to 100Mbps internet for less than $50, while 62% are willing to pay more than $50—demonstrates the extent of the affordability gap in Illinois.[173] The affordability gap is more pronounced for certain covered populations: only 21% of individuals with annual household incomes under $30,000, 26% of Black or African American individuals, and 28% of Hispanic individuals are willing to pay more than $50 for 100Mbps service.

Figure 27. Affordability-related questions asked and results from the Illinois Residential Online Survey.

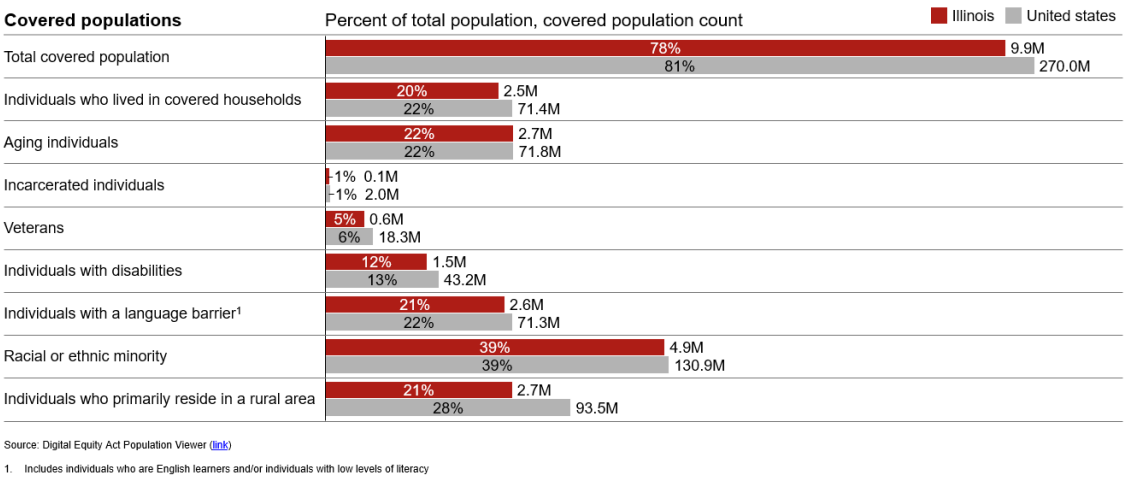


3.2.3. Covered population needs assessment

3.2.3.1. Overview of the size of the Illinois covered populations

According to the Digital Equity Act's "Population Viewer," 9.9 million of Illinois's 12.6 million residents (78.2%) are members of a covered population.[174] Individuals who are members of a racial or ethnic minority group, aging individuals, and individuals who primarily reside in a rural area are the largest covered populations in Illinois.[175] See **Figure 28** for the full breakdown of covered populations in Illinois relative to the US population.

Figure 28. Covered populations in Illinois compared to the national average.

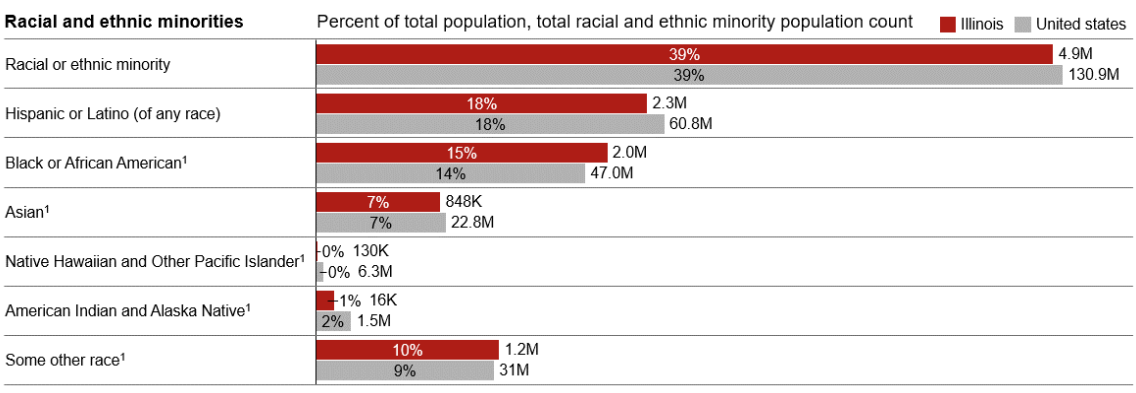


Source: Digital Equity Act Population Viewer (link)

1. Includes individuals who are English learners and/or individuals with low levels of literacy

In **Figure 29** below, we further breakdown the racial or ethnic minorities in Illinois. Individuals of Hispanic and Latino ethnicity, Black and African American, and Asian are the largest ethnic and minority groups in Illinois.

Figure 29. Racial and ethnic minorities in Illinois compared to the national average.



Source: Overall estimate of racial and ethnic minority based on Digital Equity Act Population Viewer (link); all other estimates based on US Census 2021 ACS Demographic and Housing Estimates

1. Race alone or in combination with one or more other races

Figure 30 below summarizes each region's share of covered populations. As shown, the following regions have the highest percentage of each covered population:

- Overall covered population: 98% and 96% of residents in Southeast and Southern regions, respectively, belong to covered populations, driven by high share of individuals living in rural area.
- Income of less than 150% of the Federal Poverty Level (individuals living in covered households): 24% and 27% of residents in the Southeast and Southern regions, respectively, have incomes below the FPL.
- Aging individuals: 27% and 27% of residents in the Northwest and West Central regions, respectively, are aging individuals.
- Incarcerated individuals: 2.2% and 2.1% of residents in Southeast and Southern regions, respectively, are incarcerated individuals.
- Veterans: 8% and 7% of residents in the Southwest and Southern regions, respectively, are veterans.
- Individuals with disabilities: 20% and 18% of residents in the Southern and Southeast regions, respectively, are individuals with disabilities.
- Individuals with language barrier, including individuals who are English learners and those who have low levels of literacy: 23% and 18% of residents in the Northeast and Northern Satellite regions have low English literacy.
- Racial and ethnic minorities: 48% and 27% of the Northeast and the Northern Stateline regions, respectively, represent racial or ethnic minorities.
- Individuals in rural communities: 95% and 94% of residents in the Southern and Southeast regions, respectively, live in rural communities.

Figure 30. Share of covered populations by region.

Share of each covered population as a proportion of total regional population

Top 2 highest proportions | Above population average | Below population average

	Covered pop.	Covered households	Aging	Incarcerated	Veteran	Ind. with disabilities	Ind. with language barrier[1]	Racial or ethnic minority	Rural
Northeast	75%	19%	20%	0.2%	3%	10%	**23%**	**48%**	6%
Northern Stateline	78%	23%	25%	0.3%	6%	14%	**18%**	**27%**	29%
Northwest	91%	20%	**27%**	1.4%	7%	15%	15%	17%	72%
North Central	76%	20%	23%	0.7%	6%	13%	12%	17%	39%
East Central	85%	25%	21%	0.7%	5%	12%	16%	25%	50%
Central	84%	22%	26%	1.9%	7%	16%	13%	15%	54%
West Central	88%	23%	**27%**	2.0%	7%	17%	14%	12%	69%
Southeast	**97%**	**24%**	26%	**2.2%**	6%	**18%**	14%	7%	**94%**
Southern	**98%**	**27%**	26%	**2.1%**	**7%**	**20%**	15%	13%	**95%**
Southwest	81%	20%	24%	0.9%	**8%**	14%	14%	22%	44%
Illinois average	**78%**	**20%**	**22%**	**0.5%**	**5%**	**12%**	**21%**	**39%**	**21%**

Source: Digital Equity Act Population Viewer (link)

1. Includes individuals who are English learners and/or individuals with low levels of literacy

Figure 31 below summarizes each region's share of racial and ethnic minorities populations. As shown, the following regions have the highest percentage of each racial and ethnic minorities:

- Overall racial and ethnic minorities: 48% and 27% of the Northeast and the Northern Stateline regions, respectively, represent racial or ethnic minorities.
- Hispanic or Latino: 22% and 14% of the Northeast and the Northern Stateline regions, respectively, represent Hispanic or Latino individuals.
- Black or African American: 18% and 17% of the Northeast and the Southwest regions, respectively, represent Black or African Americans.
- American Indian and Alaska Native: 1.1 and 1.0% of the Northeast and the Central regions, respectively, represent American Indians and Alaska Natives.
- Asian: 9% and 7% of the Northeast and the East Central regions, respectively, represent Asians.
- Native Hawaiian and other Pacific Islander: 0.2% and 0.2% of the East Central and Southern regions, respectively, represent Native Hawaiian and other Pacific Islanders.

  Some other race: 13% and 6% of the Northeast and the Northern Stateline regions, respectively, represent some other race.

Figure 31. Share of racial and ethnic minority by region.

Share of each minority as a proportion of total regional population

Top 2 highest proportions | Above population average | Below population average

	All racial or ethnic minority	Hispanic or Latino (of any race)	Black or African American[1]	American Indian and Alaska Native[1]	Asian[1]	Native Hawaiian and other Pacific Islander[1]	Some other race[1]
Northeast	48%	23%	18%	1.1%	9%	0.1%	13%
Northern Stateline	27%	14%	12%	0.9%	3%	0.1%	6%
Northwest	17%	10%	6%	0.8%	2%	0.1%	5%
North Central	17%	4%	10%	0.7%	3%	0.1%	2%
East Central	25%	6%	12%	0.9%	7%	0.2%	3%
Central	15%	3%	11%	1.0%	2%	0.2%	1%
West Central	12%	4%	6%	0.7%	1%	0.1%	2%
Southeast	7%	2%	4%	0.8%	1%	0.1%	1%
Southern	13%	3%	7%	1.0%	1%	0.2%	2%
Southwest	22%	4%	17%	0.9%	2%	0.1%	2%
Illinois average	**39%**	**18%**	**16%**	**1.0%**	**7%**	**0.1%**	**10%**

Source: Overall estimate of racial and ethnic minority based on Digital Equity Act Population Viewer (link); all other estimates based on US Census 2021 ACS Demographic and Housing Estimates

1. Race alone or in combination with one or more other races

The following was observed for the covered populations where county-level data was available[176]:

- Racial and ethnic minorities.
  - Hispanic. Individuals who identify as Hispanic, regardless of race, make up more than 20% of the population in six counties: Kane, Cook, Lake, Kendall (in Northeast Illinois), Boones (in Northern Stateline), and Cass (in Central Illinois).
  - African American or Black. Individuals who identify as Black or African American make up more than 20% of the population in five counties: Alexander and Pulaski (in Southern Illinois), Cook (in Northeast Illinois), St. Clair (in Southwest Illinois), and Peoria (in North Central Illinois).
  - Asian. Individuals who identify as Asian make up more than 5% of the population in 6 counties: DuPage, Lake, Cook, Will (Northeast Illinois), Champaign (East Central Illinois), and McLean (North Central Illinois)

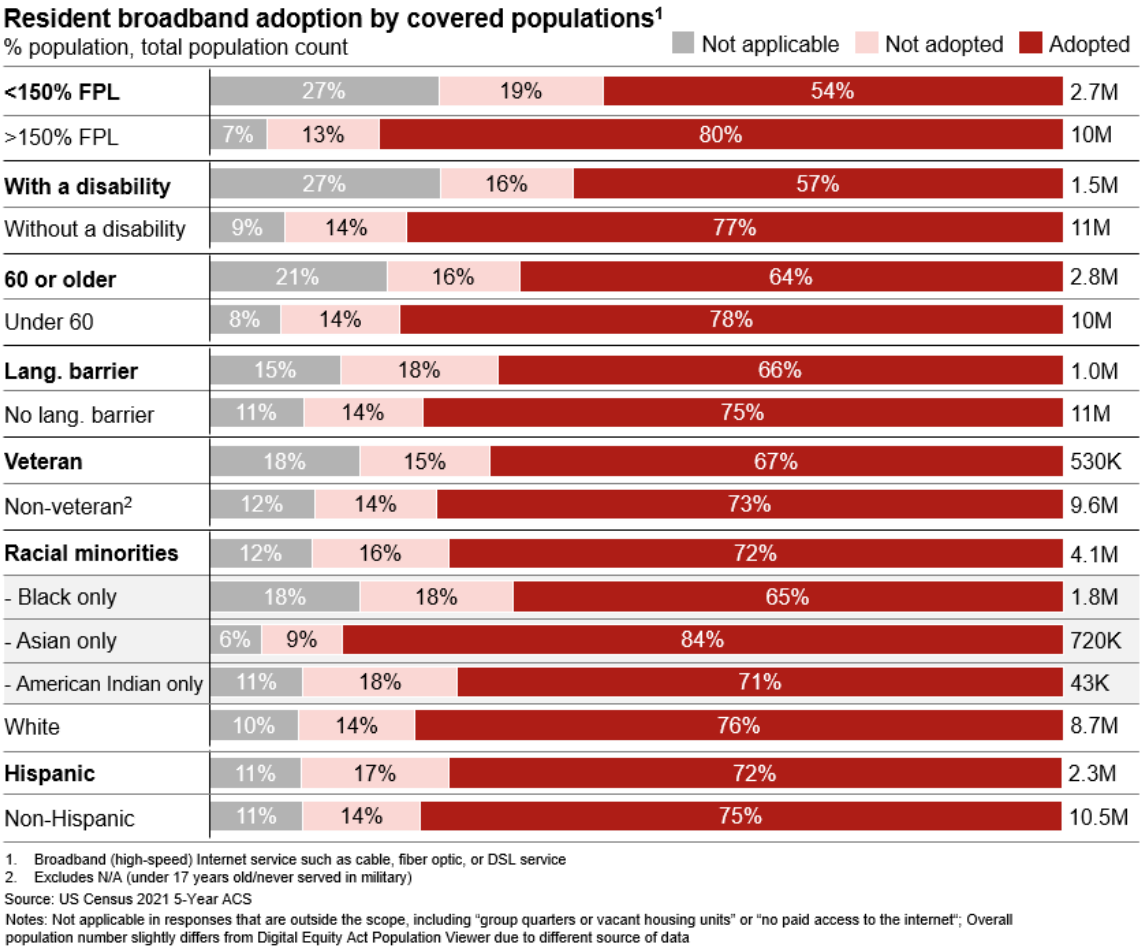
- Individuals with a language barrier, including individuals who are English learners, and those who have low levels of literacy. In seven counties—Cook, Kane, Lake (in Northeast Illinois), Cass (in Central Illinois), Alexander, Hardin (in Southern Illinois), and Boone (in Northern Stateline Illinois)—more than 20% of the population has a language barrier.
- Individuals over 60. In 16 counties—Hardin, Pope, Gallatin, Pulaski, Alexander (in Southern Illinois), Henderson, Hancock (in West Central Illinois), Jo Daviess, Putnam, Carroll (in Northwest Illinois), Calhoun (in Southwest Illinois), Stephenson (in Northern Stateline), Shelby (in Central Illinois), Marshall (in North Central Illinois), Edgar (in Southeast Illinois), and Iroquois (in North Central)—more than 30% of the population is above 60 years of age.
- Individuals with a disability or civilian non-institutionalized individuals with a disability. In 3 counties—Pope, Hardin, and Alexander (in Southern Illinois)—more than 25% of the population has a disability.
- Individuals who live in covered households (incomes 150% below the FPL). In 6 counties—Alexander, Jackson, Pulaski, Franklin, Saline, Gallatin (in Southern Illinois)—more than 30% of the population has income below 150% of the FPL.
- Veterans. In one county—Pope (in Southern Illinois—veterans make up more than 10% of the population.
- Incarcerated individuals. In seven counties—Brown (West Central Illinois), Johnson, Perry (Southern Illinois), Lawrence, Crawford (Southeast Illinois), Randolph (Southwestern Illinois), and Logan (Central Illinois)—incarcerated individuals make up more than 10% of the population.
- Rural. Seventy-one of Illinois's 102 counties are considered to be 100% rural, with 95% of the counties in Southern Illinois, 85% of the counties in Southeast Illinois, 84% of the counties in Central Illinois, 78% of the counties in West Central Illinois, 67% of the counties in East Central and Southwest Illinois, 60% of the counties in North Central and Northwest Illinois, and 25% of the counties in Northern Illinois according to the Digital Equity Act Population Viewer. "

3.2.3.2. Broadband adoption and device access by covered population

Broadband adoption

Using ACS data, the state compared the broadband adoption rate for each covered population with the state average. **Covered populations tend to have lower rates of broadband adoption than populations that are not covered**. The adoption gap is largest between individuals with household income below and above 150% of the federal poverty line (a 26pp difference), followed by individuals with and without a disability (a 20pp difference), individuals older and younger than 60 years of age (a 14pp difference), individuals with and without a language barrier (a 9pp difference), and veterans and non-veterans (a 6pp difference). When looking at race and ethnicity, broadband adoption rates among all racial minority groups (72%) and the Hispanic population (72%) are lower than that of the white (76%) and non-Hispanic population (75%). Among racial groups, Black or African American population (65%) has the lowest adoption rate and the Asian population has the highest adoption rate among the racial groups (84%). Full details on covered populations' adoption rates are shown in **Figure 32** below.

Figure 32. Adoption rates among covered populations in Illinois, according to ACS 2021 5-year estimates.

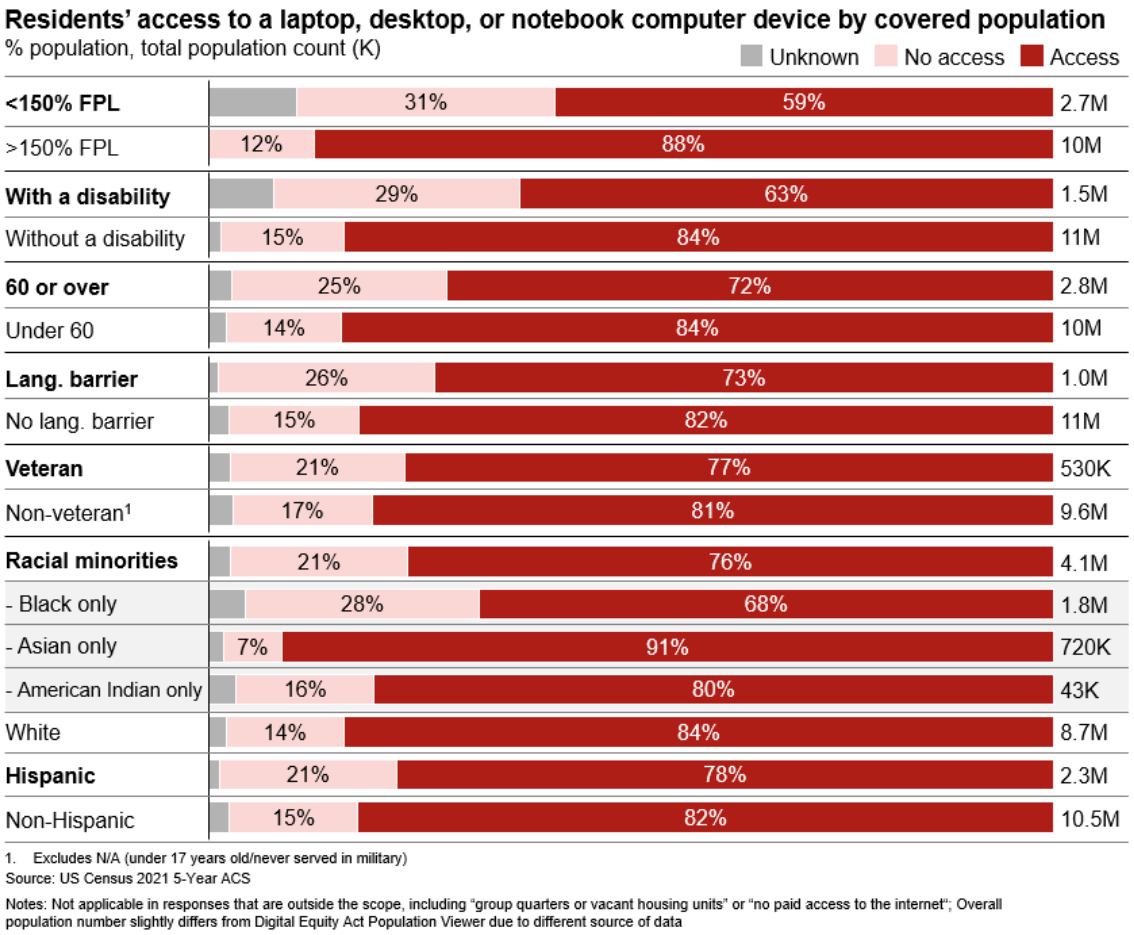


Device access

Most covered populations have lower device-access rates than populations that are not covered. The largest device access gap is observed between individuals with household incomes below and above 150% of the federal poverty line (FPL) (a 29pp difference), followed by individuals with and without a disability (a 21pp difference), individuals older and younger than 60 years oof age (a 12pp difference), individuals with and without a language barrier (a 9pp differences), and veterans and non-veterans (a 4pp difference). When looking at race, the device-access rates among racial minorities (76%) is lower than

that of the White population. Asian population has the highest device-access rate among the racial groups (91%) while Black or African American population have the lowest (68%). Hispanic population's device access rate is 4pp lower than the non-Hispanic population. Full details on covered populations' device-access rates are shown in **Figure 33** below.

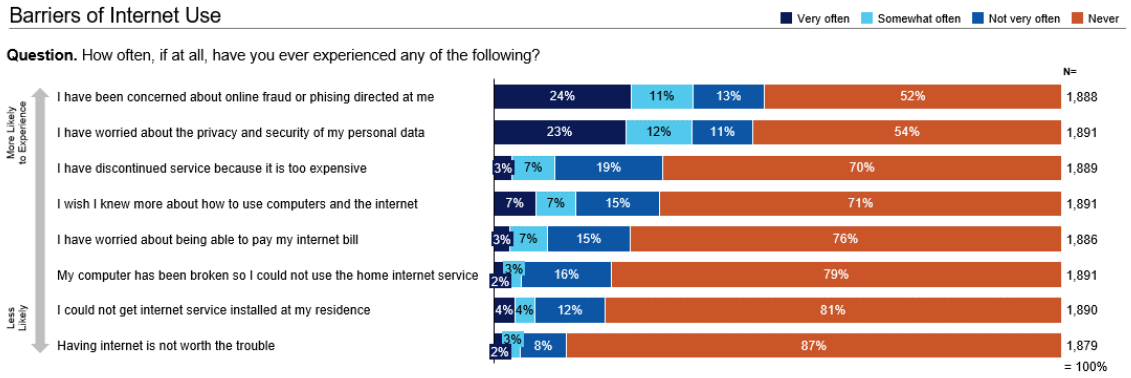
Figure 33. Device access rates among covered populations in Illinois, according to ACS 2021 5-year estimates.



3.2.3.3. Barriers to digital equity faced by covered populations

In the statewide residential phone survey of internet use, participants were asked how often they encounter barriers to internet use. In aggregate, respondents are most worried about online fraud or phishing (with 35% "somewhat often" or "very often" worried), and the privacy and security of their personal data (35%). Respondents sometimes worry about lacking digital skills (14%), affordability (10%), and price (10%). Respondents are least worried about infrastructure availability (8%), broken devices (5%), and the value of internet service (5%). See Figure 34 below for more details.

Figure 34. Questions asked about barriers to internet use results from the Illinois Residential Phone Survey.



The survey's results are broken down by covered population to better understand the barriers facing each.[177] Low-income respondents indicated that they face greater barriers to internet use in all tested experiences; these respondents reported above-average likelihood to experience all of the barriers measured. They are three times more likely to worry about broken devices and the inability to pay, and they are twice as likely to worry about lacking digital skills. Aging individuals are almost twice as likely to worry about online fraud, phishing, privacy, and the security of their personal data. This group is also twice as likely to worry about how to use the computer and the internet. Affordability is a

worry for the **African American** population; 5% more individuals in this group experienced discontinued services due to price. **Individuals in rural areas** are 10% more likely to be concerned about online fraud, phishing, privacy, and the security of their personal data. They also have more trouble getting internet services installed in their residences (3% more likely), more likely to discontinue services due to affordability concerns (2% more likely), and more likely to worry about digital skills (3% more likely.) See the full breakdown by covered population in **Figure 35** below.

Figure 35. Questions asked about barriers to internet use and results from the Illinois Residential Phone Survey.

Barrier to internet use

Question. How often, if at all, have you ever experienced any of the following? [1]
Percent answering "Very Often" or "Somewhat Often"

2%-4% higher than all respondents | 5%-9% higher than all respondents | >10% higher than all respondents

	N=1880	N=115	N=238	N=1385	N=277	N=72	N=372	N=295	N=251	N=989
Having internet is not worth the trouble	5%	12%	4%	4%	4%	0%	2%	3%	8%	4%
I could not get internet service installed at my residence	8%	12%	8%	6%	5%	6%	4%	12%	8%	11%
My computer has been broken so I could not use the home internet service	5%	14%	6%	4%	5%	2%	4%	6%	5%	4%
I have worried about being able to pay my internet bill	10%	32%	9%	8%	11%	10%	8%	10%	10%	11%
I have discontinued service because it is too expensive	10%	26%	10%	10%	15%	5%	7%	10%	16%	12%
I wish I knew more about how to use computers and the internet	14%	35%	9%	13%	11%	13%	7%	18%	28%	17%
I have been concerned about online fraud or phishing directed at me	35%	40%	20%	39%	27%	19%	25%	51%	54%	42%
I have worried about the privacy and security of my personal data	35%	40%	16%	39%	26%	18%	28%	52%	50%	41%
	All	Income <30k	Income 30k-50k	White	African American	Hispanic	Age 45-54	Age 55-64	Age 65+	Rural

1. Across sub questions, N varies by at least 1-3 respondents. The minimum N has been displayed on the page.

Source: Illinois Residential Phone Survey, conducted from May 2023 to July 2023

3.2.3.4. Summary of findings by covered population

In this section we consolidate all insights related to covered populations' needs and the barriers they face. These comprehensive insights consider all survey results, feedback from statewide listening tours, and information included in regional and local digital equity plans and programs. While some insights may be repeated, this subsection

provides readers with a full overview of all information related to each covered populations in one location.

Illinoisans who are members of a racial or ethnic minority group

Covered population: Racial and Ethnic Minorities		
Demographic information (Digital Equity Act Population Viewer)		
Size of covered population	4.9 million	
Counties with high share (30%+) of covered population	Champaign (East Central Illinois), Peoria (North Central Illinois), Cook, Kane, Lake, Will, DuPage (Northeast Illinois), Winnebag (Northern Stateline Illinois), Alexander, Pulaski (Sothern Illinois), and St. Clair (Southwestern Illinois)	
Digital equity baseline data (ACS 5-year data, 2021)		
	Covered population only	Statewide
Broadband adoption	72%	72%
Device access	76% (racial minority) -78% (ethnic minority)	79%
Needs and barriers assessment		

The assessment of the needs and barriers faced by individuals who are members of a racial or ethnic minority group are specific to that group. Below, needs and barriers information have been synthesized for the largest racial and ethnic minority groups in Illinois, based on insight gathered through stakeholder engagement and regional/local digital equity plans.

Black/African American Illinoisans (racial and ethnic minority covered population)

Covered population: Racial and Ethnic minority group: Black/African Americans	
Demographic information (ACS 5-year data, 2021)	
Size of covered population	2.0 million
Counties with high share (20%+) of covered population	Alexander and Pulaski (Southern Illinois), Cook (Northeast Illinois), St. Clair (Southwest Illinois), and Peoria (North Central Illinois)
Digital equity baseline data (ACS 5-year data, 2021)	

	Covered population only	Statewide
Broadband adoption	65%	72%
Device access	68%	79%

Needs and barriers assessment

More likely to experience a disruption in broadband access due to affordability challenges. The statewide survey showed that Black/African Americans are 5% more likely than the average Illinoisan to experience service interruptions due to difficulties in paying for service.

Less willing to pay for internet service. The statewide survey showed that Black/African Americans are 12% less willing than the average Illinoisan to pay more than $50 monthly for internet service.

More likely to be subscription vulnerable. The statewide survey showed that Black/African Americans are 6% more likely than the average Illinoisan to be "subscription vulnerable" (i.e., to have experienced service interruption due to difficulty in paying for it, have found it hard to fit a monthly internet bill into the household budget, or have discontinued service because it was too expensive).

Lower telemedicine use rates. The Disputing Disparities Report published by the AARP Illinois noted that telemedicine use rates are lower for African American or Black Medicaid beneficiaries compared to white beneficiaries.[178]

Region-specific insights captured in listening sessions and local government digital equity plans

Local government digital equity plans

The Chicago Digital Equity Plan notes that Black communities have low broadband adoption rates compared to other race and age demographics.[179]

Listening session feedback

Less reliable infrastructure in poor Black and Brown neighborhoods

A City of Chicago listening session participant mentioned that Black and Brown communities in particular are adversely affected by inadequate internet reliability and infrastructure, noting disparity in broadband connection and customer support: "*Internet infrastructure is a major barrier that I've been complaining about for over 10 years. The provider skipped 83rd-87th street when expanding their infrastructure and will never provide an answer as to why. No one on those blocks can get reliable, affordable service, but people outside of those blocks can*."[180]

A City of Chicago listening session attendee expressed a similar sentiment on the disparity of services: "*Oftentimes it is the poor Black and Brown neighborhoods and communities that do not have access to internet. I do not know if it is deliberate, but to have specific areas that have different infrastructure and coverage does not seem accidental*."[181]

A statewide virtual listening session participant noted that "*We have absolutely no high-speed internet. That area is predominantly Black, and because it's a poorer area, providers don't want to invest in the infrastructure there. There is no option for internet there*."[182]

Hispanic Illinoisans (racial and ethnic minority covered population)

Covered population: Racial and ethnic minority group: Hispanic Illinoisans		
Demographic information (ACS 5-year data, 2021)		
Size of covered population	2.3 million	
Counties with high share (20%+) of covered population	Kane, Cook, Lake, Kendall (Northeast Illinois), Boones (Northern Stateline), and Cass (Central Illinois).	
Digital equity baseline data (ACS 5-year data, 2021)		
	Covered population only	Statewide
Broadband adoption	72%	72%
Device access	78%	79%
Needs and barriers assessment		

More likely to encounter difficulties in paying for internet service. The statewide survey showed that Hispanic individuals are 14% more likely than the average Illinoisan to find it difficult to fit the monthly internet bill into their household budget. Less willing to pay for internet service. The statewide survey showed that Hispanic residents are 10% less willing to pay more than $50 monthly for internet service than the average Illinoisan.

More likely to be subscription vulnerable. The statewide survey showed that Hispanic residents are 6% more likely than the average Illinoisan to be subscription-vulnerable (i.e., to have experienced service interruptions due to difficulty in paying for the service, have found it difficult to fit a monthly internet bill into their household budget, or have discontinued service because it was too expensive).

Less confident about some tasks related to the internet. The statewide survey showed that Hispanic residents are 4% more likely to lack confidence about finding reliable information about a health or medical condition via the internet. They are also 2% more likely to lack confidence about accessing online banking or financial services, and 2% more likely to lack confidence about creating a resumé online than the average Illinoisan.

During the **public comment period**, an organization serving the Hispanic community pointed out that factors such as low income and language barriers may help to explain why Latinos in Illinois are more likely to lack internet access.[183]

Region-specific insights captured in listening sessions and local government digital equity plans

Listening session feedback

Less reliable infrastructure in poor Black and Brown neighborhoods

A City of Chicago listening session participant mentioned that Black and Brown communities in particular are adversely affected by inadequate internet reliability and infrastructure, noting disparity in broadband connection and customer support: "*Internet infrastructure is a major barrier that I've been complaining about for over 10 years. The provider skipped 83rd-87th street when expanding their infrastructure and will never provide an answer as to why. No one on those blocks can get reliable, affordable service, but people outside of those blocks can*."[184]

A City of Chicago listening session resident expressed similar sentiments on the disparity of services: "*Oftentimes it is the poor Black and Brown neighborhoods and communities that do not have access to internet. I do not know if it is deliberate, but to have specific areas that have different infrastructure and coverage does not seem accidental*."[185]

Language as a barrier in digital literacy skills development

A representative from a local organization in Chicago noted that Hispanic individuals who speak only Spanish need digital ESL classes, devices, and more awareness of existing digital literacy programming and services.[186]

Asian Illinoisans (racial and ethnic minority covered population)

Covered population: Racial and ethnic minority group: Asian Illinoisans		
Demographic information (ACS 5-year data, 2021)		
Size of covered population	0.8 million	
Counties with high share (5%+) of above covered population	DuPage, Lake, Cook, Will (Northeast Illinois), Champaign (East Central Illinois), and McLean (North Central Illinois)	
Digital equity baseline data (ACS 5-year data, 2021)		
	Covered population only	Statewide
Broadband adoption	84%	72%
Device access	91%	79%

Needs and barriers assessment

The following needs and barriers were highlighted by participants in a listening session with Asian at the Chicago Digital Equity Council[187]:

Asian languages (such as Chinese) are not a standard language for customer service, making it more difficult for Asian to sign up for internet.

Many applications are not translated into Asian languages, making it difficult to use computer software.

An organization serving the Chinese community identified that the network in the Chinatown area was slower than other areas.

Region-specific insights captured in listening sessions and local government digital equity plans

Participants in a listening session with members of the community of Chinatown identified as part of the Chicago Digital Equity council[188]: The network in Chinatown is slow, making it difficult to receive messages and receive information. Furthermore, the network is often impacted by rain or bad weather, causing frequent disconnects and interruptions.

Libraries in Chinatown have very little equipment for use.

There is a lack of technical resources for Asian to use computers, in addition to computer equipment being too expensive.

Multiple participants identified that there are no courses or organized educational events in the Chicago Chinatown region for digital literacy and training.

Multiple participants identified that the price for broadband internet is high, and even slow internet is at a high price.

Some participants felt that using digital tools was difficult because they do not know what they are missing for digital literacy. Additionally, they felt that they were unsure as to what aspects were important to know.

Aging Illinoisans

Covered population: Aging individuals (60+ years old)		
Demographic information (Digital Equity Act Population Viewer)		
Size of covered population	2.7 million[189]	
Counties with high share (30%+) of covered population	Hardin, Pope, Gallatin, Pulaski, Alexander (in Southern Illinois), Henderson, Hancock (in West Central Illinois), Jo Daviess, Putnam, Carroll (in Northwest Illinois), Calhoun (in Southwest Illinois), Stephenson (in Northern Stateline), Shelby (in Central Illinois), Marshall (in North Central Illinois), Edgar (in Southeast Illinois), and Iroquois (in North Central)	
Digital equity baseline data (ACS 5-year data, 2021)		
	Covered population only	Statewide
Broadband adoption	64%	72%
Device access	72%	79%
Needs and barriers assessment		
Less likely to be satisfied with the quality of their internet connection. The statewide survey showed that individuals above age 65 are 8% more likely than the average Illinoisan to be dissatisfied with the quality of their internet connection, especially for carrying out important online tasks.		

More likely to need additional computing devices. The statewide survey showed that individuals above age 65 are 7% more likely than the average Illinois to need additional computing devices so that each person in their household can connect to the internet.

More likely to be subscription vulnerable. The statewide survey revealed that individuals above age 65 are 11% more likely than the average Illinoisan to be subscription-vulnerable (i.e., to have experienced service interruptions due to difficulty in paying for the service, have found it difficult to fit a monthly internet bill into their household budget, or have discontinued service because it was too expensive).

More likely to believe that having internet is not worth the trouble. The statewide survey showed that individuals above age 65 are 3% more likely than the average Illinoisan to believe that having internet is "not worth the trouble." More likely to worry about digital skills. The statewide survey showed that individuals above age 65 are 14% more likely than the average Illinoisan to worry about how to use computers and the internet.

More likely to worry about online security. The statewide survey indicated that individuals above age 65 are 19% more likely to be concerned about online fraud and phishing and 15% more likely to worry about privacy and the security of their personal data than the average Illinoisan.

Stronger need for digital literacy to support overall well-being. The Disputing Disparities Report published by the AARP Illinois noted that Internet use supports the well-being of older adults by connecting them to health services and information, improving their interpersonal connections, and increasing their independence. Broadband adoption among older adults is especially important as government and health services move to online platforms.[190]

Additional insights shared during the public comment **period:**

- Aging seniors on Social Security may have difficulty qualifying for the ACP but may still find the "affordable" broadband service (e.g., $50/month) to be too expensive.[191]

- Education and relevant tools are needed to empower aging individuals with reliable, high-speed internet.[192]

- **Caregivers may benefit from a**dopting **high-speed internet service and** participating in **digital literacy training s**o that they may **facilitate digital connectivity for the aging individuals in their care.**[193]

A resident emphasized the importance of skills and access to technology for aging individuals.[194]

Aging individuals may benefit from digital literacy and cybersecurity training programs that can reassure them about **online security and privacy. Refresher courses could support digital skills training for aging individuals** who have a range of **comfort levels** with technology**.**[195]

Covered populations (e.g., aging individuals) may need other technology-related tools and devices (e.g., headphones for telehealth, cybersecurity software), which should be considered in plans to increase device access.[196]

Region-specific insights captured in listening sessions and local government digital equity plans

Listening session feedback

Online security is a major barrier to internet use by aging individuals.

A Joliet listening session participant noted that their organization primarily supports people 55 years of age and older and that "*scams are the biggest digital issue that people come to us for*."[197]

A statewide listening session participant reported that local, older individuals do not understand technology and do not want to get involved in it, noting, "*They are scared by it. They're scared about the viruses.*"[198]

Aging individuals are overlooked in digital literacy skills development.

A representative of a community-based organization in the City of Chicago said that aging individuals are often the heads of their households but are overlooked in efforts to build digital skills. They face a mix of barriers, including low incomes, lack of digital literacy, and not recognizing the need for computers and the internet.

Deficiency in digital skills adversely affects other aspects of life.

A Centralia listening session participant noted that older residents have trouble completing applications for state-based programs because they are "*unable to complete the photo upload process due to a lack of digital comfortability.*"[199]

Illinoisans who live in a covered household

Covered population: Individuals who live in a covered household		
Demographic information (Digital Equity Act Population Viewer)		
Size of covered population	2.5 million[200]	
Counties with high share (30%+) of covered population	Alexander, Jackson, Pulaski, Franklin, Saline, Gallatin (in Southern Illinois)	
Digital equity baseline data (ACS 5-year data, 2021)		
	Covered population only	Statewide
Broadband adoption	54%	72%
Device access	59%	79%
Needs and barriers assessment		

Less likely to be satisfied with the quality of their internet connection. The statewide survey showed that individuals with annual household income under $30,000 are 34% more likely than the average Illinoisan to be dissatisfied with the quality of their internet connection, especially for carrying out important online tasks.

More likely to need additional computing devices. The statewide survey revealed that individuals with annual household incomes under $30,000 are 5% more likely than the average Illinoisan to need additional computing devices to allow each person in their household to connect to the internet. They are also 9% more likely than the average Illinoisan to worry about broken computers.

More likely to have difficulty paying for internet service. The statewide survey showed that individuals with annual household incomes under $30,000 are 50% more likely than the average Illinoisan to find it difficult to fit a monthly internet bill into their household budget.

More likely to experience a disruption in broadband access due to affordability issues. The statewide survey indicated that individuals with annual household incomes under $30,000 are 15% more likely than the average Illinoisan to experience service interruptions due to difficulties in paying for internet service.

Less willing to pay for internet service. The statewide survey showed that individuals with annual household incomes under $30,000 are 17% less willing to pay more than $50 monthly for internet service than the average Illinoisan.

More likely to be subscription vulnerable. The statewide survey revealed that individuals with annual household incomes under $30,000 are 40% more likely than the average Illinoisan to be subscription-vulnerable (i.e., to have experienced service interruptions due to difficulty in paying for the service, have found it difficult to fit a monthly internet bill into their household budget, or have discontinued service because it was too expensive).

Less confident about all tasks related to the internet. The statewide survey showed that individuals with annual household incomes under $30,000 are 2% more likely to lack confidence about sending or replying to email communications, 6% more likely to lack confidence about finding reliable information online about a health or medical condition, 4% more likely to lack confidence about accessing online banking or financial services, 4% more likely to lack confidence about finding educational content and information online, 11% more likely to lack confidence about creating a resumé online, 8% more likely to lack confidence about taking a course or using training materials online to improve their job skills, 8% more likely to lack confidence about accessing or applying for government services online, and 12% more likely to lack confidence about participating in a virtual meeting than the average Illinoisan.

More likely to believe that having internet service is not worth the trouble. The statewide survey showed that individuals with annual household incomes under $30,000 are 7% more likely than the average Illinoisan to believe that having internet service is "not worth the trouble."

More likely to have trouble getting internet services installed. The statewide survey showed that individuals with annual household incomes under $30,000 are 4% more likely than the average Illinoisan to experience trouble getting internet services installed at their residence.

More likely to worry about digital skills. The statewide survey indicated that individuals with annual household incomes under $30,000 are 21% more likely than the average Illinoisan to worry about how to use computers and the internet.

More likely to worry about online security. The statewide survey showed that individuals with annual household incomes under $30,000 are 5% more likely to be concerned about online fraud and phishing and 5% more likely to worry about privacy and the security of their personal data than the average Illinoisan.

Additional insights shared during the public comment period:

- An organization pointed out the lack of digital financial services in low-income communities. Some low-income communities with little or no tax base have less influence and are unable to provide digital services (e.g., online billing for water services, road work updates) for their communities. This lack of digital capabilities often results in billing mistakes, for example. Moreover, residents in such communities are more likely to lack digital financial skills and face gaps in mobile money services. Digital

financial education should be considered in the design of digital skills training for these communities.[201]

- Individuals with affordable plans may rely on mobile broadband access, which can be inferior to other service types (e.g., fixed wireless).[202]

A local government entity noted that increasing the number of internet providers' physical locations could benefit low-income communities, where transportation is often a significant barrier.[203]

Region-specific insights captured in listening sessions and local government digital equity plans

Local government digital equity plans

The Chicago Digital Equity Plan's citywide survey found that nearly half of respondents without a device at home have an annual income below $20,000, and nearly 20% of households with income below $20,000 lack home internet service, compared to 3% of households with incomes between $74,000 and $99,000.[204]

The Connect Lake County Digital Equity Strategy Plan notes that device access in Lake County has a clear equity divide, as 98% of survey respondents with an annual income of over $50,000 had a personal computing device, while only 70% of households with an annual income of less than $25,000 per year had a personal computing device. The survey also found that 75% of low-income respondents were not able to use broadband service for extended periods due to computer problems.[205]

The Connect Lake County Digital Equity Strategic Plan found that residents in households making less than $50,000 annually are more likely to use libraries or other public buildings to access the internet at least daily, weekly, or monthly.[206]

Listening session feedback

Lack of interest in broadband service is disproportionately prevalent among covered households.

A past participant from an Illinois Care Connect (ICC) cohort observed, *"There is a low value placed on the internet in low-income households based upon their traditionally poor experience in the past—slow speed, poor device, little tech support, and low digital literacy—so when you ask residents if home internet is important to them, they often say 'not really,' because it does not add value in their daily life. They do not know what they are missing."*[207]

A Bloomington-Normal listening session participant shared, "*We have neighbors that are afraid of the internet and technology. Either they cannot handle it or do not want to handle it, and that is a major barrier. They are on a tight income and what limited amount of funds they do have, they do not want to risk the chance of getting scammed through their technology.*

This type of broadband meeting or the broadband survey may not even interest them because they do not want to learn about technology. Everything they are hearing on the news and around them is painting technology in a negative light"[208]

Lack of affordable options puts internet service completely out of reach for covered households.

A Ullin listening session participant observed that residents have to pay $100 to get their names on a list for installation, wait a year to get the proper equipment (and pay $500 to do so), and then pay a $120 monthly fee, noting, "*For low-income homes and kids, I don't see how they would be able to afford that. Good, affordable service is not out there yet.*"[209]

Another Ullin listening session participant shared similar feedback: "*When you look at the income of these citizens, there is no way they can pay. Sometimes with our satellite and phones it is $500 a month, and for some people down here, that is a house payment.*" [210]

A representative of an affordable housing organization in Chicago commented, "*Affordability is always a big issue. An $80-100 monthly bill is a barrier for most people in the community. It needs to be free.*"[211]

Financial assistance from ACP is not sufficient to offset high costs.

A Macomb listening session participant observed that the $30 ACP credit is usually not enough for the families she supports. For the plans they need, they are quoted a monthly amount that they cannot commit to, even with the $30 discount.[212]

Provider competition or participation in low-income areas is lacking.

A Macomb listening session participant shared, "*There is a clear distinction of where the competition for providers stops in the community. Those in the more affluent areas have three provider options; others in affordable housing only have one option, and it is not reliable*."[213]

A Southwest region listening session participant said, "Some providers in Southwest Illinois have declined requests to expand their services into Washington Park, an impoverished area. Perhaps they lacked the financial incentive to do so."[214]

Illinoisans who live in rural areas

Covered population: Individuals who live in rural areas		
Demographic information (Digital Equity Act Population Viewer)		
Size of covered population	2.7 million	
Rural counties in Illinois	Seventy-one of Illinois's 102 counties are considered to be 100% rural, with 95% of the counties in Southern Illinois, 85% of the counties in Southeast Illinois, 84% of the counties in Central Illinois, 78% of the counties in West Central Illinois, 67% of the counties in East Central and Southwest Illinois, 60% of the counties in North Central and Northwest Illinois, and 25% of the counties in Northern Illinois according to the Digital Equity Act Population Viewer.	
Digital equity baseline data (statewide resident phone survey, 2023)[215]		
	Covered population only	Statewide
Subscription to internet service[216]	89%	93%
Device access[217]	82%	89%
Needs and barriers assessment		
More likely to have trouble getting internet services installed. The statewide survey showed that individuals in rural areas are 4% more likely than the average Illinoisan to have trouble getting internet services installed at their residence.		
More likely to discontinue service because it is expensive. The statewide survey indicated that individuals in rural areas are 2% more likely than the average Illinoisan to discontinue service because it is too expensive.		
More likely to worry about digital skills. The statewide survey showed that individuals in rural areas are 3% more likely than the average Illinoisan to worry about how to use computers and the internet.		
More likely to worry about online security. The statewide survey revealed that individuals in rural areas are 7% more likely to be concerned about online fraud and phishing and 6% more likely to worry about privacy and the security of their personal data than the average Illinoisan.		

More dependent on broadband for economic development. The Illinois Farm Bureau (IFB) issued talking points stating a need for statewide solutions that encourage broadband adoption by farmers and rural communities. The IFB maintains that its members want better, faster, more reliable, and more affordable broadband service, which improves economic development, education, and healthcare in rural areas.[218]

Additional insights shared during the public comment period:

- A commenter shared that low-density neighborhoods could benefit from increased competition in the broadband market to facilitate greater customer choice.[219]
- A resident reported poor maintenance service in a rural area served by only one provider. [220]
- A public commenter shared that in rural areas near Peoria, broadband is not available through fiber-optic cable or providers, so residents must rely on hot spots or satellite internet.[221] Similar barriers are reported by residents in rural areas near Bartonville-Mapleton.[222]

Region-specific insights captured in listening sessions and local government digital equity plans

Local government digital equity plans

Hancock County Broadband Breakthrough shows that broadband service is needed for precision agriculture in counties with a high share of rural population.[223]

The Champaign Broadband Infrastructure Engineering Assessment Report notes that accessing computers in public places like libraries obligates residents to travel, which is especially hard in rural parts of Illinois. [224]

Broadband for All – Plan for Ogle, Lee, Boone, and Putnam Counties reports that strong internet service is an urgent need in rural communities to support evolving farm operations. Lack of robust broadband service severely hampers enhanced innovations on farms.[225]

Listening session feedback

No affordable and reliable infrastructure in rural areas

A virtual listening session participant shared, "*Many rural residents rely on satellite service for internet access. Unfortunately, this service is unreliable, with slow speeds and frequent outages—especially during inclement weather. This unreliability can hinder residents from doing important tasks. It also comes with extremely high monthly fees and installation fees.*"[226]

Lack of provider interest in expanding access or increasing competition

Attendees at both the North Central and Northwest regions' listening sessions voiced the concern that low population density in rural areas discourages providers from offering services to their communities.[227]

A Southwest region listening session participant commented, "In rural areas there is only one option. Even though it is not affordable, we have to buy it. Competition would be nice."[228]

Difficulty in getting installation

A participant in the East Central region listening session noted that installation appointments for residents in rural areas are lengthy, often lasting multiple hours due to difficulty in obtaining a connectivity signal. As a result, residents sometimes have to miss work or take time off. [229]

Adverse effects of unreliable internet service

An attendee at the East Central region listening session noted, "*Many things are digitally based, such as virtual healthcare. Many rural residents are unable to access these services.*"[230]

A Knox County resident shared, "*We had to up the amount of data due to the amount of devices we have, and it slows down the speed and reliability greatly on a daily basis. We have medical devices hooked to it as well, and I don't like that it's not reliable.*"[231]

Illinoisans with a language barrier

Covered population: Individuals with a language barrier		
Demographic information (Digital Equity Act Population Viewer)		
Size of covered population	2.6 million	
Counties with high share (20%+) of covered population	Cook, Kane, Lake (in Northeast Illinois), Cass (in Central Illinois), Alexander, Hardin (in Southern Illinois), and Boone (in Northern Stateline Illinois)	
Digital equity baseline data (ACS 5-year data, 2021)		
	Covered population only	Statewide
Broadband adoption	66%	72%
Device access	73%	79%
Needs and barriers assessment		

The following needs and barriers were highlighted by participants in the Spanish-speaking listening session[232]:

Low trust in government-sponsored programs hinders participation in affordability and device-access programs.

Security concerns are a significant barrier for residents and can inhibit internet adoption and usage altogether for many non-English-speaking residents.

Participation in internet or device-access programs is low due to potential participants' embarrassment, sensitivity, or a feeling that they will not benefit from them.

ISPs' non-English resources for device troubleshooting are limited. If available, the resources are often unclear and sometimes intimidating for users, which inhibits internet adoption altogether for some residents.

Infrastructure is lacking in underserved communities with a high number of non-English-speaking individuals. Residents have experienced long periods of full blackout due to ISP towers that are inoperable or in constant need of maintenance.

The following needs and obstacles facing individuals with language barriers, immigrants, and refugees were highlighted in feedback received during the public comment period:

- Newly arrived immigrants and refugees may have difficulty obtaining internet access and may seek troubleshooting resources. Community-based organizations may need

to prepare their digital access and literacy support in multiple languages when assisting the new immigrant populations.[233]

- Immigrants and refugees may have specific challenges when it comes to adult education in digital literacy, indicating a need to train digital navigators within these groups to overcome the obstacles presented by language barriers.[234]

Additionally, training digital navigators from immigrant and refugee groups may help empower these communities to tackle digital literacy barriers by themselves.[235]

- Official websites of digital equity programs could be designed to include materials in other languages so that individuals with language barriers can access and use the sites' resources.[236] All official, sharable contents (e.g., flyers, reports) and communications could be written in plainer language to make them accessible to all covered populations, which can help build public trust.[237]

- Informational and language barriers may hinder individuals from determining their eligibility for programs, understanding applications, and setting up devices and services, highlighting the importance of having information available in multiple languages.[238]

Region-specific insights captured in listening sessions and local government digital equity plans

Local government digital equity plans

The Broadband READY East Central report notes that the East Central region ranked first in share of individuals with a language barrier. Participants in the EC READY program reported concerns about technology and privacy as well as not having enough support for marginalized individuals and experiencing hostility when trying to access technology support services.[239]

The Cook County Digital Equity Action Plan found that many internet and computer resources are not made available in languages other than English.[240]

The Chicago Digital Equity Plan observed that 17% of participants discussed accessibility challenges, such as language spoken and inaccessibility for a person with a disability.[241]

Illinoisans with disabilities

Covered population: Individuals with disabilities		
Demographic information (Digital Equity Act Population Viewer)		
Size of covered population	1.5 million	
Counties with high share (25%+) of above covered population	Pope, Hardin, and Alexander (in Southern Illinois)	
Digital equity baseline data (ACS 5-year data, 2021)		
	Covered population only	Statewide
Broadband adoption	57%	72%
Device access	63%	79%

Needs and barriers assessment

The following needs and barriers have been highlighted for individuals with disabilities:

High prices and insufficient infrastructure are often barriers to broadband home access for individuals with disabilities. [242]

Individuals with disabilities have less access to computers, internet, and broadband in both rural and non-rural areas. [243]

Beyond access to internet and devices, a range of online accessibility features (e.g., subtitles, assisting features, read-aloud capabilities, etc.) could lower barriers to stable internet access. [244]

Additional insights shared during the **public comment** period:

- A resident with a hearing disability reported that he/she could not install a phone to assist with hearing because the installer did not have access to the needed Wi-Fi where the resident lives. This suggests that lack of broadband options could pose additional barriers to individuals with disabilities.[245]

Assistive technologies may be critical to ensuring accessibility for individuals living with disabilities.[246]

Region-specific insights captured in listening sessions and local government digital equity plans

Local government digital equity plans:

The Cook County Digital Equity Action Plan notes that many internet and computer resources are not made available with the necessary accommodations to support those with disabilities or other special navigation needs.[247]

The Chicago Digital Equity Plan observes that 17% of participants discussed accessibility challenges, such as language spoken and inaccessibility for persons with disabilities. [248]

Listening session feedback:

Low digital literacy level

A Joliet listening session participant shared, “My mom calls me every day to help her with her internet issues. She’s a senior with a disability. They don’t have the broad picture of what they can do with the internet.”[249]

Illinois residents who are Veterans

Covered population: Veterans		
Demographic information (Digital Equity Act Population Viewer)		
Size of covered population	0.6 million	
Counties with high share (10%+) of covered population	Pope (in Southern Illinois)	
Digital equity baseline data (ACS 5-year data, 2021)		
	Covered population only	Statewide
Broadband adoption	67%	72%
Device access	77%	79%

Needs and barriers assessment

The following needs and barriers have been highlighted for veterans:

There is a significant number of veterans living in rural communities which often experience lack of broadband deployment. [250]

Rural communities also face challenges with a shortage of healthcare providers which can be exacerbated by limited broadband access that veterans that decreases telehealth access.[251]

Limited digital literacy and perception of the relevance of broadband discourages some veterans from adopting broadband, in part due to the tendency of veterans to be older than the general population and disinformation targeting veterans. [252]

Veterans are more likely than non-veterans to cite a lack of computers as the primary barrier to subscribing to internet services. Price of devices and monthly costs of services are key barriers to adoption. [253]

Region-specific insights capture in listening sessions and local government digital equity plans

Listening session feedback:

Internet service is essential for veterans to access telehealth services, especially due to the higher rate of disabilities among veterans.

A Macomb listening session participant shared, “Telehealth is critically important for veterans who have to use the [government system]. The closest location is quite far away, so it puts a huge burden on the veterans in the community to have to go to those facilities.” The

participant further noted that reliable telehealth options would make it easier for veterans in the community to get the care they need.[254]

Incarcerated Illinoisans (including returning residents, justice-, and system- impacted individuals)

Covered population: Incarcerated individuals (including returning residents, justice-, and system- impacted individuals)		
Demographic information (Digital Equity Act Population Viewer)		
Size of covered population	0.1 million	
Counties with high share (10%+) of covered population	Brown (West Central Illinois), Johnson, Perry (Southern Illinois), Lawrence, Crawford (Southeast Illinois), Randolph (Southwestern Illinois), and Logan (Central Illinois)	
Digital equity baseline data (ACS 5-year data, 2021)		
	Covered population only	Statewide
Broadband adoption	N/A	72%
Device access	N/A	79%
Needs and barriers assessment		

Incarcerated individuals (including returning residents, justice-, and system-impacted individuals) benefit from digital literacy training that enables them to 1) use devices and access (limited) internet service for ongoing learning while incarcerated; 2) access essential services; and 3) build job-readiness for life after release. [255]

A lack of connection to the outside world can increase the likelihood of re-offense upon release. The inability to keep up with technological changes while in prison causes a lack of digital literacy that often becomes a barrier to securing jobs for formerly incarcerated people. [256]

In the City of Chicago's Digital Equity Plan, a returning resident shared, "Some people were never taught how to use the new technology like smart devices and touch-screen laptops. The transition from regular TV to having basically everything on the internet is difficult to adjust to." [257]

According to the Illinois Department of Corrections, device access for individuals in custody is provided primarily through tablets; approximately 70% of the population has a tablet at any

given time. Based on an estimate from the Department of Innovation and Technology, the Department of Corrections requires $200 million to facilitate IT infrastructure upgrades, but state funding may fall short of this mark. The Department of Corrections shared plans to explore ways to bring tablets and necessary wireless infrastructure to correctional facilities.[258]

4

4. Collaboration and Stakeholder Engagement

This section discusses how the IOB has collaborated and will continue to collaborate with broadband and digital equity stakeholders across the state.

4.1. Coordination and Outreach Strategy

4.1.1. Stakeholder engagement approach prior to BEAD and digital equity programs

Outreach and engagement with broadband and digital equity stakeholders have been core priorities of the IOB since its inception. Feedback received has been used to inform the office's priorities and shape its programming.

10 cohorts aligned with each economic development region in the state

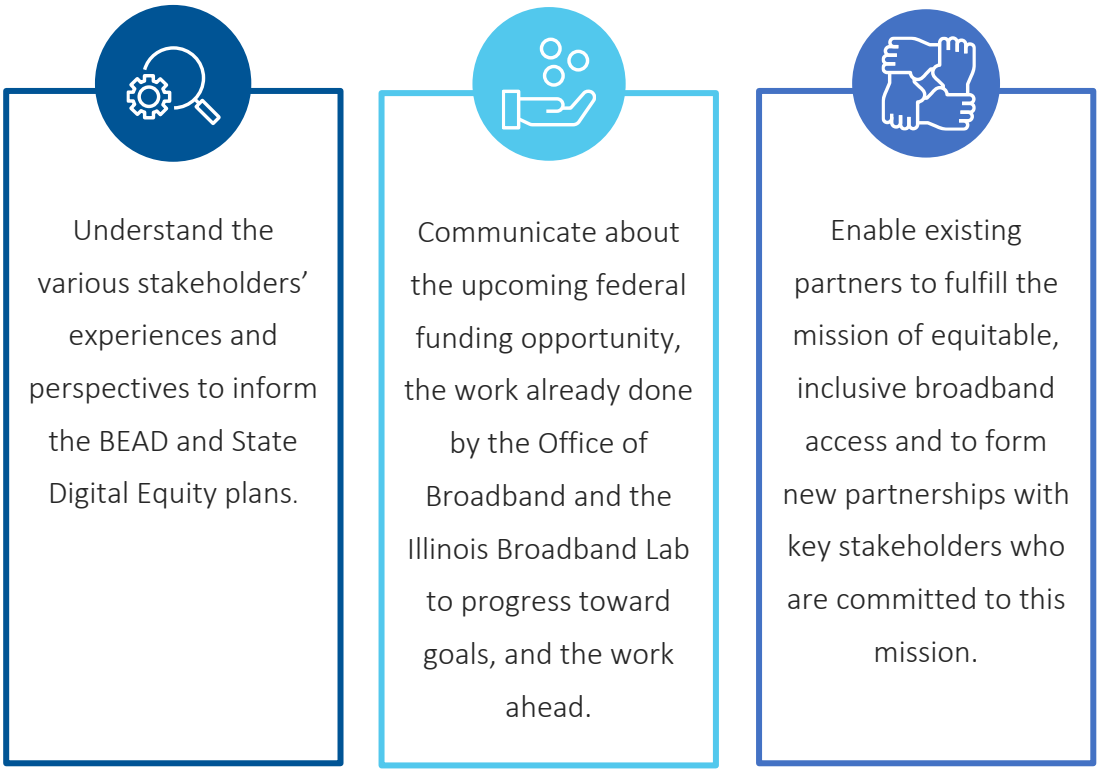
The IOB and IBL's Broadband READY program has 10 cohorts aligned with each economic development region in the state. The program is designed to identify current digital inequities and to define next steps toward creating a digitally inclusive system. Community and economic-development organizations, educators, local leaders, and other related stakeholders will collaborate to execute these next steps.[259] Additionally, the IOB's *Accelerate Illinois* and *Broadband Breakthrough* programs encourage community-driven broadband expansion by providing grants and communities with expert consultation.[260] The IOB's *Illinois Connected Communities* program engages communities in a cohort forum to offer best practices, expert consultations, and grants.[261]

Also working toward these goals is the IOB's Broadband Advisory Council, which includes representatives from various internet service providers, state agency officials, legislators, and certain broadband-related stakeholders. The council convenes quarterly.[262]

The IOB keeps stakeholders updated through regular webinars and newsletters, which are produced and distributed in cooperation with the Illinois Extension and Benton Institute.

4.1.2. Stakeholder engagement approach for BEAD and DE programs

To create the IL SDEP and Connect Illinois BEAD Five-Year Action Plan, the Illinois Office of Broadband's stakeholder engagement process involved listening to, understanding, and collaborating with a broad range of broadband and digital equity stakeholders. The IOB's aims were to: (1) assess and understand needs and barriers, (2) inventory and map existing broadband assets, and (3) learn what works.[263] With this in mind, the IOB set three objectives for its engagement of key stakeholders:



During the stakeholder engagement process, Illinois involved five stakeholder groups based on the groups mentioned in the BEAD Notice of Funding Opportunity: (1) government entities, including local government bodies and state agencies; (2) service providers; (3) other private companies, including small businesses; (4) non-profits and

community organizations; and (5) the residents and the organizations that serve them, with a focus on covered populations. [264]

To determine which organizations and entities from these groups to target and engage throughout the stakeholder engagement process, the IOB and IBL identified, catalogued, and involved its existing partners and supporters throughout the state (Section 4.1.1). These practitioners and partners included persons and organizations who have previously engaged with the Illinois Broadband Lab during webinars or existing programming. Partnerships were key to the IOB and IBL for scaling and expanding programming efforts; these partnerships were leveraged during plan development to gain additional perspectives on the needs and best practices related to digital equity in Illinois.

When planning for stakeholder engagement, the IOB and IBL reviewed the distribution of covered populations and broadband metrics to understand the diversity of Illinois's regions before engagement began. The Northeast and Northern Stateline regions have relatively high proportions of individuals with low English literacy, racial minorities, immigrants, and indigenous persons. The Southern region has low rates of broadband adoption and device access, as well as relatively high proportions of unserved Broadband Serviceable Locations (BSLs), individuals with incomes less than 150% of the federal poverty line, individuals with disabilities, and veterans. The Southeast region has low rates of broadband adoption and relatively high proportions of unserved Broadband Serviceable Locations, individuals with disabilities, and aging individuals.

Figure 36: Summary statistics on broadband metrics and covered populations across the 10 regions of Illinois.

Legend[1]
Top 2 highest proportions
Above population average

	Broadband metrics			Share of each covered population as a proportion of total regional population								
	Unserved	Broad-band adoption[1]	Access to devices	Covered pop.	Covered households	Aging	Incarcerated	Veteran	Ind. with disabili-ties	Ind. with language barrier[1]	Racial or ethnic minority	Rural
Northeast	1%	76%	94%	75%	19%	20%	0.2%	3%	10%	23%	48%	6%
Northern Stateline	2%	68%	91%	78%	23%	25%	0.3%	6%	14%	18%	27%	29%
Northwest	6%	63%	91%	91%	20%	27%	1.4%	7%	15%	15%	17%	72%
North Central	6%	67%	92%	76%	20%	23%	0.7%	6%	13%	12%	17%	39%
East Central	8%	65%	92%	85%	25%	21%	0.7%	5%	12%	16%	25%	50%
Central	9%	63%	90%	84%	22%	26%	1.9%	7%	16%	13%	15%	54%
West Central	6%	60%	87%	88%	23%	27%	2.0%	7%	17%	14%	12%	69%
Southeast	24%	58%	90%	97%	24%	26%	2.2%	6%	18%	14%	7%	94%
Southern	23%	49%	87%	98%	27%	26%	2.1%	7%	20%	15%	13%	95%
Southwest	8%	68%	91%	81%	20%	24%	0.9%	8%	14%	14%	22%	44%
Illinois average	**5%**	**72%**	**93%**	**78%**	**20%**	**22%**	**0.5%**	**5%**	**12%**	**21%**	**39%**	**21%**

1. For broadband adoption and devices access: darkest color indicates lowest proportions, middle color indicates below state average, and light grey indicates above state average
2. Includes Black or African American, American Indian and Alaskan Native, Asian, Native Hawaiian and other Pacific Islander, Some other race, Two or more races, and Hispanic populations

Covered populations excluded: Justice-impacted individuals, LGBQT+ individuals, women, and rural residents
Units used for analysis: BSLs: unserved; Households: broadband adoption and access to devices; Individuals: all covered populations
Source: US Census 2021 ACS 5-Year, FCC Maps, Digital Equity Act Population Viewer (link)

To engage members of these stakeholder groups, Illinois led a multi-channel stakeholder engagement process. This effort began with individual conversations and briefings with local legislators and government officials about current broadband efforts across Illinois. The state invested in various activities to facilitate an inclusive stakeholder engagement process that would reach stakeholders who have historically been left out of state planning processes. To engage stakeholders from across Illinois, the state conducted outreach efforts through the following channels during development of the IL SDEP and the Connect Illinois BEAD Five-Year Action Plan:

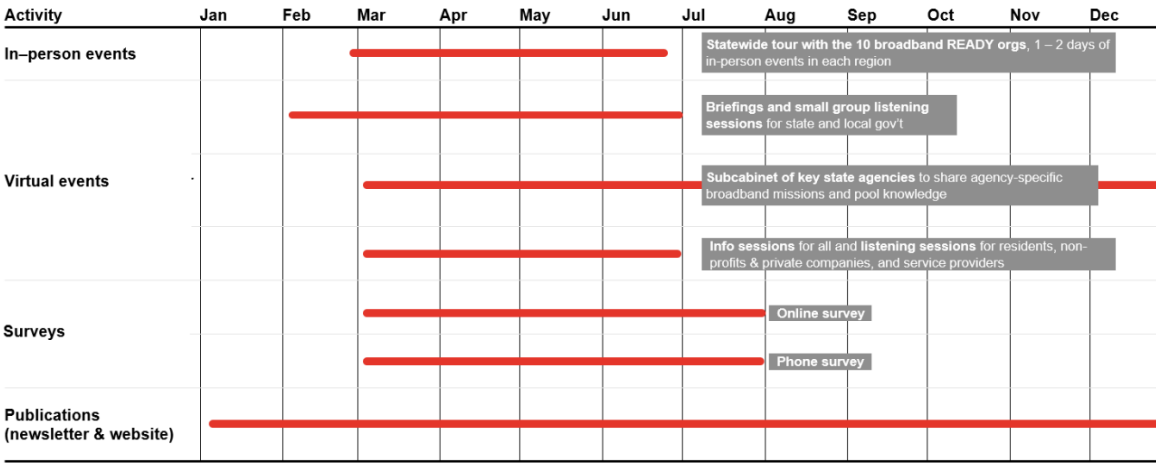
In-person events. Through a statewide listening tour, several stakeholder groups—including residents, non-profits, community organizations, small businesses, and local governments—were invited to participate in in-person listening sessions held in local Illinois communities.

Virtual events. State government agencies were engaged through the Interagency Broadband Working Group, which was established at the beginning of the stakeholder engagement process. The broadband subcabinet met regularly to discuss federal funding opportunities and to bring in agency leaders with a stake in closing the digital divide. Local governments could also choose to participate in small group listening sessions. The Director of the IOB hosted individual conversations with legislators and local government leaders. Briefings on the IOB and IBL for local governing bodies (e.g., city councils and county boards) were offered as follow-ups to one-on-one conversations. Additionally, virtual listening sessions were hosted for key stakeholder groups to provide updates on the Office of Broadband and Illinois Broadband Lab activities. These virtual sessions also gathered feedback on digital equity and broadband-related experiences. The state hosted four virtual listening sessions, one of which was facilitated in Spanish. Of the three sessions in English, one targeted residents, one targeted local organizations, and one targeted internet service providers.

Surveys. The IOB and IBL administered phone and online surveys. The online survey was available to members of all stakeholder groups so that they could share their experience in deploying, using, and promoting broadband. The phone survey was administered to a statistically significant sample of Illinoisians. Additionally, the state administered a survey specifically targeting community anchor institutions (CAIs) to learn about their connectivity and how they provide broadband access to the community. The state also specifically surveyed public housing authorities (PHAs) to understand the challenges, barriers, and benefits related to broadband access for covered households.

Publications. The new Illinois Broadband Lab website and social media platforms were launched to disseminate information about stakeholder engagement efforts and updates on the federal funding application process. Additionally, the bi-weekly "Illinois Broadband Connections" newsletter published by the Benton Institute in partnership with the Office of Broadband includes updates on stakeholder engagement efforts.

Figure 37: The IOB and IBL launched a multi-channel stakeholder engagement process during the drafting of the IL SDEP and will continue engaging with stakeholders once the IL SDEP is complete.



The goal of the in-person listening sessions and phone survey was to provide a forum that could reach stakeholders—especially among covered populations—that may currently lack broadband access and to engage local residents, non-profits, and community organizations. In-person outreach was organized around the Illinois Department of Commerce Economic Development Regions, which covers all 102 counties in the state. The in-person resident and non-profit engagement events were planned around the Economic Development Regions in Illinois. Each region has an existing Broadband READY program, which is housed under the Office of Broadband. The Illinois Broadband Lab planned engagement events for residents and non-profits in partnership with the Broadband READY team, local government representatives, the University of Illinois Extension, and local organizations. Through these partnerships, Illinois built upon existing broadband-related efforts in the community and engaged stakeholders through organizations they were familiar with.

- The IL SDEP incorporates the feedback received from stakeholder engagement activities in the following sections in this document: (1) Section 2.2 – Alignment with

Existing Efforts to Improve Outcomes, (2) Section 3.1 – Asset Inventory, (3) Section 3.2 – Needs Assessment, and (4) Section 5.0 – Implementation. As it engaged with various stakeholders, the state noted the major concerns, needs, and gaps in broadband equity throughout Illinois. Additionally, the State recorded existing and ongoing community and local efforts across the state related to broadband deployment, access, and equity that contributed to the IL SDEP. The takeaways from the stakeholder engagement efforts conducted as a part of this IL SDEP were used as key input for the Connect Illinois BEAD Five-Year Action Plan. The outcomes of stakeholder engagement efforts are summarized in Section 4.1.2.

The Illinois Office of Broadband and the Illinois Broadband Lab plan to continue engaging stakeholders through channels established prior to stakeholder engagement efforts and through activities begun as part of these efforts. For example, the Illinois Office of Broadband convenes the Broadband Advisory Council quarterly. The council includes representation from various internet service providers, state agency officials, legislators, and certain broadband-related stakeholders. Additionally, the Illinois Office of Broadband plans to continue its Interagency Broadband Working Group. Through this group, the state plans to monitor the implementation of the IL SDEP to ensure that digital services are meeting constituents' needs throughout the state. The Illinois Broadband Lab website and Office of Broadband newsletters (published in partnership with the Benton Institute for Broadband & Society) will continue to be disseminated and updated regularly.

The Interagency Broadband Working Group includes representatives from the broader DCEO, Illinois's workforce agency that coordinates with 22 local workforce areas, the Illinois Department of Labor, Illinois Board of Higher Education (IBHE), and the Illinois Community Colleges Board (ICCB). The DCEO engages with labor organizations and community-based organizations to find the best ways to expand the talent pipeline for key industries, including energy, construction, and transportation.

To accomplish its implementation strategy, the state will continue to convene these organizations—both through the council and independently, as these organizations develop their own strategies to ensure that digital literacy and skill-building are included and aligned among agencies. As previously mentioned, the state plans to also work

closely with the Office of Employment and Training as it develops its WIOA Plans to align workforce development resources across Illinois's key industries and to anticipate demand, including the demand for an expanded, highly skilled workforce to deploy broadband.

The Illinois Broadband Lab and Broadband READY teams will continue to engage the local partners who have been involved in the stakeholder engagement process. The regional Broadband READY teams will participate throughout the stakeholder engagement process so that local partners will be involved throughout and after the implementation of the IL SDEP.

4.1.3. Stakeholder engagement schedule for BEAD and DE programs

Through local coordination and outreach strategies, the state was able to engage a variety of stakeholders both in-personal and virtually. Across the 10 regions, 1,162 residents, local government representatives, and representatives of community-based organizations attended one of the "10-Region Stakeholder Engagement Tour" events (See Appendix 9), and 88 attended virtual sessions. In sum, 1,250 listening session attendees were engaged by the state.

20

Cities

54

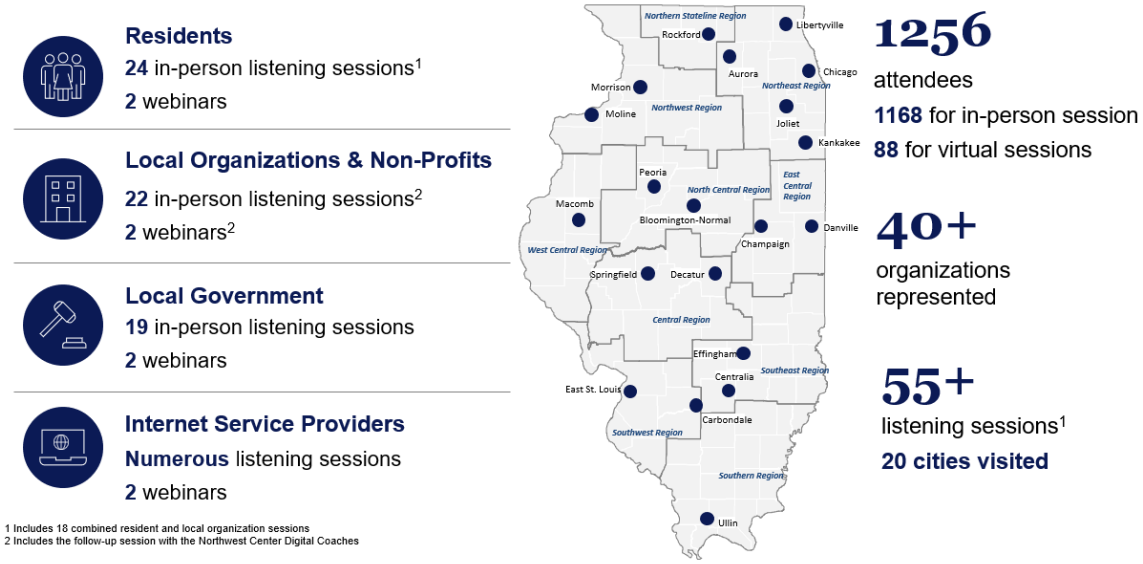
Listening sessions

40

Organizations

The IOB and IBL visited 20 cities across Illinois and hosted 54 listening sessions (Table 9 in the appendix). Over 40 organizations were represented in these listening sessions. Twenty-four in-person listening sessions and two webinars were hosted for residents; 18 of these events were combined with sessions for local organizations and non-profits. Twenty-two in-person listening sessions and two webinars were hosted solely for local organizations and non-profits. Nineteen in-person listening sessions and two webinars were hosted for local government representatives. One virtual webinar was also hosted for internet service providers.

Figure 38. The Illinois Broadband Listening Tour spanned all 10 regions and engaged 1,250+ stakeholders



4.1.4. Collaborating partners in BEAD and DE programs

Appendix 10. Partners identifies the new and existing partners with whom Illinois collaborated in developing the IL SDEP. The state partnered with several of these organizations to host listening sessions during stakeholder engagement efforts for the BEAD and DE Programs. The list is ordered as follows: (1) statewide organizations and state agencies, (2) local or municipal governments and organizations, and (3) academic institutions.

4.1.5. Plan for ongoing stakeholder engagement for digital equity

Ongoing stakeholder engagement is critical to ongoing planning and working toward digital equity. The State Digital Equity Plan incorporates insights from stakeholder engagement sessions that were held during the development of the plan, as well as from the broadband and digital equity plans produced by counties and cities, which are summarized in Section 2.5.

In addition, this SDEP was shared for public comment from December 4, 2023 to January 31, 2024. The feedback received, as well as a description of how the feedback is considered in this plan, is provided in Appendix II.

As described in Section 5, implementation and stakeholder engagement will be critical to the ongoing planning, evaluation, refinement, and execution of the state's digital equity priorities. In addition to the core activities that engage stakeholders in the digital equity system in Illinois, the IOB will continue to work with the State Agency Broadband Working Group, which includes collaborators on workforce topics related to broadband deployment and digital equity.

5

5. Implementation

5.1. Implementation Strategy and Key Activities

5.1.1. Core activities the state plans to establish

Achieving digital equity in Illinois will ultimately result from the collaborative work of thousands of leaders, practitioners, researchers, and program designers across the state, with guidance from experts across the nation. The IOB aspires to lead a program that:

- Learns from and supports the decades of experience of digital equity practitioners, who have been doing the work in and with local communities.
- Supports the development of innovative programs that draw from the practices of social innovation.
- Allows practitioners to test and learn—enabled by data—while respecting digital learners' privacy.
- Evaluates programs holistically, incorporating culturally relevant assessment approaches.

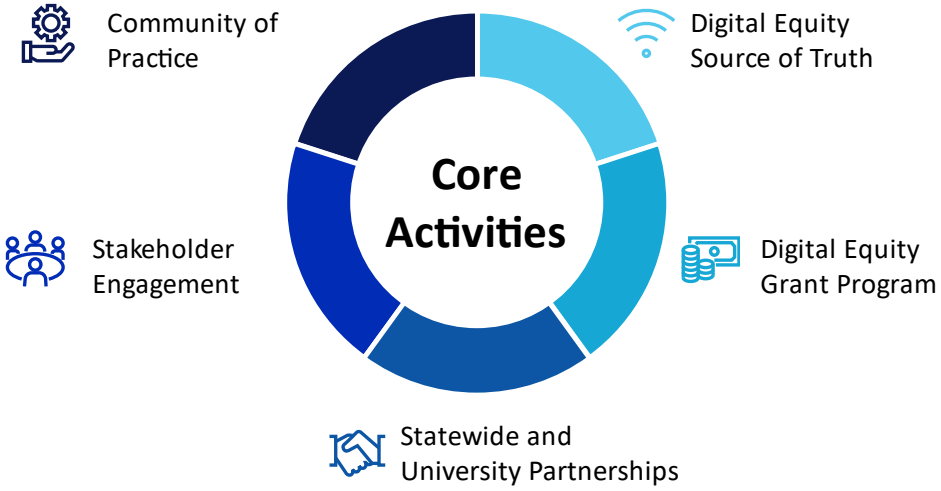
To effectively facilitate digital equity in Illinois, the IBL plans to engage a broad range of digital equity leaders throughout the state. In particular, IBL intends to work with regional and local partners as well as community leaders to achieve the state's digital equity objectives by executing the core activities outlined in this section.

This important work will be led and orchestrated by conducting the following five core activities:

1. Maintain and make available an Illinois digital equity data set to serve as a common source of truth. To enable the state's digital equity practitioners to work from a common fact base, the IOB/IBL will create and maintain a publicly available dataset and tools that can be leveraged by digital equity practitioners around the state, a public-facing dashboard to track key metrics and KPIs, a public-facing asset inventory, and the IL SDEP, which will be updated regularly.
2. Execute a statewide digital equity grant program. The IOB/IBL will facilitate a digital equity grant program to fund digital equity programs around the state. This program will be co-designed with community organizations that can offer critical perspectives and lived experiences. Non-profits and other institutions interested in helping improve digital equity in Illinois can submit a proposal to the IOB/IBL to apply for the grant. Details on the application process, requirements, and timeline will be widely distributed.
3. Lead select statewide programming and university partnerships. The IOB/IBL will coordinate statewide programming on high-priority statewide and regional projects as well as research partnerships with universities, some of which will be coordinated with other state agencies.
4. Conduct ongoing stakeholder outreach and engagement. The IOB/IBL will conduct and support stakeholder engagement across regions and in communities to ensure that the voices of residents and digital equity practitioners continue to shape digital equity priorities and approaches.
5. Support and sustain a digital equity community of practice. The IOB/IBL will foster partnerships and collaboration between new and existing organizations so that they may expand their impact by sharing knowledge and resources.

These core activities are further described in Sections 5.1.1.1 – 5.1.1.5 below.

Figure 39: Core implementation activities of the Illinois Office of Broadband and Illinois Broadband Lab.



Members of the IOB/IBL will lead a subset of core activities, while local and regional leaders will champion the remaining activities. The state also plans to continue its core digital equity and inclusion programming (such as Broadband READY grants, the Digital Equity Capacity Kickstarter Program, Digital Navigators, etc.) to prepare for and complement the forthcoming digital equity programming.

5.1.1.1. Digital equity source of truth

Understanding the current state of digital equity in Illinois, as well as the gap between the current and desired states, depends on data. Determining the impact of programs and progress toward the goal of digital equity requires data as well. Hence, having a common source of truth for the work of digital equity throughout the state—especially the work driven by the IOB and IBL—will be critical to our work.

The IOB and the IBL plan to maintain publicly available dashboards and asset inventories that statewide partners can use to establish baselines and track progress on digital equity in Illinois. These tools will incorporate multiple metrics related to access, adoption, devices, and more—all of which will align with the state's broadband priorities. The resulting information and insights will allow the state to allocate funds appropriately, so that every Illinoisan has access to high-speed internet.

Key steps in creating this digital equity source of truth include:

- Creation and maintenance of a public-facing dashboard to track key metrics and KPIs
- Creation and maintenance of a public-facing asset inventory
- Ongoing updates to the IL SDEP

The IOB/IBL expects that the state will lead the creation and updating of this DE source of truth. The IBL will focus on building and maintaining the public-facing dashboard, asset inventory, and the SDEP. Regional partners will help to build the asset inventory to ensure that the central inventory accurately reflects the programming in their areas.

The IOB/IBL expects the public-facing DE dashboard to contain data and metrics pertinent to all covered populations. This data will likely come from measurements that capture multiple dimensions of digital inclusion, including access, affordability, device access, digital skills and confidence, and degree of utilization. Additionally, the DE dashboard will likely support the ongoing measurement and tracking of goals and objectives at the state, regional, and local levels. The state plans to collaborate with regional stakeholders to identify key datasets for inclusion, to assess and assure data quality and reliability, and to take measures to protect the privacy of populations from whom the data is drawn.

5.1.1.2. Illinois digital equity grant program

The digital equity plans shared by local governments, as well as feedback from local non-profits and residents, have all resoundingly confirmed that adequate resourcing is critical

to successfully achieving the state's digital equity goal. The need for funding is discussed in nearly all of the county and city digital equity plans that were incorporated into this state digital equity plan. Moreover, the need to build capacity for digital inclusion work was conveyed at most listening sessions.

To fill these gaps, the IOB/IBL intends to run a digital equity grant program that will fund community-driven, well designed, and compelling programming. This core activity will:

- Begin with capacity-building prior to the grant application process to provide resources and support for potential applicants. These resources and support will help overcome any barriers to applying and will encourage a diverse set of applicants and grantees to apply.
- Provide funding to support high-performing programs that have a track record of measurable success and support from the communities they serve.
- Seed and support new, innovative programs that take a test-and-learn approach.[265] This activity may include:
  - Designating funds specifically for innovative ("test and learn") programs in addition to established ("tried and true") programs while ensuring that innovative programs have a distinct set of goals and KPIs.
  - Implementing grantee selection criteria favoring applications that use insights from recent pilot programs or similar programs in applicants' communities.
  - Establishing methods to ensure that grantees applying test-and-learn approaches are not penalized for failed experiments but are supported in implementing contingency plans that achieve the intended objectives.
- Encourage collaborative partnerships (e.g., between state agencies and universities):
  - Support the development of new and scaling up of existing partnerships between and among county governments, universities, and community organizations (e.g., community college device distribution programs in partnership with local and county governments).[266,267]

  - The state will consider implementing grantee-selection criteria that favor applications from entities working in partnership with other community organizations or local government partners.

- Institute performance measures and reporting mechanisms that incorporate the principles of culturally relevant evaluation, including but not limited to[268]:
  - Publishing criteria for grant applications, selection, and evaluation for public comment and review.
  - Ensuring that internal review committees are diverse and committed to responding to cultural context.
  - Leveraging various assessment methods in measurement criteria—including quantitative and qualitative outcomes—to evaluate an intervention's impact through benchmarks outlined in published evaluation criteria.
  - Encouraging partnerships with philanthropic and potentially other local government funding sources to drive sustainability.

Across the digital equity plans developed by local governments and feedback provided by residents and non-profits during listening sessions, a range of potential programs have been identified, including:

- Expanding device distribution programs to include additional support (e.g., digital literacy programming, system updates, troubleshooting, and hardware repairs) to improve devices' durability and functionality.[269]
- Individualizing digital literacy curriculum to address a wide range of needs—including one-to-one support, multi-generational training, and task-based training—to meet individuals "where they are."[270]
- User training with respect to cybersecurity, privacy, and other digital safety matters.
- Remote learning or telehealth services/facilities.
- Digital literacy/upskilling (from beginner-level to advanced).
- Computer science, coding and cybersecurity education programs.

- Broadband sign-up assistance and programs that provide technology support.
- Multi-lingual outreach to support broadband adoption and digital literacy.
- Education of incarcerated individuals to promote pre-release digital literacy, job skills, online job acquisition skills, etc.
- Digital navigator programs that are widely available and free, targeting support of all covered populations
- Support for communities to explore, study, and pilot community-driven broadband solutions that enable residents to choose among internet services that meet a local community's needs
- Device refurbishment and distribution to support affordable (new and used) device access
- Workforce development programs that partner with existing digital equity programs (e.g., technical training in device refurbishment)

While the IOB/IBL will run the statewide digital equity grant program, regional and local partners will be engaged to provide technical assistance to local applicants (including capacity-building prior to the commencement of the grant rounds) and will also share relevant regional context with the IBL to support its decision-making. The statewide digital equity grant program can address gaps in digital equity among covered populations by working closely with local and regional organizations that serve specific covered population groups. Local communities and experts who have been doing the work for years are best positioned to drive digital equity and inclusion. The state seeks to empower and build capacity among these leaders and organizations through this grant program. The state also plans to consider applications from new, innovative programs. It will select programs competitively, with significant weight given to community support. Additionally, the state plans to offer training and technical assistance to support applicants before and throughout the grant period of performance. It will encourage participation in the regional community of practice to enable applicants and grantees to learn from and propel each other toward the goal of full digital inclusion and equity.

5.1.1.3. Statewide and university partnerships

While much of the work targeted for support by the IOB/IBL will take place at the local level, the IOB/IBL will lead several initiatives directly, in partnership with state agencies and universities at the statewide level. Examples of current work led by the state office include Broadband READY grants, the Digital Equity Capacity Kickstarter program, and the statewide digital equity navigators' network, among many others. Several of these programs are summarized below:

Broadband READY. A key component of the planned operating model is engaging regional and local partners via the Broadband READY program, which was established in 2020.[271] The Broadband READY program is made up of 10 distinct regions spanning the entire state. Each READY region has local reach and community presence, which the IBL plans to expand through this work. In highly active cities and counties of the state, the IBL will also work directly with established digital equity programs.

In partnership with Broadband READY and active cities and counties, the IBL hopes to:

- Incorporate critical community-level insights from regional and local partners, which will help the state to customize approaches to each region.
- Partner with local, known, accessible points-of-contact throughout the regions to facilitate engagement with community organizations.
- Partner with regional and local capacity-to-scale efforts to reach all members of under-represented communities.
- Standardize statewide processes for collecting data, tracking KPIs, and evaluating programs' effectiveness at the local and regional levels.

Digital Equity Capacity Kickstarter program. In addition to the State Digital Equity Capacity Grant program, the Digital Equity Capacity Kickstarter (DECK) program represents an integral and strategic component of the state's Connect Illinois vision and commitment to broadband access and use. Applications must cover one or more of the following categories related to access, adoption, and use:

- Outreach and adoption: Facilitate awareness of and enrollment in low-cost broadband programs and future broadband subsidy programs.
- Digital skill-building, navigation, and use: Serve as primary point of contact for community members seeking guidance and support for digital literacy, digital skill-building, device access, and home broadband needs; provide advice, assistance, and tech support to community members on the use of digital tools and platforms; and coach, train, and guide residents individually or in groups on how to use their home internet service and devices to meet their day-to-day needs and achieve their goals.
- Community Technology Center access: Establish, administer, and expand Community Technology Centers (CTCs) to support basic computer literacy training programs offered at these centers; and provide access to computers, internet connectivity, and related training to Illinois communities with demonstrable need.
- Access expansion feasibility: Identify and advance a community's vision and goals for broadband access; evaluate market options, consumer demand, and stakeholder alignment; engage internet service providers and build public-sector leadership; and consider next steps for a public-private partnership, grant funding, etc. to increase broadband access and connectivity.

The program announced its first set of awards in September 2023 and will continue to do so on a rolling basis until available funds are depleted. The program will serve as a bridge to the forthcoming state digital equity grant program. [272]

Digital Navigator Program. In September 2023, the IBL launched a statewide cohort of digital navigator fellows to plan and coordinate local digital equity programs. The fellows provide on-the-ground support for digital skills and computer training; raise awareness and participation in affordable broadband plans; support the efforts of local governments, collaborators, and community organizations in identifying local digital equity barriers; launch programs and services that address unique local needs; and ensure that Illinoisans of all incomes and backgrounds can access the benefits of high-speed internet. At least one digital navigator fellow has been assigned to work alongside existing Broadband Regional Engagement for Adoption + Digital Equity (READY) teams in

each of the Illinois Department of Commerce and Opportunity's 10 regions, and the IBL plans to work toward increasing the number of available digital navigator fellows in the long term. Assigned to universities, local governments, or economic development authorities leading Broadband READY efforts within each region, digital navigator fellows support the efforts of local governments, collaborator agencies, and community organizations to identify local digital equity barriers and to launch programs and services that address unique local needs.[273]

Through partnerships with state agencies and universities, the state plans to:

- Collaborate with state agencies on select, shared priorities (such as workforce and education-related priorities) and aligned programs.
- Work with universities to define and execute a research agenda, which may include topics related to broadband use and high-priority focus areas, such as tele-health and digital agriculture.

In addition, the IOB/IBL plans to collaborate with state leaders who lead partnerships with workforce agencies, labor organizations, and institutes of higher education across the state to scale the digital skills workforce. More specifically, the state will engage with relevant stakeholders to:

1. Support state agencies in implementing the digital literacy components of their strategic plans and programming portfolios, like the DCEO's Office of Employment and Training (OET)'s digital literacy components in its State of Illinois WIOA Unified State Plan and workforce programming.[274]
2. Collaborate with manufacturing-focused organizations like the Illinois Manufacturers' Association (IMA) or the IMA Education Foundation (IMAEF) to scale programs that increase digital literacy skills in the manufacturing workforce.[275]
3. Support EV and clean energy-focused initiatives like the state's Electrify Illinois or DCEO's CEJA Workforce Program to integrate digital literacy skill-building into its training programs.[276]

4. Collaborate with state agencies (e.g., DCEO, ICCB, Illinois Department of Employment Security [IDES], and IDHS) to scale digital literacy and workforce development programs.[277]

5. Work with local governments to share best practices and to encourage residents to attend educational workforce development programs through scholarships, internships, and employer incentives (sourced from City of Harvey Broadband Strategic Plan[278]).

6. Work with state agencies (e.g., the IDES, the IDES American Job Centers, and DCEO's workNet Center) to share and promote digital economy opportunities with jobseekers. The Broadband READY grants, the DE Capacity Kickstarter program, the Digital Navigator program, and other collaborations detailed above specifically work to close digital equity gaps among covered populations. Each program takes a targeted, data-based approach, working closely with local and regional organizations, to address the nuances of each gap in specific covered populations across different locations.

7. Work with housing authorities, local housing departments, affordable housing developers, and other state agencies to explore increasing the number of fiber-ready affordable housing units.[279]

5.1.1.4. Stakeholder engagement

Stakeholder engagement will remain a core activity throughout the implementation process so that feedback on IBL programming and practices can influence the direction of programming. To actively engage a diverse group of stakeholders, the IBL will continue to involve representatives from the following groups: (1) government entities, including local government bodies and state agencies; (2) service providers; (3) other private companies, including small businesses; (4) non-profits and community organizations; and (5) residents and the organizations that serve them, with a focus on engaging members of covered populations.

To ensure broad representation, stakeholder engagement will entail a combination of in-person events, virtual events, surveys, and publications. These activities will include continuing quarterly State Agency Working Group meetings, quarterly statewide meetings about broadband deployment and digital equity, and biweekly IBL newsletter updates. At the local level, IOB/ILB will coordinate with regional partners to identify the stakeholder-engagement forums and schedule that best suit each community.

The IOB originally set out to meet four objectives in its engagement of key stakeholders: (1) understanding affected groups' experiences and perspectives to inform the BEAD and State Digital Equity plans; (2) sharing information about the upcoming federal funding opportunity, the work already underway by the Office of Broadband and the Illinois Broadband Lab, and the work ahead; (3) enabling existing partners and forming new partnerships with key stakeholders who are committed to the mission of equitable, inclusive broadband access; and (4) building long-term capacity for all impacted communities and key stakeholders through support, transparency, and feedback. In implementing each of these objectives, the IOB can ensure that local and regional stakeholders serving covered populations are included in outreach for upcoming grant opportunities and other relevant efforts. These stakeholders can inform the IOB on the experiences and perspectives shared by members of covered populations in specific communities, which can deepen partnerships and inform program planning. Going forward, engaging stakeholders as an ongoing part of implementation will allow a variety of perspectives to be incorporated and will facilitate collaboration with the underrepresented communities the IBL seeks to serve. The effectiveness of the IBL's programs will thus be improved, allowing for better digital equity outcomes and helping to address the digital equity gaps facing covered populations across the state.

The IBL plans to partner with local and regional champions to obtain feedback on ongoing digital equity programs, as local or regional champions are likely to have more frequent, in-person contacts with their communities. Many already have developed trusted relationships with practitioners and residents in their regions. The IBL plans to continue its partnership with local and regional champions in addressing the specific gaps affecting covered populations in their communities. As part of this effort, the IBL plans to

periodically convene local and regional champions to gather feedback that it can use to make regular improvements.

5.1.1.5. Community of Practice

Many digital equity practitioners have already convened to support digital equity ecosystems across the state. Increased funding and programming for digital equity will open up opportunities to build systems in which best practices, lessons learned, and potential improvements can be shared, compiled, enhanced, and disseminated. Respondents to the IOB/IBL's survey of non-profits and community organizations expressed support for building communities of practice. In response to the question, "How can the Illinois Office of Broadband/the State of Illinois support you in creating programs to foster internet connectivity among the residents you serve?", 46% of respondents indicated that they would like the state to create forums where they could connect with other organizations with similar goals. Forty-six percent of respondents said that they would like the state to share best practices, and 42% of respondents stated that they would like to receive technical support from the state.[280]

To meet this need, the State of Illinois plans to foster partnerships and collaboration between new and existing organizations so that they may expand their impact by sharing knowledge and resources. Creating partnerships with local digital equity champions will strengthen individual programs and benefit the broader digital equity system as a whole. Leaders of different programs across regions will have a venue for learning about what is working and what is being tested in different parts of the state. Over time, as the state gathers these insights on best practices and effective solutions, the resulting findings can shape programs and improve their outcomes.

The IBL anticipates that "communities of practice" can be supported at a regional level and can include members of local organizations, nonprofits, libraries, universities, community governments, and community members. Through quarterly or monthly meetings, these communities could share findings and best practices, build capabilities within and across the community, and leverage local experts and support networks. The

state expects to convene periodic, statewide meetings to strengthen communities of practice through the following activities:

- Providing opportunities to share insights and best practices so that communities' impact can be felt across the state, to include the codification of best practices.
- Highlighting the impact of, and findings from, the ongoing work of libraries and universities, which can serve as hubs for digital equity practitioners and researchers.
- Reviewing feedback received from communities to identify any common needs or additional areas of support required.
- Encouraging digital equity practitioners to incorporate the FCC's new Broadband Consumer Labels to support customers in navigating among various broadband subscriptions. The regional communities of practice will comprise local leaders and practitioners who focus on the covered populations in that area. The IOB/IBL will proactively engage local organizations that tailor their work to meet the needs of each covered population in each area. These organizations will include libraries, universities (especially Minority-Serving Institutions), non-profits, and other local, community-based organizations with deep relationships in the community that are based on digital inclusion. While some regions may not initially have an obvious stakeholder who focuses on a given covered population, the IOB/IBL will work with the community's local leaders to identify and engage potential partners in the effort.

5.1.2. Measures to ensure a sustainable, effective plan for all state communities

The IOB and IBL aspire to establish a sustainable plan for building and nurturing lasting programs and to create programs that achieve the intended impact, goals, and objectives. The specific activities that IOB/IBL will undertake to reach this goal are summarized below.

Sustainability

To meet goals for sustainability, the IOB will incorporate measures to ensure the effectiveness of (1) the overall State Digital Equity Plan, and (2) the sustainability of individual programs funded by the capacity grant.

For the State Digital Equity Plan, the IOB plans to take the following measures:

1. Secure annual federal funding for the state. The IOB/ILB will ensure that the requirements of the Digital Equity Capacity Grant program are fulfilled annually so that Illinois can obtain its fair share of federal funding for digital equity.
2. Identify and apply for other federal grants. Additional funding sources will enable the IOB to expand its impact and to build programs that last beyond the implementation activities funded by the State Digital Equity Capacity Grant.
3. Choose local partners that have established relationships with covered populations. The IOB understands that fostering digital equity in communities requires trust-based relationships, which are built over time. To evaluate programs for potential funding, the IOB must determine whether applicants have trusted relationships with the populations they seek to serve.
4. Work with local digital equity leaders to support action. The work of digital equity has gone on for many years. Obtaining the insight of experienced experts is critical to ensuring that funds are invested well, and that programs have impact.
5. Maintain and grow public-private partnerships. Partnerships with non-profits, corporates, and philanthropic entities will expand available resources and enhance the potential impact of the state's digital equity efforts.

To ensure the sustainability of individual programs that are funded by the capacity grant, the IOB plans to:

1. Encourage partners to provide matching funds in grant applications. External matching funds can help to ensure the longevity of individual programs by expanding the number of entities that have an interest in the program's success.

2. **Provide technical assistance to grantees.** This assistance would support regional groups of grantees in troubleshooting and addressing the typical challenges community organizations face in delivering digital equity programs. The state hopes that such support will improve execution and outcomes, enabling programs to have greater impact over time.

Effectiveness

To meet these goals, the IOB will incorporate measures to ensure the effectiveness of (1) the overall State Digital Equity Plan, and (2) individual programs funded by the capacity grant.

To enhance the effectiveness of the State Digital Equity Plan, the IOB will take the following five measures:

1. **Assess overall progress toward targets and objectives across programs.** The IOB will measure progress toward original targets to ensure that efforts align with originally stated objectives.
2. **Assess progress over time toward targeted impact.** Beyond the specifically outlined objectives, the state is committed to realizing the overarching vision of deploying broadband and equity programs. To this end, the IOB may form research partnerships with universities to capture the long-term impacts of funded programming on the state's digital equity goals.
3. **Audit financial plans and compare them to actual funding allocation across programs.** Performing periodic audits to compare the planned use of funds to their actual use will help to prevent fraud, waste, and abuse.
4. **Collect feedback for ongoing program updates.** Through core activities like engaging stakeholders and creating communities of practice, the IOB will obtain critical input for shaping the digital equity program.

5. **Incorporate feedback from stakeholders.** The IOB will ensure that feedback received from stakeholders on the program and plan is incorporated into decision-making on programming priorities and goals.

To ensure the effectiveness of individual programs funded through the capacity grant, the IOB will take four measures:

1. **Understand eligible subgrantee qualifications.** Understanding their qualifications will ensure that eventual subgrantees are well-equipped to carry out the programs for which they have received grants.
2. **Select subgrantees that lay out comparatively compelling plans.** When selecting subgrantees, the IOB will publish the criteria it will use to assess applications for digital equity funding. Choosing the most compelling plans will assure progress toward achieving digital equity.
3. **Assess progress and impact using KPIs and financial information.** Ongoing assessment of key program targets will ensure that each program continually prioritizes the most effective approaches.
4. **Conduct oversight and audit activities.** The IOB plans to deploy mechanisms like periodic reporting and site visits to gain comprehensive understanding of grantees' work and how it aligns with the state's overall objectives.

5.1.3. Mechanisms to ensure the plan is regularly evaluated and updated

Critical to the State Digital Equity Plan's overall success—which depends on making measurable progress toward our objectives and goals—is the state's ability to understand the funded programs' outcomes and impact, and then to correct and/or update programs and plans based on those findings.

To accomplish this goal, the IOB will incorporate the following mechanisms to regularly evaluate and update the plan.

Evaluation

Evaluation of the IL SDEP and individual program performance is based on the following assessments:

1. **The trajectory of KPIs that measure the long-term outcomes of digital equity programs:** For operational, leading, impact, and lagging metrics, the state will partner with higher educational entities to assess the impact of state programs on long-term outcomes. By taking this approach, the SDEP aims to assess the impact of both direct and indirect variables on program participants and target populations.
2. **Aggregated performance and/or outputs of the plan with respect to measured goals:** The state will apply a similar approach to ensure that the program is meeting short- and long-term KPI targets. KPI targets may vary for programs taking an innovative approach, and grantees will be asked to provide whole-group statistics and subgroup statistics (e.g., performance specific to groups of shared socioeconomic status, racial and ethnic minorities, etc.) where possible. The state plans to use review panels that include various stakeholder groups when analyzing performance data.
3. **Performance versus plan/target for individual, funded projects:** A review committee will assess each program against impact criteria. The committee will account for the relevant cultural context of each program. Data collection instruments and parameters for acceptable evidence will be reviewed in advance of program implementation to ensure accuracy and alignment.

The IOB recognizes that some approaches to evaluation may not be sensitive to the needs, perspectives and circumstances of ethnic communities. With the support of the Center for Culturally Responsive Evaluation and Assessment (CREA), which is part of the University of Illinois at Urbana-Champaign's College of Education, the IOB/IBL plans to select and apply a culturally responsive framework to its assessment processes.[281] The state plans to implement these principles at each phase of the evaluation and/or assessment processes outlined below. Note that descriptions of each stage of the process are drawn from the framework but are not direct quotes.

Nine phases of culturally relevant assessments can be applied[282]:

1. Preparing for the assessment:
    a. Build a diverse selection of grantees and evaluation committees, with careful consideration of the digital equity program's sociocultural context.
    b. Ensure that team members understand and commit to accounting for the cultural context of all Illinoisians.
2. Engaging stakeholders:
    a. Ensure that engaged stakeholders are representative of the underrepresented communities the grant program seeks to serve so that individuals from all sectors can offer input.
    b. Encourage grantees to share how they would engage with underrepresented communities over the course of the program.
3. Identifying the assessment's purpose and intent:
    a. Evaluate the grant process periodically to ensure that cultural nuances are captured and used to interpret progress and conduct summative evaluations.
    b. Evaluate progress inspired by the grants to determine whether goals and program parameters are appropriate for the target population.
4. Framing the right questions:
    a. Employ mechanisms for responding to concerns raised by key stakeholders regarding the suitability of particular inquiries.
    b. Publish a definition of "acceptable evidence" for public comment on evaluation criteria prior to implementation.
5. Designing the assessment:
    a. Consider quantitative and qualitative formats and how responses to an intervention will be measured before and after testing.

b. Measure the impact of an intervention based on benchmarks outlined in published evaluation criteria.

6. Selecting and adapting instrumentation:
   a. Refine and adapt data collection instruments—even if previously used—to ensure that they accurately relay information about the population.
   b. Address unforeseen reporting challenges as part of mid-year reporting.
7. Collecting data:
   a. Leverage different channels—like surveys—for distribution of data collection instruments.
   b. Provide space in applications for general comments and anecdotal or contextually relevant information.
   c. Institute mechanisms for flagging potential barriers to engagement in applications.
8. Analyzing data:
   a. Convene review panels that include various stakeholder groups to generate fresh findings.
   b. Disaggregate datasets to uncover findings that are buried among whole-group statistics.
   c. Ensure that the internal review committee is committed to responding to **cultural context.**
9. Disseminating and using the results:
   a. Publish grant awardees' names with an explanation of the process and results.
   b. Establish an ongoing public reporting schedule to give the public access to grantees' work.

Updating the plan

To ensure the plan is regularly updated, the IOB will incorporate the following mechanisms:

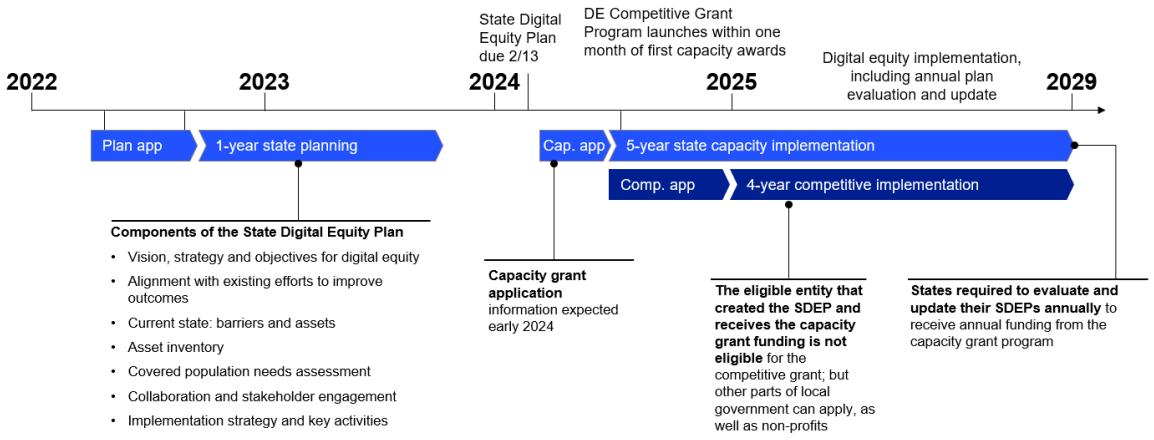
1. **Require multi-year subgrantees to submit periodic reports, including any project/ program modifications:** These reports will be incorporated into the state's revisions to its plan and will allow the IBL to update plans to reflect component programs' anticipated trajectory.
2. **Seek and incorporate feedback for plan updates:** The IBL expects to pair plan updates with stakeholder engagement to allow for public comment on proposed plan updates.
3. **Revise SDEP to reflect new information and ideas:** The IBL will incorporate identified needs, updates on progress, stakeholder feedback, and revised approaches and goals to ensure that plan updates are both comprehensive and aspirational.

These principles for program evaluations and updates ensure that programs remain aligned with the state's goals and objectives for the IL SDEP.

5.2. Timeline

The State of Illinois has begun to map out the timeline for implementing the IL SDEP. The submission of the IL SDEP completes one year of state planning after receiving the State Digital Equity Planning Grant. The state plans to complete the application for the Digital Equity Capacity-Building Grant Program in early 2024 and to initiate a yearly subgrantee process that aligns with the yearly release of capacity funds over five years. Currently, little information has been made public about the timeline of the Digital Equity Capacity-Building Grant Program NOFO. Any delays in this process could impact the estimated timeline of the IL SDEP.

Figure 40: Expected timeline of NTIA Digital Equity Programs



To deliver on this overall timing, the state has assigned an execution timeline and milestone dates to key tasks under each of the core activities, as shown in the following sections:

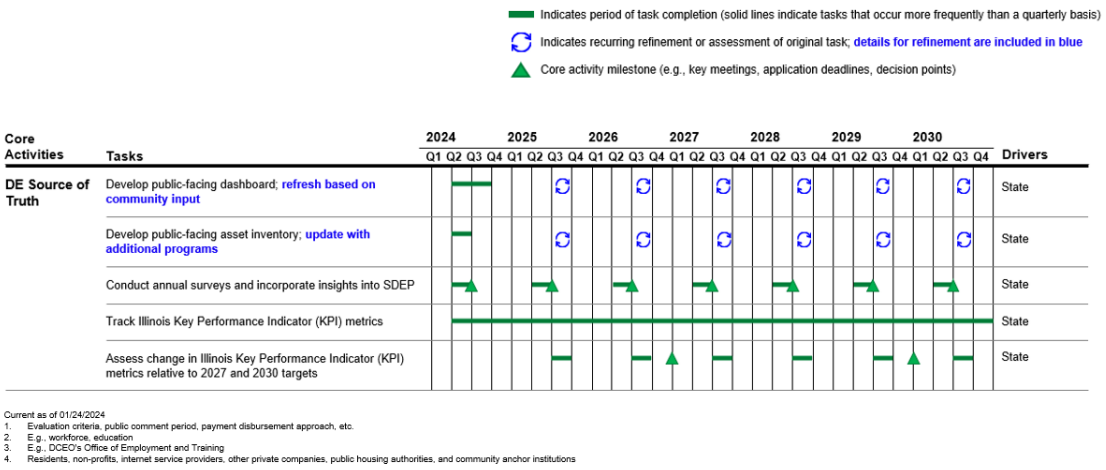
Timeline for 5.1.1.1 Digital equity source of truth

The timeline for the digital equity source of truth, as shown in **Figure 41**, outlines five activities:

1. Develop a public-facing dashboard tool, including methods for data storage, organization, and analysis. After its initial creation, the design of the dashboard can be refined through community feedback.
2. Compile a public-facing inventory of assets that can be displayed on the dashboard. After the initial inventory is created, additional programs may be added based on community input.
3. Conduct surveys annually and incorporate survey results into the SDEP.
4. Track Illinois's KPIs, as defined in Section 2.3, using the data on the dashboard.

5. Assess progress of the KPIs relative to the 2027 and 2030 targets—also outlined in Section 2.3—using data compiled on the dashboard.

Figure 41. Timeline for delivering the digital equity source of truth



Timeline for 5.1.1.2 Digital equity grant program

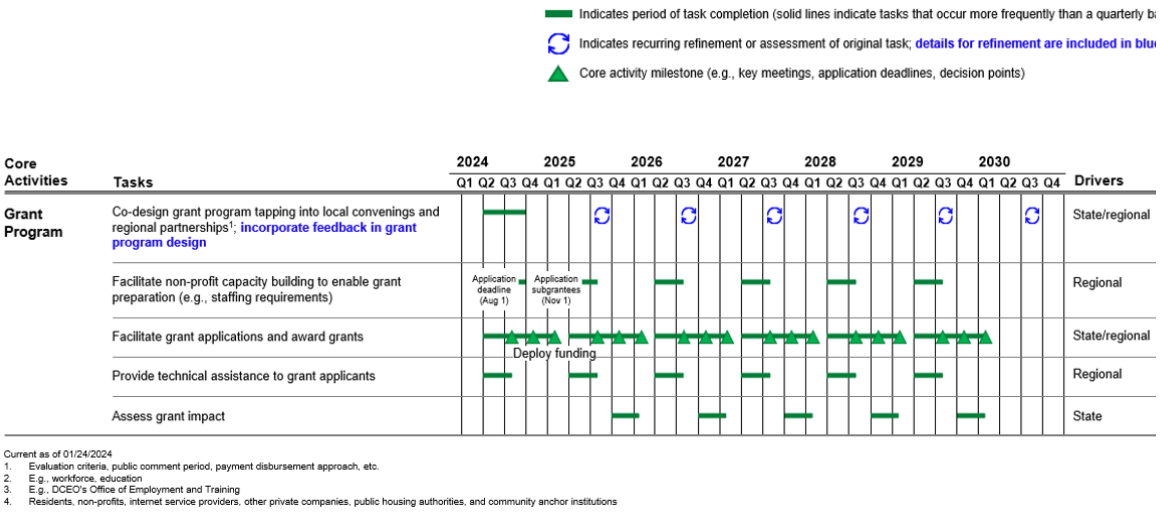
The digital equity grant program timeline displayed in **Figure 42**outlines five activities that will be undertaken at both the state and regional level:

1. Co-design the grant program (e.g., evaluation criteria, payment distribution approach) through close partnership with local groups and regional partnerships. After the initial program is designed, the state can incorporate feedback from community stakeholders in designing the program.
2. Facilitate capacity-building resources and training to prepare and encourage a diverse set of non-profits and other eligible entities to apply for grants. Capacity-building may address topics such as staffing for producing positive digital equity outcomes from the program's funding, writing an effective grant application, managing a budget,

expense reporting, and more. Capacity-building efforts can be implemented regionally while working closely with local non-profits.

3. Facilitate the application process and award grants to selected applicants across the state.
4. Host a technical assistance session to share information about the grant process at a regional level with non-profits across the state.
5. Regularly assess the grant's impact on funded programs and their efforts to bridge the digital divide in communities across Illinois.

Figure 42. Timeline of proposed path to delivery of digital equity grant program



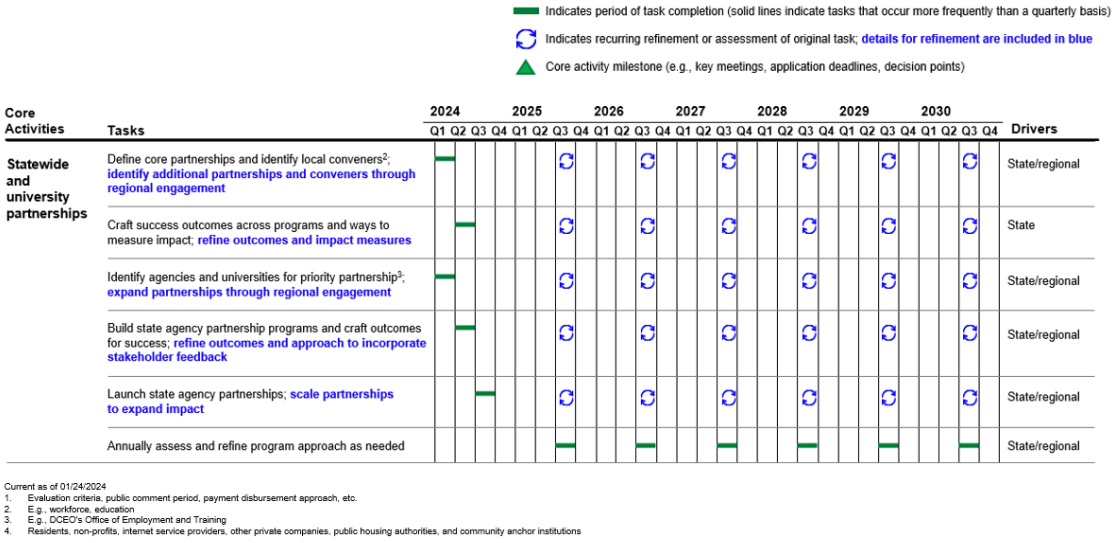
Current as of 01/24/2024
1. Evaluation criteria, public comment period, payment disbursement approach, etc.
2. E.g., workforce, education
3. E.g., DCEO's Office of Employment and Training
4. Residents, non-profits, internet service providers, other private companies, public housing authorities, and community anchor institutions

Timeline for 5.1.1.3 Statewide and university partnerships

The timeline displayed in **Figure 43**outlines six state- and regional-level activities to support statewide and university partnerships:

1. Define core partnerships and identify local organizers who specialize in advancing specific outcomes (outcomes related to the workforce or education, for example). After the initial identification of partnerships, additional partners and organizers may be added through regional engagement efforts.
2. Define outcomes that would indicate success for the programs facilitated by partnerships and identify ways to measure impact. The initial definition of successful outcomes and measures of impact may be refined later to track programs and initiatives more effectively.
3. Identify government agencies (e.g., DCEO's Office of Employment and Training) and universities for priority partnership. Additional partnerships may be added through regional engagement.
4. Build state agency partnership programs and define successful outcomes. Program approaches and successful outcomes may be refined to incorporate stakeholders' feedback.
5. Launch state agency partnerships and scale programs and collaborations over time to expand their impact on the communities they serve.
6. Annually assess and refine the program approach based on stakeholder feedback and best practices.

Figure 43. Timeline of proposed path to delivery of statewide and university partnerships



Timeline for 5.1.1.4 Stakeholder engagement

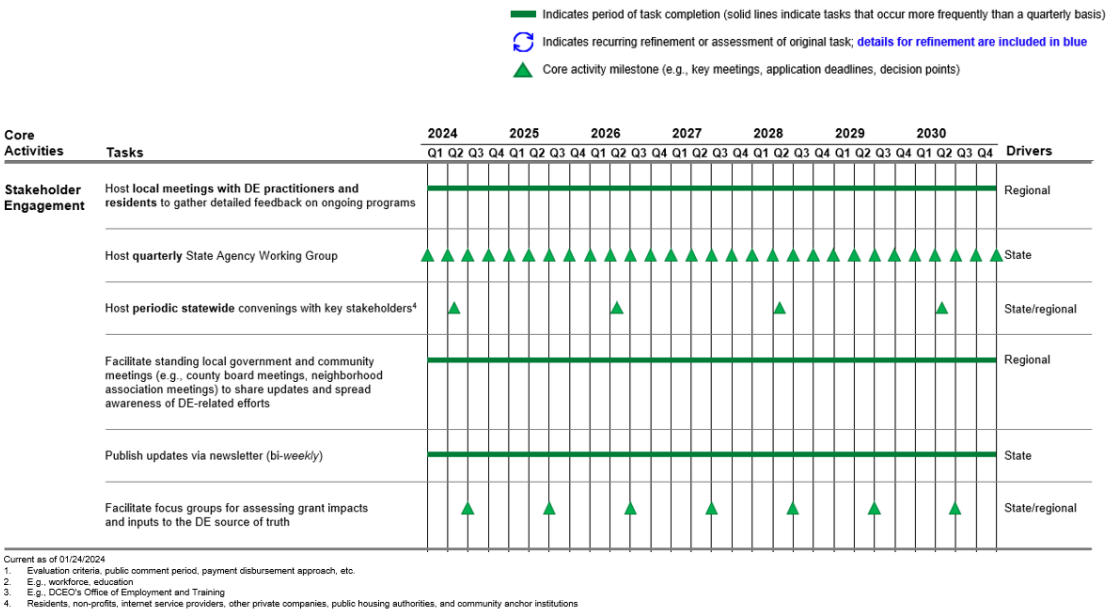
The timeline displayed in **Figure 44**outlines six activities that will be driven at both the state and regional levels to support stakeholder engagement across the state:

1. Host local meetings with digital equity practitioners and community residents to gather detailed feedback on ongoing programs and their impact on the communities they serve.
2. Host Interagency Broadband Working Group sessions quarterly to facilitate ongoing conversations and collaboration among state agencies.
3. Host statewide meetings with key stakeholders (e.g., residents, non-profits, ISPs, small businesses, public housing authorities, and CAIs) periodically.
4. Facilitate standing meetings with local government and community members (e.g., county board meetings, neighborhood association meetings). These meetings will

provide the opportunity to share digital equity-related updates and raise awareness of new programs and initiatives that can benefit communities.

5. Publish a biweekly newsletter to disseminate digital equity-related updates.
6. Facilitate focus groups to assess the impact of grants and to gather input for the digital equity source of truth, thus ensuring that feedback from key stakeholders (e.g., residents, non-profits, ISPs, small businesses, public housing authorities, and CAIs) will be incorporated.

Figure 44. Timeline of proposed path for stakeholder engagement

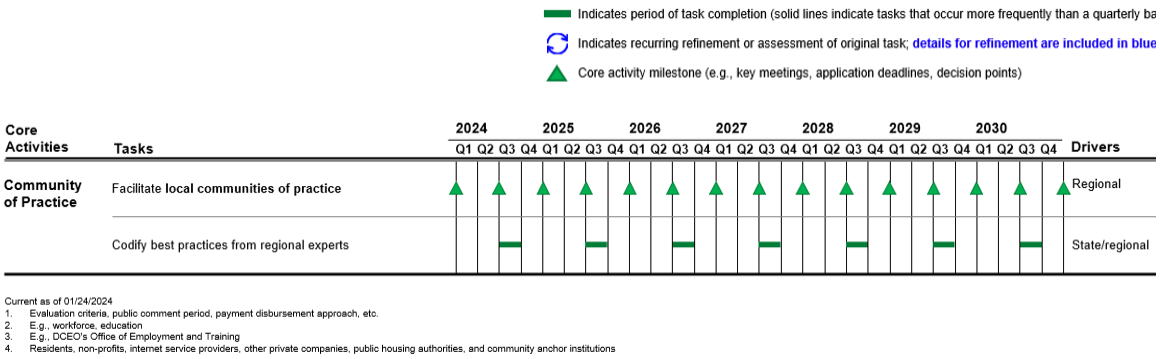


Timeline for 5.1.1.5 Communities of practice

The timeline displayed in **Figure 45**outlines two activities to be conducted at both the state and regional levels to support communities of practice across Illinois:

1. Facilitate local communities of practice by closely engaging regional organizers, digital equity practitioners, non-profits, and community stakeholders.
2. Codify best practices shared by regional experts and incorporate those practices into implementation activities accordingly.

Figure 45. Timeline of proposed path to support communities of practice



6

6. Conclusion

The IL SDEP outlines the State of Illinois's priorities and goals for improving broadband adoption by all Illinoisans through broadband availability and affordability, online accessibility and inclusivity, digital literacy, online privacy and cybersecurity, and device availability and affordability.

This plan has been informed by direct engagement with stakeholders throughout Illinois, including residents, community organizations, internet service providers, local governments, and state agency representatives. Insights gained from stakeholder engagement and statewide research efforts have laid bare the digital divide in the state of Illinois and its disproportionate effect on residents who belong to covered populations. The goal of this plan is to enable populations with the education and tools necessary to fully leverage digital assets that are powered by reliable, high-speed internet, so that all Illinoisians can fully participate in the digital economy and the digital ecosystem.

Questions or feedback? Email: broadband@Illinois.gov.

Interested in getting involved or staying engaged? Visit bitl.y/IOBpartner to get in touch!

Endnotes

1 Illinois Department of Commerce and Economic Opportunity, Office of Broadband

2 Illinois Broadband Lab

3 "Chicago's Equity Statement of Principles," Chicago Office of Equity and Racial Justice

4 U.S. Census Bureau: Quick Facts on Illinois

5 Languages in Illinois, Statistical Atlas

6 Illinois Defense Manufacturing Consortium, University of Illinois Chicago

7 American Community Survey 5-Year Data, 2021

8 Broadband-serviceable locations are defined by the FCC as "a business or residential location in the United States at which mass-market fixed broadband Internet access service is, or can be, installed." (FCC)

9 FCC National Broadband Data Map accessed in July 2023

10 Based on the statewide resident internet use survey. More details in Section 3.2 and Appendix.

11 American Community Survey 2021 5-Year Estimates

12 Based on the statewide resident internet use survey. More details in Section 3.2 and Appendix.

13 Based on the statewide resident internet use survey. A visualization of covered populations in comparison with national averages is available in Section 3.2, Figure 28.

14 Digital Equity Act Population Viewer

15 Based on the statewide resident internet use survey. More details in Section 3.2 and Appendix.

16 U.S. Census 2021, ACS 5-Year data

17 Ibid.

18 Ibid.

19 U.S. Census 2021, ACS 5-Year data

20 Ibid.

21 Ibid.

22 Based on conversations with Illinois residents during stakeholder engagement events

23 American Community Survey 2021 5-Year Estimates

24 Ibid.

[25] Based on conversations with Illinois residents during stakeholder engagement events and review of existing regional digital equity plans

[26] List of local digital equity plans was identified through public search and may not be exhaustive.

[27] A broadband system is scalable when it has the capacity to accommodate a greater amount of usage than initially designed for without impacting the performance of the service delivery to its subscriber base.

[28] Connect Illinois Broadband Strategic Plan, February 2020; Connect Illinois Digital Equity and Inclusion, October 2021; Illinois BAC Annual Legislative Report, January 2023

[29] Illinois Broadband Advisory Council Annual Legislative Report, January 2023

[30] Illinois Broadband Advisory Council Annual Legislative Report, January 2023

[31] Digital Inclusion Week: Highlights Across Illinois, Illinois Broadband Connections

[32] The IBL-led Broadband READY Grant Program was launched in 2021 to support qualified regional entities to develop and deliver programs that address broadband inequalities. Grantees convene inclusive and regionally representative Broadband READY Teams. Program focuses on providing eligible residents across the state with affordable computing devices and broadband services, as well as digital skills training.

[33] Working Groups, BAC, DCEO

[34] Working Groups, BAC, DCEO

[35] Illinois Economy and Build the Workforce of the Future, DCEO, October 2019

[36] Working Groups, BAC, DCEO

[37] Based on conversations with the DCEO Office of Employment and Training

[38] Illinois State Board of Education 2020 – 2023 Strategic Plan

[39] A Thriving Illinois: Higher Education Paths to Equity, Sustainability, and Growth, IBHE, 2021

[40] Expanding Career Pathway Opportunities in Adult Education, Strategic Directions for Illinois, Strategic Five-Year Plan 2018 – 2023, ICCB

[41] Working Groups, BAC, DCEO

[42] Ibid.

[43] Covered populations are individuals who live in covered households, including aging individuals, veterans, individuals with disabilities, individuals with a language barrier (including those who are English learners and have low levels of literacy), members of racial or ethnic minority groups, and individuals who primarily reside in a rural area. Also included are incarcerated individuals (other than those incarcerated in a federal correctional facility).

[44] U.S. Department of Interior Indian Affairs Federally Recognized Tribes, as of 2023.

[45] Computer Literacy: Knowledge and Skill Development Continuum

[46] East Central Illinois Preliminary Report – August 2022

[47] Hancock County Broadband Breakthrough

[48] Digital Equity Strategic Plan

[49] ConnectWaukegan - Fixed Wireless Proof of Concept

[50] 2020 Waukegan Community Assessment

[51] Broadband Infrastructure Engineering Assessment Report

[52] Housing Authority of Champaign County Broadband Access

[53] Cook County Digital Equity Action Plan

[54] Technology Strategic Plan

[55] Chicago Digital Equity Plan

[56] City of Harvey Broadband Strategic Plan

[57] Definitions, National Digital Inclusion Alliance

[58] Affordability Connectivity Program, Federal Communications Commission

[59] This figure represents a preliminary accounting of digital equity programs, which are approximately localized to counties where they may be based, targeted, or assumed to be targeted.

[60] In response to the question, "What are the biggest challenges faced by the organization when trying to increase access to affordable internet, internet-capable devices, and digital skills?" in the IBL online survey of non-profits and community organizations, analyzed on 09/01/2023, with N = 28.

[61] In response to the question, "How can the Illinois Office of Broadband or the State of Illinois support you in creating programs to foster internet connectivity among the residents you serve?" in the IBL online survey of non-profits and community organizations, analyzed on 09/01/2023, with N = 26.

[62] American Community Survey 5-Year data, 2021

[63] FCC National Broadband Data Map accessed in July 2023

[64] Based on the statewide resident internet use survey. More details in Section 3.2 and Appendix

[65] American Community Survey 2021 5-Year Estimates

[66] Based on the statewide resident internet use survey. More details in Section 3.2 and Appendix

[67] Covered population as defined by the State Digital Equity Planning Grant Program Notice of Funding Opportunity, NTIA

[68] U.S. Department of Interior Indian Affairs Federally Recognized Tribes, as of 2023.

[69] NTIA Internet Use Survey, 2009 to 2021. Variable = No home internet use by anyone in household

[70] NTIA Internet Use Survey, 2009 to 2021. Variable = No home internet use by anyone in household

[71] Connect Livingston Broadband Plan, Accelerate Illinois Round 2

[72] Kankakee County Broadband Plan, Accelerate Illinois Round 2

[73] Jackson County Broadband Plan, Accelerate Illinois Round 1

[74] Champaign County Internet Survey, Connect Champaign County, July 2022

[75] The Historic Village of Elsah, Accelerate Illinois Round 1

[76] Knox County Broadband Plan, Accelerate Illinois Round 1

[77] Lake County Broadband and Digital Equity Action Plan, Current State Assessment, Appendix C, page 51

[78] Peoria-Woodford Broadband Planning Report, Accelerate Illinois Round 2

[79] Effingham Listening Session, March 22

[80] City of Chicago Listening Session, April 19

[81] City of Chicago's Digital Equity Plan, January 2023

[82] Effingham Listening Session, March 22

[83] Bloomington-Normal Listening Session, Central Region, May 16

[84] City of Chicago Listening Session, May 3

[85] U.S. Census Bureau ACS 2021 5-Year Estimates

[86] Tazewell County Broadband Planning, ICC Round 2

[87] East Central Listening Sessions, April 12-13

[88] Chicago Listening Session, April 19

[89] Virtual Listening Session, May 4

[90] Virtual Webinar, May 9

[91] Virtual Webinar, May 4

[92] Champaign Broadband Infrastructure Engineering Assessment Report, March 2022

[93] Connect Lake County Digital Equity Strategic Plan, prepared for Connect Waukegan, April 2022

[94] East St. Louis Listening Session, March 16

[95] Bloomington-Normal Listening Session, May 16

[96] City of Chicago Listening Session, April 19

[97] Ibid.

[98] Ibid.

[99] Chicago Digital Equity Plan, January 2023

[100] City of Chicago Listening Session, May 3

[101] The survey consisted of randomly sampled respondents and was weighted to match the demographics of Illinois—accounting for region, age, income, and ethnicity. The phone survey is a representative sample, and the findings could be extrapolated to the population.

[102] City of Chicago Listening Session, April 19

[103] City of Chicago Listening Session, April 19

[104] Ibid.

[105] City of Aurora Listening Session, May 18

[106] North Central Listening Session, March 16-17

[107] City of Chicago Listening Session, April 19

[108] Virtual Webinar, May 9

[109]North Central Listening Session (Peoria), May 16-17

[110] City of Chicago Listening Session, May 3

[111] Northeast Listening Session, May 18

[112] Central Listening Session, April 25-26

[113] Virtual Webinar, May 9

[114] Virtual Webinar, May 9

[115] Broadband Breakthrough: Infrastructure Planning for Rural Farming Communities

[116] Ibid.

[117] Impact of Broadband Penetration on U.S. Farm Productivity, CFPB

[118] Broadband Internet and New Firm Location Decisions in Rural Areas, American Journal of Agricultural Economics

[119] "Who we are," Illinois Farm Bureau

[120] Champaign County Broadband Infrastructure Assessment Report, March 2022

[121] Broadband for All – Ogle, Lee, Boone, and Putnam Counties, Accelerate Illinois Round 2

[122] East Central Listening Sessions, April 12-13

[123] IFB Weekly: Most Recent Talking Points as of 3/13/23, Illinois Farm Bureau

[124] Southwest Listening Sessions, March 15-16

[125] East Central Listening Sessions, April 12-13

[126] Submitted by The Silicon BlackGroup | Cybersecurity Services during the Illinois SDEP public comment period.

[127] Webinar, May 9

[128] East Central Listening Sessions, April 12-13

[129] Southeast Listening Sessions, March 22

[130] Southwest Listening Sessions on March 15-16

[131] East Central Listening Sessions, April 12-13

[132] Bond County Broadband Initiative, Accelerate Illinois Round 2

[133] Knox County Broadband Plan, Accelerate Illinois Round 1

[134] Southwest Listening Sessions, March 15-16

[135] Affordable Connectivity Program Wind-Down Fact Sheet, FCC

[136] Ibid.

[137] Ibid.

[138] Methodology from Estimating participation in the Affordable Connectivity Program (ACP), October 2022; "Households eligible" figures are equivalent to the number of households at or below 200% of the Federal poverty level, plus those who receive Medicaid or government medical assistance, Supplemental Security Income, public assistance, or SNAP benefits.

[139] U.S. Census Bureau ACS 2021 5-Year Estimates

[140] Calculated based on data from USAC ACP Enrollment and Claims Tracker, September 2023, and methodology from Estimating participation in the Affordable Connectivity Program (ACP), October 2022

[141] Institute for Local Self-Reliance's ACP dashboard

[142] USAC ACP Enrollment and Claims Tracker, September 2023

[143] Calculated based on data from USAC ACP Enrollment and Claims Tracker, September 2023, and methodology from Estimating participation in the Affordable Connectivity Program (ACP), October 2022

[144] Calculated based on data from USAC ACP Enrollment and Claims Tracker, December 2022, and methodology from Estimating participation in the Affordable Connectivity Program (ACP), October 2022

[145] USAC ACP Enrollment and Claims Tracker, December 2023

[146] Market share defined as number of specific provider offerings divided by all provider offerings in the state. Data based on FCC National Broadband Map, accessed March 2023.

[147] For each provider, their offerings' share is indicated based on the total number of state providers' offerings in Illinois. The full price breakdown for 100 Mbps service is also included, based on the price available on the provider's website. Green checks indicate that ACP is offered.

[148] Whiteside County Broadband Plan, Accelerate Illinois Round 1

[149] Southwest Listening Sessions, March 15-16

[150] Central Listening Session, April 26

[151] City of Chicago Listening Session, May 3

[152] City of Chicago Listening Session, May 3

[153] City of Chicago Listening Session, May 10

[154] City of Chicago Listening Session, May 3

[155] Connect Lake County Digital Equity Strategic Plan, Prepared for Connect Waukegan, April 2022

[156] Northeast Listening Session, May 18

[157] North Central Listening Session, May 16-17

[158] Connect Waukegan

[159] Chicago Digital Equity Plan, January 2023

[160] Cook County Digital Equity Action Plan, October 2023

[161] Joliet Listening Session, May 31

[162] Universal Broadband in Illinois: Studying the Costs of Providing Free and Affordable Service for All Residents, December 2020

[163] Adapted from the DCEO's ACP Outreach Grant Application

[164] FCC Announces $66M in Affordable Broadband Outreach Grants, March 2023

[165] City of Chicago Digital Equity Plan, January 2023

[166] North Central Region Broadband READY Report, Bloomington Normal EDC

[167] Defeating the Digital Divide: How Chicago Can Achieve True Digital Equity, Kids First Chicago

[168] Connect Lake County Digital Equity Strategic Plan, Prepared for Connect Waukegan, April 2022

[169] Southeast Listening Sessions, March 22

[170] Southern Listening Sessions, March 1-2

[171] Southwest Listening Session, March 15-16

[172] Ibid.

[173] See estimation in previous paragraphs and **Figure 25** and **Figure 26** for more details.

[174] Digital Equity Act Population View, U.S. Census Bureau

[175] U.S. Census 2021, ACS 5-Year data

[176] Digital Equity Act Population View, U.S. Census Bureau and U.S. Census 2021, ACS 5-Year data (for racial and ethnic minority breakdowns)

[177] Analysis by the following covered populations are not included due to insufficient responses: veterans, individuals with disabilities, and incarcerated individuals (defined by the state to include returning residents and justice- and system-impacted individuals).

[178] Disrupt Disparities: Challenges and Solutions for 50+ Illinoisans of Color, AARP Illinois, 2020

[179] Chicago Digital Equity Plan, 2023

[180] City of Chicago Listening Session, May 10

[181] Ibid.

[182] Statewide Virtual Listening Session, May 09

[183] Submitted by the Hispanic Federation during the Illinois SDEP public comment period.

[184] City of Chicago Listening Session, May 10

[185] Ibid.

[186] City of Chicago Listening Session, April 19

[187] Greater Chinatown Community Conversation from the Chicago Digital Equity Council

[188] Ibid.

[189] Individuals aged 60 or older

[190] Disrupt Disparities: Challenges and Solutions for 50+ Illinoisans of Color, AARP Illinois, 2020

[191] Submitted by Illinois resident during the Illinois SDEP public comment period.

[192] Submitted by AgeGuide during the Illinois SDEP public comment period.

[193] Submitted by AARP during the Illinois SDEP public comment period.

[194] Submitted by resident during the Illinois SDEP public comment period.

[195] Submitted by AARP during the Illinois SDEP public comment period.

[196] Submitted by Digitunity during the Illinois SDEP public comment period.

[197] Juliet Listening Session, May 31

[198] Statewide Virtual Listening Session, May 09

[199] Centralia Listening Session, March 15

[200] Individuals in households with incomes at or below 150% of the federal poverty line (FPL)

[201] Submitted by Bank On Illinois during the Illinois SDEP public comment period.

[202] Submitted by AARP during the Illinois SDEP public comment period.

[203] Submitted by City of Peoria during the Illinois SDEP public comment period.

[204] Chicago Digital Equity Plan, 2023

[205] Connect Lake County Digital Equity Strategic Plan, Prepared for Connect Waukegan April 2022

[206] Ibid.

[207] "What Have We Learned?" End of Program Evaluation, Illinois Connected Communities Round 2

[208] Bloomington-Normal Listening Session, May 16

[209] Ullin Listening Session, March 1

[210] Ibid.

[211] City of Chicago Listening Session, April 19

[212] Macomb Listening Session, May 3

[213] Ibid.

[214] Southwest Listening Session, March 16

[215] Statewide residential phone survey results used since ACS data does not differentiate between rural and non-rural individuals.

[216] Statistics based on answer to the survey question, "Do you have a subscription to internet service for your home?"

[217] Statistics based on answer to the survey question, "Does your household need more computing devices to allow each person to connect to the internet?"

[218] Who we are, Illinois Farm Bureau

[219] Submitted by the City of Peoria during the Illinois SDEP public comment period.

[220] Shared by a resident during Illinois State Digital Equity Plan public comment period.

[221] Submitted by Peoria resident during the Illinois SDEP public comment period.

[222] Submitted by Bartonville-Mapleton area resident during the Illinois SDEP public comment period.

[223] Hancock County Broadband Breakthrough

[224] Champaign Broadband Infrastructure Engineering Assessment Report, March 2022

[225] Broadband for All – Ogle, Lee, Boone, and Putnam Counties, Accelerate Illinois Round 2

[226] Virtual Listening Session on 5/4

[227] North Central Listening Sessions, May 16-17; Northwest Listening Sessions, May 9-10

[228] Southwest Listening Sessions, March 15-16

[229] East Central Listening Sessions, April 12-13

[230] Ibid.

[231] Knox County Broadband Plan, Accelerate Illinois Round 1

[232] City of Chicago Spanish Speaking Listening Session, April 19

[233] Submitted during the Illinois SDEP stakeholder engagement session

[234] Submitted by Literacy Works during the Illinois SDEP public comment period.

[235] Ibid.

[236] Ibid.

[237] Ibid.

[238] Submitted by Comcast during the Illinois SDEP public comment period.

[239] Broadband READY East Central Region Plan, August 2022

[240] Cook County Digital Equity Action Plan, October 2023

[241] Chicago Digital Equity Plan, 2023

[242] TECHNOLOGY AND DISABILITY, October 2022

[243] A guide to internet accessibility for Americans with disabilities, August 2023

[244] Ibid.

[245] Submitted by Illinois resident during the Illinois SDEP public comment period.

[246] Submitted by Reaching Across Illinois Library System (RAILS); Illinois Heartland Library System; Consortium of Academic and Research Libraries in Illinois during the Illinois SDEP public comment period.

[247] Cook County Digital Equity Action Plan, October 2023

[248] Chicago Digital Equity Plan, 2023

[249] Juliet Listening Session, May 31

[250] Veterans and the Digital Divide, December 2021

[251] Ibid.

[252] Report on Promoting Broadband Internet Access Service for Veterans, May 2019

[253] Ibid.

[254] Macomb Listening Session, May 3

[255] People In Prison Should Have Access to Digital Technology, August 2023

[256] Ibid.

[257] City of Chicago Digital Equity Plan, January 2023

[258] Correspondence with Illinois Department of Corrections

[259] Broadband READY, Department of Commerce and Economic Opportunity

[260] Accelerate Illinois, Department of Commerce and Economic Opportunity

[261] Illinois Connected Communities, Department of Commerce and Economic Opportunity

[262] Illinois Broadband Advisory Council, Department of Commerce and Economic Opportunity

[263] Core Team Meeting, January 2023

[264] Broadband Equity, Access, and Deployment Program Notice of Funding Opportunity

[265] Examples of recent initiatives that take an innovative approach include mobile public Wi-Fi pilots (e.g., school buses equipped with hotspots, as described by attendees of the Southwest region listening session on March 16 and the Southeast region listening session [Effingham] on March 22) and farmers' use of "grain tower satellites," as mentioned at a Southeast listening session on March 22.

[266] East Central listening session on 4/13; Central listening session, April 25

[267] East Central region listening session (Danville Area Community College), April 13

[268] See Section 5.1.3 below for additional details on how the IBL intends to apply culturally relevant assessment processes.

[269] City of Chicago listening session on 5/3; Central listening session on 4/25 – 4/26

[270] City of Chicago listening session on 4/19

[271] Broadband Regional Engagement for Adoption + Digital Equity

[272] Digital Equity Capacity Kickstarter Program NOFO

[273] Illinois launches statewide digital navigator program, Illinois Broadband Lab

[274] 2020 – 2024 State of Illinois WIOA Unified State Plan; Workforce Development, DCEO

[275] IMAEF Education Foundation Seeks Measures to Increase Training Opportunities, Strengthen Workforce

[276] Training and Degree Programs, Illinois Drives Electric; CEJA Workforce Programs, DCEO

[277] Broadband Strategic Plan, City of Harvey, September 2021

[278] IDES IllinoisJobLink.com; Illinois workNET

[279] Submitted by LISC Illinois during the Illinois SDEP Public Comment Period

[280] IBL's online survey to non-profits and community organizations, analyzed on 09/01/2023, with N = 26.

[282] Source: *A Guide To Conducting Culturally Responsive Evaluations* by Henry T. Frierson, Stafford Hood, and Gerunda B. Hughes, as published in 2002 User-Friendly Handbook for Project Evaluation by Division of Research, Evaluation and Communication National Science Foundation

[283] A Plan to Revitalize the Illinois Economy and Build the Workforce of the Future, October 2019

[284] State of Illinois WIOA Unified State Plan, 2020 – 2024

[285] State Plan on Aging FY 2022 – FY 2024

[286] A Thriving Illinois: Higher Education Paths to Equity, Sustainability, and Growth, 2021

[287] Illinois State Board of Education 2020-2023 Strategic Plan

[288] Illinois Department of Veterans' Affairs Strategic Plan 2023-2027

[289] Expanding Career Pathway Opportunities in Adult Education, Strategic Five-Year Plan 2018 – 2023, January 2018

[290] Illinois United for Youth, A Systems of Care Initiative Pathways: A Strategic Plan for Children's Mental Health, IDHS

[291] 2022 Annual Report, Governor's Rural Affairs Council

[292] State's Librarian vows to protect free speech, access to books, March 2023

[293] Long Range Plan for the Use of Library Services and Technology Act Funds 2023 – 2027

[294] Digital Equity Plan Guidance

[295] Combines the underserved and served BSLs in Illinois; FCC Data Maps accessed June 2023

[296] FCC Data Maps accessed June 2023

[297] Ibid.

[298] To achieve this objective, two things must be true: (1) a provider with an affordable option is present, and (2) consumers must be able to access the service.

[299] Based on the definition provided in the BAC Affordability Study as either $10/month or $25/month

[300] Provider and speed distribution based on FCC Data Maps, Nov 2022. Internet price based on secondary research.

[301] Combines the underserved and served BSLs in Illinois; FCC Data Maps accessed June 2023

[302] Based on BEAD NOFO, CAI ("community anchor institution") means an entity such as a school, library, health clinic, health center, hospital or other medical provider, public safety entity, institution of higher education, public housing organization, or community support organization that facilitates use of broadband service among vulnerable populations, including but not limited to low-income individuals, unemployed individuals, children, the incarcerated, and aged individuals (including CDFIs).

[303] Data from the Drive-Up Wi-Fi Hotspots map maintained by the IOB and IBL

[304] U.S. Census 2021 5-Year ACS. Additional details in Section 3.2

[305] Ibid.

[306] Ibid.

[307] Ibid.

[308] Ibid.

[309] Ibid.

[310] Ibid.

[311] Ibid.

[312] Ibid.

[313] Ibid.

[314] Ibid.

[315] Share of Illinoisans over the age of 3 who responded that they use a desktop computer, laptop, or tablet on the NTIA Internet Use Survey 2021

[316] Digital literacy rate estimated using statewide residential internet use survey; see details in Section 3.2

[317] Ibid.

[318] Ibid.

[319] Ibid.

[320] Estimate based on counties with a participating organization in Round 1 or Round 2 of the Illinois Connected Communities or Accelerate Illinois and Broadband Breakthrough

[321] Based on IBL Stakeholder Survey responses to the question, "How often, if at all, have you ever experienced any of the following?"

[322] Based on statewide internet use online survey responses to the question, "If you were asked to complete the following tasks using the internet, how confident would you be that you could successfully complete them?" (See section 3.2.1.3 for details)

[323] U.S. Census, ACS 2021 5-Year Estimates

[324] Data collected based on IBL Broadband and Digital Equity Survey question, "Does your household need more computing devices, such as a laptop or tablet computer, to allow each person to connect to the internet as needed?"

[325] Calculated with data from Estimating participation in the Affordable Connectivity Program (ACP), September 2023, and USAC ACP Enrollment and Claims Tracker, Dec 2022

[326] U.S. Census 2021 5-Year ACS. Additional details in Section 3.2

[327] U.S. Census 2021 5-Year ACS. Additional details in Section 3.2

[328] Ibid.

[329] Ibid.

[330] Ibid.

[331] Ibid.

[332] Ibid.

[333] Ibid.

[334] Ibid.

[335] Ibid.

[336] Connect K-12

[337] 2020 Illinois School District Technology Survey, Learning Technology Center of Illinois in collaboration with the Illinois State Board of Education

[338] Ibid.

[339] Ibid.

[340] Trend Generator, National Center for Education Statistics (Student Enrollment: What is the percent of students enrolled in distance education courses in postsecondary institutions in the fall?)

[341] Homework gap refers to households in Illinois with children who do not have a high-speed subscription at home to complete homework; A P-20 system represents preschool through education after college (Illinois P-20 Council)

[342] 2020 Illinois School District Technology Survey, Learning Technology Center of Illinois in collaboration with the Illinois State Board of Education

[343] Share of Illinoisans over the age of 65 who responded that they use a desktop computer, laptop computer, or a tablet on the NTIA Internet Use Survey 2021

[344] Based on statewide internet use online survey responses to the question, "If you were asked to complete the following tasks using the internet, how confident would you be that you could successfully complete them?" 17% of respondents over 65 reported not feeling comfortable completing at least one of the tasks provided.

[345] A Report on the Illinois CARE Connections Program, August 2021

[346] Adapted from the Illinois Department of Aging's State Plan on Aging FY2022-FY2024

[347] Reducing Social Isolation Through Technology: A Report on the Illinois CARE Connections Program, August 2021

[348] Figures for farms with internet access, from USDA Farm Computer Usage and Ownership, 2021. Note: Speed data not available

[349] Working Remotely via the Internet, Age 15+ Persons Who Use the Internet, November 2021, NTIA Internet Use Survey

[350] Medicare Telehealth Trends Data File, Center for Medicare and Medicaid Services

[351] How Illinois Manufacturers are Adopting Advanced Technologies: An Insight Report on Automation, Workforce, and Productivity, Illinois Manufacturing Excellence Center

[352] Intelligent transportation systems can be defined as "the integrated application of sensor, computer, electronics, and communications technologies and management strategies to provide traveler information to increase the safety and efficiency of the surface transportation system," Illinois Statewide ITS Strategic Plan, 2019

[353] Organization that owns or manages the described asset.

[354] Links provide either further information on the asset or a direct link to the asset's website, depending on what is available online.

[355] Digital Equity Asset Map Survey Responses, City of Chicago Digital Equity Coalition

[356] Digital Equity Asset Map Survey Responses, City of Chicago Digital Equity Coalition

[357] Digital Equity Asset Map Survey Responses, City of Chicago Digital Equity Coalition

[358] Digital Equity Asset Map Survey Responses, City of Chicago Digital Equity Coalition

[359] Ibid.

[360] Ibid.

[361] Ibid.

[362] Digital Equity Asset Map Survey Responses, City of Chicago Digital Equity Coalition

[363] City of Chicago Listening Sessions on 4/19

[364] Digital Equity Asset Map Survey Responses, City of Chicago Digital Equity Coalition

[365] Ibid.

[366] Digital Equity Asset Map Survey Responses, City of Chicago Digital Equity Coalition

[367] Ibid.

[368] Digital Equity Asset Map Survey Responses, City of Chicago Digital Equity Coalition

[369] Ibid.

[370] Organization that owns or manages the described asset.

[371] Links provide either further information on the asset or link directly to organization providing access, depending on what is available online.

[372] Formerly known as ConnectWaukegan.

[373] Organization that owns or manages the described asset.

[374] Links provide either further information on an asset or link directly to the organization providing access, depending on what is available online.

[375] Broadband for All – Plan for Ogle, Lee, Boone, and Putnam Counties; Accelerate Illinois, Round 2.

[376] Accelerate College Region Accelerate Team Presentation; Accelerate Illinois Brakes...for Now, Illinois Broadband Connections.

[377] Peoria-Woodford Broadband Planning, Accelerate Illinois, Round 2.

[378] Kankakee County Broadband Plan, Accelerate Illinois, Round 2.

[379] McLean County High-Speed Internet Quality Survey, open through March 31, 2023.

[380] Connect Lake County is a separate nonprofit organization from Lake County Government.

[381] ConnectWaukegan – Fixed Wireless Proof of Concept, Waukegan Broadband Community Taskforce, October 2022

[382] Greene County ICC Update, June 2022

[383] Gov. Pritzker and President Preckwinkle Announce New Statewide Network to Deploy Computer Devices for Low-Income Residents Across the State, December 2020

[384] Connect Livingston Broadband Plan, Accelerate Round 2; Accelerate Illinois Brakes...for Now, Illinois Broadband Connections

[385] Knox County Broadband Plan, Accelerate Illinois, Round 1

[386] Mercer County Broadband Plan, Accelerate Illinois, Round 1

[387] Whiteside County Broadband Plan, Accelerate Illinois, Round 1

[388] Jackson County Broadband Plan, Accelerate Illinois, Round 1

[389] City of Broadband, Illinois Broadband Plan, Accelerate Illinois, Round 1

[390] The Historic Village of Elsah, Accelerate Illinois, Round 1

[391] Illinois Connected Communities: Leveraging the Power of Local Communities, Benton Institute, June 2021

[392] Digital Equity Asset Map Survey Responses, City of Chicago Digital Equity Coalition

[393] Pembroke-Hopkins Park Broadband NOW! Plan, Accelerate Illinois, Round 2

[394] Digital Equity Asset Map Survey Responses, City of Chicago Digital Equity Coalition

[395] Illinois Connected Communities Final Report, The Community Builder's Oakwood Shores

[396] Illinois Connected Communities Final Report, North Chicago CUSD 187

[397] Illinois Connected Communities: Leveraging the Power of Local Communities, Benton Institute, June 2021

[398] Digital Equity Asset Map Survey Responses, City of Chicago Digital Equity Coalition

[399] Submitted by Literacy Works during the Ilinois SDEP public comment period.

[400] Organization that owns or manages the described asset.

[401] Links provide either further information on the asset or connect directly to the organization providing access, depending on what is available online.

[402] Broadband Adoption in Illinois, Panel presentation for Illinois Association of County Board Members, October 2022

[403] Links to profiles for each region: Northwest, Northern Stateline, Northeast, East Central, North Central, West Central, Central, Southwest, Southeast, Southern

[404] Digital Equity Asset Map Survey Responses, City of Chicago Digital Equity Coalition

[405] Digital Equity Asset Map Survey Responses, City of Chicago Digital Equity Coalition

[406] Broadband Adoption in Illinois, Panel presentation for Illinois Association of County Board Members, October 2022

[407] Organization who owns or manages the described asset

[408] Links provide either further information on asset or direct to organization providing access depending on what is available online

[409] Connected Illinois Round 1 Projects Announced, July 2020, Illinois Broadband Connections

[410] Connect Illinois, DCEO

[411] Illinois Broadband Advisory Council Annual Legislative Report, January 2023

[412] Illinois K-12 Broadband Network, NASCIO

[413] Connect Illinois Overview and Status, December 2022

[414] Illinois Broadband Lab

[415] Illinois Connected Communities Kickoff, August 2020, Illinois Broadband Connections

[416] Celebrating 50 Editions of Illinois Broadband Connections, May 2022, Illinois Broadband Connections

[417] Connect Illinois Overview and Status, December 2022

[418] Connect Illinois Overview and Status, December 2022

[419] Illinois Broadband Advisory Council Annual Legislative Report, January 2023