Broadband Advisory Council

Annual Legislative Report

2024

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Top left: Xandi Wright presents at Illinois Connected 2024
Top right: IOB staff, Crawford County Broadband Project members, and LTC Telecom Training staff pose in Robinson, IL
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Lower right: IOB staff attends a broadband and digital equity roundtable event with Congresswoman Nikki Budzinski in East St. Louis, IL

Introduction

2024 has been a stellar year for broadband expansion and digital equity work in Illinois, aligned with the work of the Broadband Advisory Council. The Illinois Broadband Team has dedicated most of the year to the Broadband Access, Equity, and Deployment (BEAD) program and the Digital Equity Capacity Grant, implementing the various planning steps that are required before securing funding from the federal government. The team has been successful, not only obtaining approval from the National Telecommunications and Information Administration (NTIA) for both initiatives, but also in engaging people across Illinois in the work, building momentum in dozens of counties and hundreds of communities.

The year was also marked by awarding 62 Connect Illinois Round 3 projects, completing the multi-year effort to deploy millions of dollars in Capital Projects Fund, bond, and state resources to connect households in need.

Among the successes, there have been challenges, such as the discontinuation of the federal Affordable Connectivity Program (ACP), a vital broadband affordability subsidy that helped millions of Illinoisans secure and maintain home broadband service. ACP was not refunded by Congress in April, and as of yet has not been replaced with a viable program. While ACP's premature end, among other broadband policy challenges, contributes to broadband skepticism in communities, the Illinois Broadband team has made strides in both building trust and promoting understanding among partners and stakeholders through targeted and intensive community engagement efforts.

2024 has been a year of preparation, setting up the state to tap into up to $1.3 billion in federal funding to improve broadband infrastructure and digital equity. Through it all, the Illinois Broadband Team remains focused on the three pillars of broadband that form the foundation of their work:

- **Access**: Improved broadband infrastructure and device access, particularly on an individual or residential basis

- **Adoption**: Increased subscription to broadband service and device ownership at affordable pricing

- **Use**: Increased use of internet-based tools to increase health, happiness, and well-being across Illinois

The following report summarizes the work of the Illinois Office of Broadband (IOB) and the Illinois Broadband Lab (IBL), advised by the Broadband Advisory Council, as Illinois strives to build ubiquitous broadband infrastructure and achieve digital equity for every resident of Illinois.

Letter from the Chair

As the newly appointed Chair, I am pleased to submit this report on a banner year for realizing the vision of the Connect Illinois investment and leveraging the federal BEAD and Digital Equity Act funds. I commend the Illinois Office of Broadband and Illinois Broadband Lab staff for their tireless work and achievements under Devon Braunstein's and Matt Schmit's strong leadership.

The Broadband Advisory Council membership is a small and diverse cross-section of community members and partner organizations working across the state to support and amplify these efforts. As the Director of Technology Services at the Reaching Across Illinois Library System (RAILS), I am pleased to be representing the statewide library community and their critical role in this landscape. The work of equitably connecting Illinois residents of all ages and backgrounds to the many aspects of our society that require high-speed internet, device access, and new skills is embedded in the values of the library profession and the daily activities of library workers. Partnerships with and support to libraries are smart investments—and an incredible value for your tax dollar. We at RAILS, along with our partners at the Illinois Heartland Library System, Illinois Office of the Secretary of State, Illinois State Library, Illinois Library Association, and other library-supporting organizations provide a network of support to the 1,700+ public, school, academic, and specialized libraries across the state.

I intend to bring our spirit of collaboration, transparency, and judicious use of resources to the Broadband Advisory Council, inviting active engagement, generative discussions, and an ongoing commitment to learning from and connecting with each other across our shared priorities. I am confident that 2025 will provide many opportunities to demonstrate that we are stronger together.

Anne Slaughter
Broadband Advisory Council Chair
Director of Technology Services
Reaching Across Illinois Library System

Letter from the Illinois Office of Broadband

2024 marked a year of growth and momentum-building for the Illinois Office of Broadband (IOB). In preparation to launch a $1.04 billion broadband infrastructure program and $23.7 million digital equity initiative, the IOB grew to 12 full-time team members, expanded a historic partnership with the Illinois Broadband Lab, and balanced process and procedure with creativity and grit to meet several challenging federal deadlines.

As we remained laser focused on our mission to achieve universal broadband access, we also worked to support communities on their broadband journeys – from facilitating a statewide speed testing campaign with the University of Chicago's Internet Equity Initiative, to hitting the road for broadband education and awareness.

Together, the IOB and Illinois Broadband Lab established a proactive approach to engaging communities, executed a third round of Connect Illinois grants, created space for digital equity knowledge sharing, coordinated deeper interagency collaboration, convened 300+ stakeholders for a statewide summit, achieved federal approval to unlock billions of dollars in resources, and so much more.

I look forward to what 2025 has in store for Illinois' growing digital equity ecosystem.

Devon Braunstein
Deputy Director, Illinois Office of Broadband
Department of Commerce and
Economic Opportunity

The Broadband Advisory Council

Created through Public Act 100-833, the Broadband Advisory Council (BAC) is charged with removing barriers and fostering collaboration to expand broadband access, adoption, and utilization. In particular, the BAC serves to guide the creation, implementation, and effectiveness of the increasingly comprehensive Connect Illinois program – which balances the need for improved broadband access through infrastructure investment with complementary programming promoting broadband adoption and utilization, all through the lens of digital equity and inclusion.

In announcing the BAC, Governor J.B. Pritzker identified three main outcomes to center the council's work: telehealth; education; and economic development. These priorities have gained significance with the COVID-19 pandemic and constitute three primary utilization categories that depend upon high-quality broadband access:

- **Telehealth** | Expand access to telehealth across the State of Illinois, which will provide additional healthcare options to communities in rural and urban Illinois alike, ranging from primary care to expanded treatment opportunities in areas such as mental health and opioid addiction.

- **Education** | Increase broadband access – both for in-classroom learning and remote learning at home throughout Illinois to ensure students have the tools they need to succeed.

- **Economic Development** | Expand economic development and opportunity in urban and rural communities throughout Illinois. This investment will support the growth of Illinois' agriculture economy and information technology sector and will help to modernize transportation and support the development of entrepreneurs and small business owners.

To inform and advise the Connect Illinois program, the BAC convened in August 2019. The council has held regular meetings on a quarterly basis, with an occasional special meeting to cover additional agenda items. The council composition includes representation from an array of internet service providers, state agency officials and legislators, and various community and broadband-related stakeholders. Four community representation seats were added to the original 25-member council. See Appendix to view the council's current appointed membership.

2024 Meetings of the Broadband Advisory Council

Regular Meeting: February 7, 2024
Regular Meeting: April 10, 2024
Regular Meeting: July 31, 2024
Regular Meeting: October 16, 2024

Priorities for 2025

- Refresh BAC membership in order to ensure an engaged and representative pool of experts
- Align BAC priorities with the activities of Connect Illinois Round 4, the State Digital Equity Plan, and Illinois' 2024 Economic Growth Plan
- Advise the Illinois Office of Broadband on cultural competencies, policy, and procedure

Find all BAC meeting minutes at https://dceo.illinois.gov/broadband/meetingsmaterials.html

The Illinois Broadband Team

Illinois Office of Broadband (IOB)

Created in September 2019, the Office of Broadband is housed within the Illinois Department of Commerce and Economic Opportunity (DCEO), the state's largest grant-making authority. As a primary charge, the Office is responsible for administering the Connect Illinois grant program. The Office also develops and administers related programming – such as in the areas of community planning and capacity building, regional engagement, and digital equity and inclusion.

The Office administers the Connect Illinois grant program, leverages a modest Eliminate the Digital Divide Fund balance to support complementary programming, and maintains several procured contracts – including for recurring broadband mapping, intergovernmental collaboration with the University of Illinois System, and consultant support.

The Office expanded profoundly in 2024, growing from six staff members to twelve in order to prepare for the federal BEAD and Digital Equity Act (DEA) programs. The Office now includes a Deputy Director, Assistant Deputy Director, Grants Manager, three Assistant Grants Managers, a Compliance Manager, three Community Engagement Managers, a Policy Analyst, and a Fiscal Liaison, as well as support from an Illini Science Policy Scholar. As of May 2024, the Office also has a new Deputy Director, Devon Braunstein. Her previous work in leading the City of Chicago's efforts to achieve universal connectivity, plus background in public sector economic development and software implementation, make her a capable leader and an expert in community broadband access and digital equity efforts.

To add value to Office of Broadband programming, leverage existing resources, and enhance capacity, the Office maintains strategic collaborations with the Benton Institute for Broadband & Society, Heartland Forward, the Illinois Innovation Network, University of Illinois Extension Services, and many non-profit organizations dedicated to disseminating refurbished devices.

Illinois Broadband Lab

The Illinois Broadband Lab collaboration within the University of Illinois System contributes experience and expertise in critical areas such as: mapping and data, programmatic support, outreach, communications, and digital navigation, among many other spheres. Together, the Illinois Office of Broadband and Illinois Broadband Lab unites sixteen dedicated full-time staff members.

The Illinois Broadband Team poses for a group photo at the Illinois Connected 2024 summit.

Illinois Science Policy Scholars

The Illini Science Policy Program is a unique post-graduate opportunity for students graduating from University of Illinois who are interested in University of Illinois Extension's critical issue areas – food, economy, environment, community, and health – and the policy decisions affecting those resources. The Illinois Broadband Team is enriched by these scholars, their past academic and lived experience, and their current field of study. Three scholars graduated in May of 2024, while one scholar began serving with the team in July of 2024.

Kaung Nyein's work focused on digital equity as well as on how immigrant populations are impacted by lack of/or limitation of resources. "During and after the pandemic, we are seeing more and more of the digital divide among communities. The normalization of Work-from-home and the advancement of the technology with AI is reaching to another level, having high-speed and reliable broadband connectivity should be a right in our modern world. The accessibility and adoption of broadband should no longer be an issue as we prepare to embark on to the next level of technology." Nyein is now using his experience an Assistant Urban Planner in Salt Lake City, Utah.

Theodora (Dora) Kourkoulou supported the broadband team with her background in education and digital societies. She focused on digital equity for justice-impacted and returning citizens with less knowledge of digital technologies, and how to bring digital equity seamlessly into the diverse communities of Illinois through creation of an app. Kourkoulou also pioneered a digital skills curriculum purpose-built to serve incarcerated and returning residents who may or may not own a digital device. She now serves as a Clinical Assistant Professor of Elementary Education at the University of Iowa.

Kushal Vinod focused on digital equity and mapping as well as workforce development while supporting the team with curriculum building, broadband dashboard mappings, and social media content creation. "The issues I'm addressing impact a wide range of individuals, from students in underserved areas who require internet access for education to small businesses seeking to expand their online presence. In essence, anyone who relies on digital resources is affected."

Stephanie Schnaufer joined the Illinois Broadband Team in July 2024. She focuses on issues of broadband infrastructure policy and procedure including statewide Dig Once rulemaking and intersections between digital equity and health, such as food insecurity and nutrition. "By helping to expand broadband access, I am contributing to equitable opportunities in economic development, healthcare, and education, enabling people to improve their quality of life."

Broadband Infrastructure in Illinois

Perhaps the biggest infrastructure challenge of our time is that of universal broadband availability. In the tradition of the original Rural Electrification Act passed by Congress in 1936, making broadband internet available to all has become a government priority. State and federal programs are working together in order to fill in access gaps left in marginalized, rural, and topographically challenging communities after private investment failed to serve them. Both President George W. Bush and President Barack Obama added broadband stipulations to the original act in 2008 and 2014 respectively, calling for a comprehensive broadband strategy, state and federal loans or grants to support expansion, and even a pilot of a rural gigabit network. While these projects have evolved and changed in the decade since, Illinois remains dedicated to serving all residents with fast, reliable, and affordable broadband service.

Connect Illinois

Connect Illinois is the state's landmark equity-focused broadband infrastructure program targeting areas in the greatest need of internet service. By addressing market failures where private investment has favored profitable areas, the program aims to bridge the broadband access gap. Competitive grants drive public-private investment exceeding $1 billion in Illinois alone, and support scalable, future-proof infrastructure. With a community-driven approach, Connect Illinois fosters collaboration, promotes affordability, and aligns with the state's underlined five-year economic plan to advance broadband equity and innovation statewide.

In addition to competitive grants, the Connect Illinois program included $20 million for upgrades to the 100 GB Illinois Century Network, the state's existing 2,000-mile open access institutional fiber network serving over 3,400 K-12, higher education, and library locations across the state. Importantly, this funding provided a secure K-12 Broadband Network available at no cost for all Illinois K-12 public schools.

The upcoming fourth round of Connect Illinois will be supported by the $1.04 billion in federal Broadband Equity, Access, and Deployment (BEAD) funds made possible by the 2021 Infrastructure Investment and Jobs Act. BEAD funding in Illinois will move Connect Illinois closer to its goal of ubiquitous and robust broadband access for all homes, businesses, and community anchor institutions throughout the state. Investment in broadband access will support telehealth, education, economic development, and precision agriculture efforts statewide, supporting communities well into the future.

To date, Connect Illinois has awarded $387+ million to internet service providers, connected nearly 6,300 households, and anticipates connecting as many as 40,000 locations over three waves of funding and 80 projects.

Awardees in 2024's Round 3 range from large internet service providers like Frontier Communications and Comcast to smaller Illinois-based companies such as Wabash Telephone Co-Op, Flat Rock Telephone Co-Op, and Grafton Technologies. The awarded projects touch 27 Illinois counties and will greatly expand broadband access in both rural and urban areas.

Broadband Equity, Access, and Deployment (BEAD)

What is BEAD?

The Broadband Equity, Access, and Deployment (BEAD) Program provides $42.45 billion to expand high-speed internet access by funding planning and infrastructure deployment in all 50 states, Washington D.C., Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands. This program is part of the Infrastructure Investment and Jobs Act (IIJA), and is being administered by the National Telecommunications and Information Administration (NTIA). According to the NTIA, 73% of all Illinoisans fall under one or more of the identified populations that experience greater than average inequity related to broadband access. NTIA has allocated $1.04 billion to fund the BEAD-funded Round 4 of Connect Illinois.

Illinois Office of Broadband staff began preparing for the BEAD program in 2023 with the 5-Year Action Plan, and drafting BEAD Initial Proposals 1 and 2. 2024 marked addition progress in achieving NTIA milestones required to tap into funds.

Challenge Process and Project Area Unit Selection

Illinois was required to facilitate a public challenge process of the Federal Communications Commission (FCC) map representing all unserved and underserved broadband serviceable locations (BSL) in the state. The IOB encouraged residents and internet service providers (ISPs) alike to engage with the map and determine if it correctly reflected the availability of service and broadband speeds for their homes, businesses, and community anchor institutions. Then, eligible challengers, including units of local government, internet service providers, and non-profit organizations, could submit challenges along with evidence through a designated portal. Illinois offered an opportunity for challenged providers to submit rebuttals, and finally adjudicated all challenges and rebuttals to reach a final set of locations eligible to be connected through the BEAD program. Illinois received over 190,000 challenges, which ultimately showed that 175,293 locations in the state will be eligible for BEAD funding, including 171,937 BSLs and 3,356 community anchor institutions.

In preparation for the sub-grantee selection process, locations are grouped into project area units (PAUs), which are clusters of eligible locations that serve as the building blocks for BEAD applications. ISPs will be able to choose which PAUs they propose to serve as part of the sub-grantee selection process.

Applicant Pre-Qualification

Through a Pre-Qualification Phase, the IOB invited prospective BEAD applicants to submit materials ahead of the sub-grantee selection process to demonstrate their qualifications for the program. Forty-one entities participated, which will allow them to move swiftly through the qualification step of the application process.

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Broadband Equity, Access, and Deployment (BEAD) - Continued

Current Status

As of December 2024, NTIA approved Illinois' Challenge Process results, finalizing Illinois' set of BEAD-eligible locations. Once the map of updated locations is published and available for 30 days, the BEAD application process can begin. IOB will facilitate two waves of applications with an optional third wave to ensure total coverage of all unserved and underserved locations. Following NTIA approval of Illinois' Final Proposal, preliminarily selected applicants will be formally awarded and may begin implementing their work, following the execution of grant agreements.

Five-Year Action Plan | Aug 2023

The very first foray into planning for BEAD in Illinois. This action plan formed the basis of Illinois' strategy for managing the funds and implementing programming.

Inital Proposal | Submitted Dec 2023

Initial Proposals Volumes I and II document how Illinois conducted the Challenge Process and how it will administer its sub-grantee selection process. Illinois received formal Initial Proposal approval on June 13, 2024.

Challenge Process | Feb-Jul 2024

The Challenge Process offered an opportunity to units of local government, internet service providers, and non-profit organizations to dispute the map of connectivity using evidence, resulting in the final map of BEAD-eligible locations.

Request for Input | May-Jun 2024

IOB received input on Project Area Units (PAUs) to be used for subgrantee selection, as well as initial interest.

Pre-Qualification Process | Jun-Aug 2024

This process allowed potential applicants to submit materials demonstrating their eligibility and readiness for the BEAD program.

Subgrantee Selection | Expected Early 2025

IOB will select subgrantees who will carry out broadband deployment. The final map of eligible locations will be available 30 days before the application opens.

Final Proposal and Implementation | Due June 13, 2025

IOB will select subgrantees who will carry out broadband deployment. The final map of eligible locations will be available 30 days before the application opens.

Digital Equity in Illinois

Across the globe, it is undeniable that universal high-speed internet service is essential for connecting to local and global communities and resources. To take full advantage of available health, education, economic development, and finance tools, all Illinois residents must have affordable access to high-speed internet and be able to use the internet safely and effectively.

Digital Equity is an outcome. It is the state where all Illinoisans have access to the quality and affordable broadband, devices, and skills they need to participate in Illinois' modern economy and thrive. Community members with the greatest barriers are empowered towards civic and cultural participation, employment, lifelong learning, and access to essential services. It is also a process. It is how Illinois strives to do business, by prioritizing access and opportunities for groups that have the greatest need and who are most impacted by digital inequities.

In order to tackle these complex and all-encompassing issues, Illinois published the State Digital Equity Plan (SDEP) in 2024, detailing the state's vision for digital equity, goals for realizing this vision, and the data used to inform those goals. It also outlines 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.

Completion of the SDEP was just one of the many steps that unlocked Illinois' ability to apply for State Digital Equity Capacity Grant funds, part of the Digital Equity Act. NTIA has approved Illinois' application for $23.7 million of Capacity Grant funds, the first of three awards anticipated over the next three year years. This funding will support the implementation of the following core activities. The following sections detail Illinois' activities to progress toward true digital equity.

State Digital Equity Plan Core Implementation Activities

Digital Equity Source of Truth
- Maintain and make available an Illinois digital equity data set to serve as a common source of truth. Staff will make and provide access to dashboards, data sets, and tools.

Digital Equity Grant Program
- Execute a statewide digital equity grant program. The upcoming Illinois Digital Equity Capacity Grant will subgrant State Capacity Grant funds

Statewide and University Partnerships
- Lead select statewide programming and university partnerships such as the Broadband READY program (page 19) and Regional Conveners program (page 15).

Stakeholder Engagement
- Conduct ongoing stakeholder outreach and engagement. Community Engagement Managers and dedicated IBL staff will continue these activities

Community of Practice
- Support and sustain a digital equity community of practice, such as the DECK Community of Practice (page 14) and the Digital Equity Update Call (page 16).

Digital Equity Capacity Kickstarter Grant Program (DECK)

The Digital Equity Capacity Kickstarter (DECK) grant program represents an integral and strategic component of the state of Illinois' Connect Illinois vision and commitment to broadband access, adoption, and use, all through the lens of digital equity and inclusion. The program served as a bridge to forthcoming federal Digital Equity Capacity Grant Program funding made possible through the Digital Equity Act. DECK supports expansion of broadband access, adoption, and use initiatives among broadband and digital equity stakeholders, such as community-based organizations, libraries, and local government, creating and fostering Illinois' digital equity ecosystem. The state made awards across two waves, impacting seven out of the ten economic development regions across the state.

Across two waves, the IOB awarded more than $2M to 33 projects implemented by 29 organizations. Four organizations received funds for both Wave 1 and 2, allowing them to continue and expand their programming.
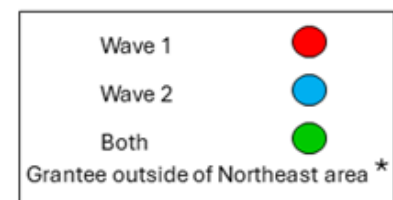
The State Digital Equity Plan identified communities of practice as a way to implement change and build digital equity ecosystems across the state. DECK grantees formed the DECK Community of Practice a way to foster partnerships and collaboration between all grantees, convening 14 times over 2024 to share knowledge and resources to expand impact and advance digital equity practices. The group's feedback will be used to compile a best practices guide for Illinois digital equity practitioners as a key asset to building and strengthening Illinois' digital inclusion efforts.

Wave 1 Awardees

- Center for Changing Lives
- Chicago Urban League
- Coalition for a Better Chinese American Community
- Gads Hill Center
- Growing Home
- McLean County
- Metropolitan Family Services
- North Lawndale Employment Network
- Northwest Side Housing Center
- scaleLIT
- Southwest Organizing Project (SWOP)
- TCA Health, Inc. NFP
- Teague Int. Corporation d/b/a The Trep School
- The Center: Resources for Teaching and Learning
- Touch Gift Foundation
- Women's Business Development Center

Wave 2 Awardees

- Asian Human Services DBA
- Trellus
- Board of Trustees of Western Illinois University
- Carlinville Public Library
- Chicago Public Library
- ConnectWauekgan
- NFP
- Digital Leaders Now
- Howard Area Community Center
- Law And The Fam LLC d/b/a Legit Pathways Academy
- Partnership for a Connected Illinois, Inc.
- Pathlights Human Services
- Phalanx Family Services
- Region 1 Joint Planning Commission
- Southwestern Illinois College
- St Augustine College

Both Wave Awardees

- Association House of Chicago
- Erie Family Health Centers
- The Quilt Corporation NFP Inc
- YMCA of Metropolitan Chicago

Digital Equity Act Programming

The federal Digital Equity Act provides $2.75 billion nationwide to establish three grant programs that promote digital equity and inclusion. Those programs aim to ensure that all people and communities have the skills, technology, and capacity needed to reap the full benefits of our digital economy. Illinois was allocated more than $23.7 million through the State Digital Equity Capacity Grant to implement large scale digital equity and inclusion programming, which will impact millions of Illinoisans and their communities. State Digital Equity Capacity Grant funding will support the following programs in Illinois, outlined in the State Digital Equity Plan:

- A public-facing **Digital Equity Source of Truth**, a common source for data related to digital equity and connectivity in Illinois.
- The **Illinois Digital Equity Capacity Grant Program**, a direct grant program for digital equity practitioners, organizations, educational institutions, local governments and more to invest in local inclusion activities, equipment, and programming.
- The **statewide Regional Engagement for Adoption and Digital Equity (READY) Program**, a partnership between the University of Illinois System and state universities in Illinois prioritizing digital equity projects and research. The IOB provides community engagement support.
- Ongoing stakeholder outreach and engagement from Illinois Office of Broadband staff and partners, including the upcoming **Regional Conveners** program.

Digital Equity Source of Truth

The Digital Equity Source of Truth will be a shared hub of data related to broadband access and digital equity and inclusion, including information related to telehealth, education, economic mobility, and more. Data will be gathered and maintained by the IOB and IBL through a network of state agencies, nonprofit partners, and industry focused data experts. The team will then create key publicly available datasets, including an asset inventory and related tools for digital equity practitioners, as well as any future updates to the State Digital Equity Plan. All of these tools will allow users a timely and ever-growing snapshot of digital equity accomplishments, as well as challenges, in Illinois.

Illinois Digital Equity Capacity Grant (IDEC)

The goal of the Illinois Digital Equity Capacity Grant (IDEC) program is to ensure that all people and communities across Illinois have the skills, technology, and capacity needed to reap the full benefits of our digital economy, and will align closely with goals identified in the State Digital Equity Plan. Thanks to the federal Digital Equity Capacity Grant, Illinois will distribute up to $13.5 million to local organizations who are best positioned to implement digital equity programs for covered populations, communities that are most impacted by digital divides. While the grant program is focused on support for Covered Populations, this work will increase digital equity and support digital inclusion activities to benefit all Illinoisans.

Funded initiatives must create long and meaningful change, have a measurable implementation strategy, and involve opportunities for stakeholder feedback. The Office of Broadband has been hard at work preparing organizations across the state for this funding opportunity, gathering and incorporating community feedback into every stage of development.

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Broadband Regional Engagement for Adoption and Digital Equity (READY)

The Broadband Regional Engagement for Adoption and Digital Equity (READY) wrapped up its third cohort in June 2024, growing to include eight of Illinois' economic development regions and serving as a key program for regional collaboration for Illinois' State Digital Equity Plan (SDEP) listening tour and public comment period. Each University-led team received $75,000 in funding to further their digital equity impact projects and serve as regional conveners, helping to fulfill the SDEP's core implementation activity of engaging with Statewide and University Partnerships. The program is designed to identify current digital inequities as well as next steps in creating a digital inclusion ecosystem through regional collaboration, and seeks to provide scalable solutions for broadband utilization across all 10 economic development regions. It serves as a forerunner to provisions included in the federal Digital Equity Act, and a touchstone for Office of Broadband work in digital equity and inclusion.

The program underwent an expansion in 2023 to respond to Illinois' Digital Equity Planning Grant, serving as a key program for outreach, regional convening, and stakeholder engagement for Illinois' 2023 statewide listening tour, enabling Illinois to reach 1,256 Illinoisans in a total of 54 in-person and virtual listening sessions.

Regional engagement around the State Digital Equity Plan continued in 2024, where four in-person community stakeholder events on college campuses were held in targeted regions with over 120 attendees to coincide with the public comment period for the Draft State Digital Equity Plan, in addition to several virtual feedback sessions. READY teams also played an important role in participating in co-design workshops for the upcoming IDEC grant program. Further regional engagement activities included meeting with county officials to coincide with BEAD preparation, and fostering collaborations with other Illinois Office of Broadband programming, such as the Broadband Breakthrough program.

The READY teams have made progress in their various Digital Equity Impact Projects, such as University of Illinois Springfield's 12-module digital literacy curriculum for community health workers, Western Illinois University's device lending mini-grants for local library systems and their partnership with the Illinois Institute for Rural Affairs, and Illinois State University's device distribution project and facilitation of the McLean County Connect infrastructure initiative.

Regional Conveners Program

The Illinois Office of Broadband is exploring a grant and community engagement program empowering local digital equity experts to become regional conveners in their areas. These convener organizations will be hubs of broadband access and digital equity resources, responsible for building and maintaining digital equity ecosystems and contact networks across the state. More information on this program will be released in 2025.

Community Engagement

Community Engagement is at the core of broadband expansion and digital equity work. Illinois Broadband Team staff not only inform community members about state grant and programming opportunities, they become familiar with the local broadband and digital equity ecosystems that work to close divides and and create equity across the state. They do this both virtually and in-person, with team staff traveling over 1,000 miles in Illinois in 2024 alone, with other travel across the country for various networking, learning, and engagement opportunities.

Digital Navigators

In January 2023, the IOB received a grant from the Federal Communication Commission (FCC) to support outreach and enrollment for the Affordable Connectivity Program (ACP). The Office of Broadband commissioned the IBL with the execution of the funds by establishing a statewide Digital Navigator program. Through Lead for America | American Connection Corps (LFA), nine Digital Navigators were placed at University and government partners around the state for a one-year term.

During this time, Navigators conducted outreach to over 45,000 residents through community-wide outreach events and print and digital media. The Navigators provided ACP enrollment assistance to several hundred Illinoisans before the ACP outreach program ended in February 2024. Navigators then shifted their responsibilities to providing digital skills classes. Using the NorthStar Digital Literacy Assessment, Navigators provided learning and assessment opportunities to citizens in their local communities.

Since the conclusion of the LFA 2023-2024 Fellowship year in July, IBL and IOB have been reconfiguring the Digital Navigator Program with the lessons learned from the pilot year. IBL has been working with a new cohort of Digital Navigators for 2024-2025.

Year 1 Digital Navigator Program Impact - Northstar Learning Platform			
Unique Users	73	Assessment Passing Rate	49%
Learning Hours	104	Skill Badges Claimed	82
Assessment Hours	53	Skill Certificates Awarded	49
Total Assessments	273	Assessment Gains	+8.17%

Digital Equity Updates Call

The IOB hosts a monthly Digital Equity Updates Call to share important information and showcase Illinois' digital equity ecosystem. This meeting has evolved over the year, moving from a simple touch-base opportunity for digital equity practitioners to a vital monthly meeting featuring updates on state and federal digital equity news, showcasing Illinois programs and organizations, and allowing attendees new and experienced to learn from one another and network to increase their impact. The meeting averages 52 attendees each month, and the team expects that number to grow in 2025.

Illinois Connected 2024

2024 has been a banner year for broadband access and expansion as well as digital equity work in Illinois, and the Illinois Broadband Team wanted to bring key stakeholders and partners together to celebrate all that had been achieved and all that was yet to come. Together, the IBL, the National Digital Inclusion Alliance (NDIA), and sponsors such as Alliant Credit Union and Intersect Illinois hosted a summit in May 2024.

The summit was filled with expert panels, informative workshops, and networking events that offered an opportunity to learn, build partnerships, and celebrate Illinois' accomplishments. Over 300 attendees had the opportunity to see the impact of Illinois' digital ecosystem and take a peek at its future.

Find more information and photos from the event at https://broadband.uillinois.edu/illinois-connected-summit-recap/

Top left: Promotional material for Illinois Connected 2024
Top right: IOB Deputy Director Devon Braunstein welcomes attendees to the event
Lower left: Pamela Rosales (NDIA) opens a panel
Lower right: Digital equity leaders across Illinois speak on a panel at the social reception overlooking Lake Michigan

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Community Engagement

Broadband Breakthrough

In 2024, the Benton Institute for Broadband & Society, with funding from the Illinois Soybean Association, completed the second and third Broadband Breakthrough cohorts, continuing the success of the 2023 pilot program funded by United Soybean Board. This 2023-2024 work with 17 rural farming communities would not have been possible without the collaboration of the Illinois Office of Broadband, University of Illinois Extension, Illinois Broadband Lab, and Illinois State University (ISU).
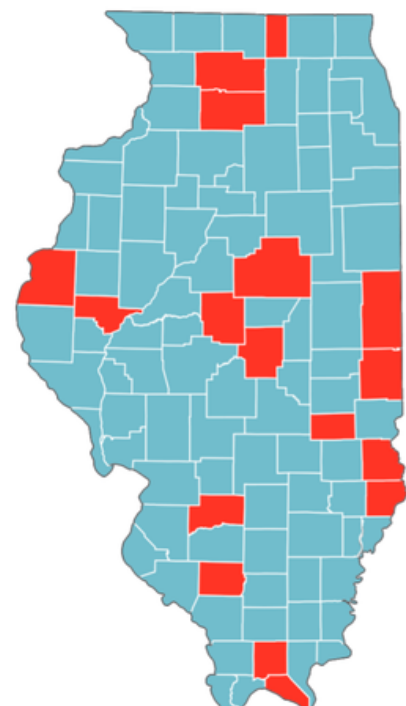
The community engagement and broadband planning program is designed to stimulate broadband infrastructure investment that supports larger community goals such as economic development, telehealth delivery, precision agriculture, distance learning, and civic engagement. Edgar, Hancock, McLean, Ogle, and Schuyler counties graduated from the pilot program. The second cohort included Clinton, Crawford, Cumberland, Logan, Macon, and Perry counties. Boone, Johnson, Lawrence, Lee, Massac and Vermilion completed the program in mid-2024.

Program collaborators introduced various resources to help counties understand their broadband needs, assets, and options. For instance, a research team at ISU, with funding support from the Illinois Innovation Network Sustaining Illinois seed grant awarded to Professor John Kostelnick, provided two open-source tools that helped communities see the impact high-performance broadband would have on the local farming economy and mapped vertical assets that might be used in the deployment of broadband networks.

At the end of the 16-week program, each community creates a broadband action plan that guides them on their broadband journeys. McLean County went on to win a Illinois Office of Broadband DECK grant to conduct a feasibility study that will determine the cost of deployment and identify a suitable internet service provider partner. Many counties are currently working with internet service providers to support ISP applications for upcoming BEAD and other federal funding.

Top: IOB and IBL staff along with Digital Navigators attend Broadband Breakthrough Cohort launch

Right: Orange counties have completed Broadband Breakthrough program

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It is clear that though 2024 has been a landmark year for broadband, 2025 will be even more notable. With $1.04 billion in BEAD funding and $23.7 of Digital Equity Capacity Grant funding secured for infrastructure expansion and digital equity efforts, Illinois' broadband landscape will change drastically over the next four years increasing the health, wealth, and well-being of all Illinoisans.

2025 will be an even more exciting year, including activities such as:

- The Broadband Advisory Council will gain a refreshed, engaged, and representative member base

- The Illinois Office of Broadband and Illinois Broadband Lab will both increase their staff count in order to support the major initiatives implemented through the year

- The Illinois Office of Broadband will launch the BEAD-funded Connect Illinois Round 4, working to connect every unserved and underserved household, business, and community anchor institution with fast, reliable, and affordable broadband service.

- The Illinois Office of Broadband will launch Digital Equity Act activities, such as the Illinois Digital Equity Capacity Grant, the Digital Equity Source of Truth, a regional conveners program, and much more.

- The Illinois Broadband Lab will continue the Digital Navigators program with a new roster of community-based navigators spread throughout the 10 economic development regions

- The Illinois Broadband Lab will implement a new cohort of Broadband Breakthrough, with the Illinois-based Benton Institute for Broadband and Society and the Reid Consulting Group, with additional staff support from the Illinois Office of Broadband

- The Illinois Broadband Lab will continue the READY program guided by the State Digital Equity Plan and its core implementation activities

Broadband access is not a luxury. It is an essential utility, as vital to everyday living as electric service and home heating. The work that the Illinois Broadband Team has accomplished in 2024 will serve as a launchpad, propelling the state forward to accomplish that most important of goals: universal broadband access, adoption, and use for every resident of Illinois.

Left: Device distribution event with ConnectLakeCounty, a Wave 2 DECK (page 13) grantee
Right: One-on-one tech help at ConnectLakeCounty

Connected Nation (CN) serves as the broadband data collection and mapping contractor supporting the Illinois broadband development efforts. The Illinois Office of Broadband maintains the project. CN has been conducting research and broadband provider (ISP) outreach, collecting and obtaining information related to broadband service areas, processing and analyzing broadband data, developing and updating broadband maps, and conducting field validation activities.

Illinois broadband mapping deliverables have been completed biannually since February 2021. All Interactive Broadband Maps are now available from a launch page: https://illinois-broadband-cngis.hub.arcgis.com/

Notable Changes

CN redesigned the Illinois Broadband Map utilizing the latest ESRI technology. The redesign includes a simplified user interface, regrouping, and consolidation of the data layers.

With the National Telecommunications and Information Administration's (NTIA) Broadband, Equity, Access, and Deployment (BEAD) program as the focus, CN developed a Project Area Unit (PAU) Selection tool to assist applicants with selecting PAUs to include in their BEAD application. The tool summarizes the PAUs selected, including the number of eligible locations, hard-to-serve PAUs, and reference costs. The selection can be downloaded as a .cvs file.

The Digital Divide cannot be closed without understanding where gaps in broadband service exist. Broadband mapping is critical in determining these gaps and presenting the information in user-friendly formats.

Data Collection and Internet Service Provider Outreach

CN conducts provider outreach to work with and collect availability data from the provider community. CN compiles and updates a registry of providers offering service within the state and consolidates and standardizes the location-based data into a comprehensive data set on broadband availability by location type, technology, and speed.

CN reviews and analyzes the provider data for completeness and alignment with established standards and practices. This includes independent research on network offerings, licenses, and state and federal broadband databases to verify and refine the data. For non-participating providers, CN fills in the gaps by including federal filings and, in some cases, field data collection – where CN sends Engineering and Technical Services teams to locate telecom assets and infrastructure for targeted providers to develop more accurate service areas.

Broadband data collection and mapping in 2024 focused on fixed broadband services (cable, DSL, fiber, and fixed wireless). The table below provides information on the provider participation and response rates for the May 2024 outreach.

Broadband Provider Data Collection May 2024	
Provider Outreach Summary	
Total Viable Providers	127
Participating	101
Non-Participating	26
Viable Providers Not Yet Mapped	3

Broadband Provider Data Collection May 2024	
Provider Outreach Summary	
Total Viable Provider Platforms	186
Participating	147
Non-Participating	35
Viable Providers Not Yet Mapped	4
New Viable Providers Since May 2024	0

Field Validation Activities

Field validation activities confirm exact service boundaries, track telecommunications assets and infrastructure, validate construction progress, locate new or previously unknown broadband providers, and educate stakeholders on available services.

CN broadband technicians survey designated areas to confirm or refute the presence of advertised broadband services and speeds and refine provider data in discrepancy areas. For 2024, field validation was conducted to support Connect Illinois rounds, including the BEAD program.

CN works closely with broadband providers to collect, process, research, analyze, and clarify residential broadband service areas for inclusion on the state's broadband maps. CN desktop research and stakeholder feedback identify areas that require further investigation. These targeted locations consist of areas that have been challenged as having the broadband service available as advertised or areas where CN believed potential overstatement existed.

CN reviewed coverage areas from the Illinois broadband map where FCC Fabric/BDC data had to be utilized, either from a provider not supplying more granular information about their service area, the provider being non-responsive to requests, or the provider supplying data to CN that may have been more recent than the current public data. Additionally, areas targeted for field validation included providers who had received Connect Illinois grant funds and completed build-out in their application areas; field validation provided a way to confirm that the services were built out as expected.

The field validation activities in 2024 verified technology and speed and provided valuable input for data refinements and updates incorporated into the May and October 2024 Illinois broadband mapping deliverables. Validation activities also confirmed project progress for Connect Illinois grant rounds.

Appendix I: Connected Nation Illinois Broadband Annual Report 2024 - Continued

Broadband Availability Statistics

Broadband availability statistics provide a measure of the overall progress being made towards universal coverage. The tables below demonstrate the percentage of broadband service locations (BSL) covered at varying speeds across the state by year. The first table represents all fixed technologies, while the second represents only wireline technologies. With each successive broadband data update, the percentage of BSLs covered by higher speeds has increased, reflecting the continued expansion of broadband across the state.

Illinois Broadband Availability Percentage of BSLs Connected by Speed Tier per Year for Fixed Technologies (Cable, DSL, Fiber, Fixed Wireless)						
Speeds	**Jun 2021**	**Nov 2021**	**May 2022**	**Nov 2022**	**Dec 2023**	**May 2024**
25 Mbps Download x 3 Mbps Upload	97.19%	97.83%	98.11%	98.26%	98.51%	98.63%
100 Mbps Download x 20 Mbps Upload	90.61%	93.42%	93.23%	78.50%	95.61%	95.87%
100 Mbps Download x 100 Mbps Upload	n/a	n/a	31.33%	30.68%	45.69%	53.72%
1 Gbps Download x 1 Gbps Upload	20.08%	23.93%	24.10%	24.16%	32.1%	34.17%

Illinois Broadband Availability Percentage of BSLs Connected by Speed Tier per Year for Wireline Technologies (Cable, DSL, Fiber)						
Speeds	**Jun 2021**	**Nov 2021**	**May 2022**	**Nov 2022**	**Dec 2023**	**May 2024**
25 Mbps Download x 3 Mbps Upload	93.55%	94.01%	94.28%	94.29%	93.53%	92.79%
100 Mbps Download x 20 Mbps Upload	89.98%	92.44%	92.93%	70.74%	92.59%	92.04%
100 Mbps Download x 100 Mbps Upload	n/a	n/a	28.53%	28.59%	44.36%	52.69%
1 Gbps Download x 1 Gbps Upload	19.97%	23.36%	23.20%	23.27%	32.09%	34.16%

Appendix I: Connected Nation Illinois Broadband Annual Report 2024 - Continued

The U.S. Census defines a rural area as a non-urban area and urban areas as having a population of at least 5,000 or 2,000 housing units. Consistent with the statewide numbers, rural availability continues to increase but at a slower pace and lags behind urban and suburban areas. It should be noted that the definition of a rural area changed with the 2020 Census, which affected the availability statistics between November 2021 and May 2022.

Rural Illinois Broadband Availability Percentage BSLs Connected by Speed Tier per Year for Fixed Technologies (Cable, DSL, Fiber, Fixed Wireless)						
Speeds	**Jun 2021**	**Nov 2021**	**May 2022**	**Nov 2022**	**Dec 2023**	**May 2024**
25 Mbps Download x 3 Mbps Upload	93.20%	94.70%	86.67%	88.07%	92.32%	93.16%
100 Mbps Download x 20 Mbps Upload	74.55%	82.27%	54.49%	49.59%	78.1%	79.48%
100 Mbps Download x 100 Mbps Upload	n/a	n/a	21.37%	19.72%	37.39%	37.72%
1 Gbps Download x 1 Gbps Upload	10.85%	14.25%	11.62%	12.59%	24.62%	25.69%

Rural Illinois Broadband Availability Percentage BSLs Connected by Speed Tier per Year for Wireline Technologies (Cable, DSL, Fiber)						
Speeds	**Jun 2021**	**Nov 2021**	**May 2022**	**Nov 2022**	**Dec 2023**	**May 2024**
25 Mbps Download x 3 Mbps Upload	83.23%	84.25%	56.67%	56.91%	66.67%	63.88%
100 Mbps Download x 20 Mbps Upload	73.13%	79.90%	47.46%	40.89%	62.09%	60.41%
100 Mbps Download x 100 Mbps Upload	n/a	n/a	15.13%	16.27%	30.95%	32.96%
1 Gbps Download x 1 Gbps Upload	10.85%	14.25%	11.62%	12.59%	24.62%	25.69%

Appendix I: Connected Nation Illinois Broadband Annual Report 2024 - Continued

Evaluating the percentage of connected households across the state is one way of viewing the data. Another meaningful approach to understanding the impact of broadband is to view the total number of households impacted by a lack of broadband service at various speed levels. Below are tables on the number of households not connected by broadband among fixed and wireline technologies. At the current federal broadband definition of 25 Mbps download and 3 Mbps upload, it is estimated that there are 55,922 Illinois households without access to fixed broadband. This number exponentially increases as higher speeds are analyzed.

Illinois Lack of Broadband Availability BSLs Not Connected by Speed Tier per Year for Fixed Technologies (Cable, DSL, Fiber, Fixed Wireless)			
Speeds	**Nov 2022**	**Dec 2023**	**May 2024**
25 Mbps Download x 3 Mbps Upload	87,001	55,922	52,059
100 Mbps Download x 20 Mbps Upload	1,074,613	161,063	156,608
100 Mbps Download x 100 Mbps Upload	3,464,714	2,031,496	1,754,724
1 Gbps Download x 1 Gbps Upload	3,790,832	2,539,999	2,496,006

Illinois Lack of Broadband Availability BSLs Not Connected by Speed Tier Per Year for Wireline Technologies (Cable, DSL, Fiber)			
Speeds	**Nov 2022**	**Dec 2023**	**May 2024**
25 Mbps Download x 3 Mbps Upload	285,540	241,902	273,201
100 Mbps Download x 20 Mbps Upload	1,462,595	277,158	301,910
100 Mbps Download x 100 Mbps Upload	3,569,570	2,081,159	1,793,711
1 Gbps Download x 1 Gbps Upload	3,835,167	2,540,255	2,496,288

Like the overall statewide statistics, the broadband data were analyzed in rural areas to estimate the number of rural households not connected at the designated speed levels.

Rural Illinois Lack of Broadband Availability BSLs Not Connected by Broadband per Year for Fixed Technologies (Cable, DSL, Fiber, Fixed Wireless)			
Speeds	**Nov 2022**	**Dec 2023**	**May 2024**
25 Mbps Download x 3 Mbps Upload	66,380	54,168	50,625
100 Mbps Download x 20 Mbps Upload	280,394	154,433	151,787
100 Mbps Download x 100 Mbps Upload	446,554	441,547	460,661
1 Gbps Downloadx 1 Gbps Upload	486,242	531,565	549,609

Rural Illinois Lack of Broadband Availability BSLs Not Connected by Broadband per Year for Wireline Technologies (Cable, DSL, Fiber)			
Speeds	**Nov 2022**	**Dec 2023**	**May 2024**
25 Mbps Download x 3 Mbps Upload	328,821	235,074	267,139
100 Mbps Download x 20 Mbps Upload	465,773	267,332	292,805
100 Mbps Download x 100 Mbps Upload	N/A*	486,939	495,876
1 Gbps Downloadx 1 Gbps Upload	486,242	531,565	549,653

The tables below shift from statewide to county-level statistics and show how broadband availability varies across counties. The first table shows the **top ten most served counties** by fixed broadband at three speed levels; in this case, the most served is based on the percent of served households in the county, where "served" refers to the respective speeds available for subscription.
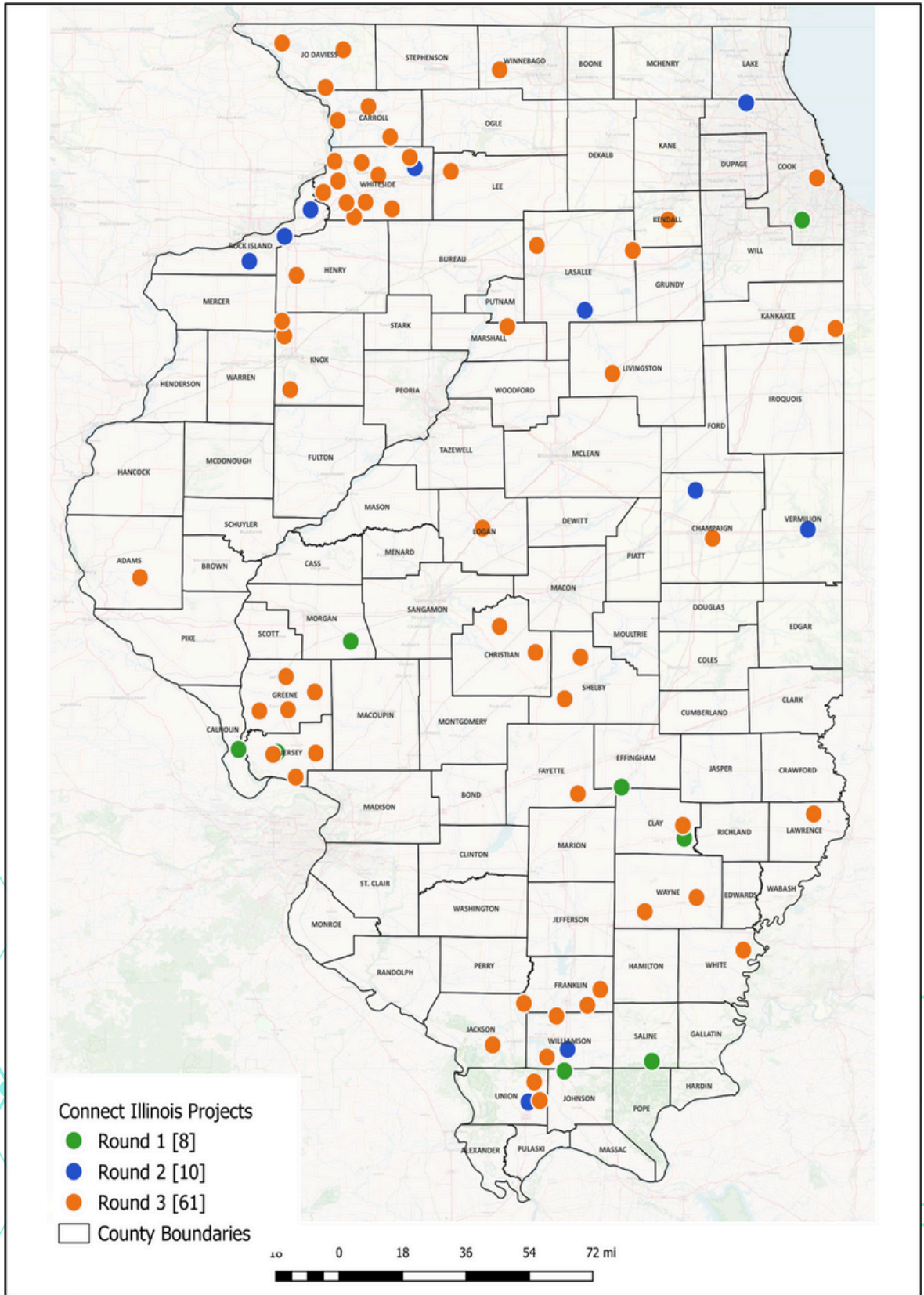
	Top Ten Most Connected Counties Percent of Connected BSLs per Speed Tier per County					
	25 x 3 Mbps Fixed Broadband		100 x 20 Mbps Fixed Broadband		1 x 1 Gbps Fixed Broadband	
	County	% Connected	County	% Connected	County	% Connected
1	CALHOUN	100	HARDIN	100	CLAY	93.48
2	GREENE	100	COOK	99.94	ADAMS	89.92
3	HARDIN	100	DUPAGE	99.79	ROCK ISLAND	77.48
4	MORGAN	100	CLAY	99.61	CHAMPAIGN	76.1
5	SCOTT	100	KENDALL	99.59	KENDALL	74.29
6	MCDONOUGH	99.99	WILL	99.59	MARION	73.71
7	COOK	99.98	DOUGLAS	99.47	CASS	71.95
8	WINNEBAGO	99.97	FORD	99.32	JEFFERSON	70.51
9	DUPAGE	99.96	LAKE	99.07	MADISON	70.36
10	KENDALL	99.94	RICHLAND	98.93	CHRISTIAN	69.85

The following table shows the **ten least connected counties**, based on the percent of households served by fixed broadband. It should be noted that 32 Illinois counties do not have access to 1 Gbps download and 1 Gbps upload broadband service (i.e., 0% served), while two counties do not have access to 100 Mbps download and 20 Mbps upload broadband.

	Ten Least Connected Counties Percent of Connected BSLs per Speed Tier per County					
	25 x 3 Mbps Fixed Broadband		**100 x 20 Mbps Fixed Broadband**		**1 x 1 Gbps Fixed Broadband**	
	County	**% Connected**	**County**	**% Connected**	**County**	**% Connected**
1	ALEXANDER	56.59	ALEXANDER	45.27	PUTNAM	0
2	CLARK	70.5	PULASKI	55.34	CALHOUN	0
3	POPE	81.65	CLARK	58.23	MARSHALL	0
4	UNION	82.38	MASSAC	59.2	SCOTT	0
5	BOND	82.93	WASHINGTON	60.98	GREENE	0
6	CRAWFORD	83.23	PUTNAM	61.3	BUREAU	0
7	HAMILTON	84.08	LEE	64.65	HARDIN	0
8	RANDOLPH	84.14	MENARD	66.01	BOND	0.09
9	PULASKI	84.79	CARROLL	66.25	ALEXANDER	0.15
10	WABASH	84.99	CALHOUN	69	STEPHENSON	0.18

Appendix II: Connect Illinois Project Map

Connect Illinois Projects
- Round 1 [8]
- Round 2 [10]
- Round 3 [61]
- County Boundaries

Appendix III: 2024 READY Program Highlights

Central | University of Illinois Springfield	Focus: Increase digital devices and digital literacy training among community health workers
	• 12-module digital literacy curriculum • Hosted workshops with Illinois Migrant Council and Illinois Public Health Association
East Central | University of Illinois Urbana-Champaign	Focus: Join with trusted community based organizations (CBOs) to develop "Peer-to-Peer" train-the-trainers digital navigation program
	• Join with trusted CBOs to develop "Peer-to-Peer" train-the-trainers digital navigation program
North Central | Illinois State University, Bloomington-Normal	Focus: Work with McLean County to expand digital equity initiatives; increase American Connectivity Program (ACP) adoption; device distribution
	• Hosted several in-person ACP events; distributed hundreds of devices • Facilitated McLean County Connect infrastructure initiative
Southeast | Eastern Illinois University, Charleston	Focus: Develop "network of networks" for southeast counties; coordinate outreach with Broadband Breakthrough counties
	• Visited all 13 regional counties to host workshops/education events • Assist with rural BEAD challenge process & Broadband Breakthrough
Southern | Southern Illinois University, Carbondale	Focus: Expand access to devices and tech support in Southern Region
	• Established computer technology center at Eurma Hayes Center with 10 computers/tablets • Graduate assistant utilized for accessible tutoring hours; Leveraged grants for more tutoring availability
Southwest | Southern Illinois University Edwardsville	Focus: Survey communities on lack of trust around digital equity issues; coordinate fellows, digital navigators, students, and CBOs
	• Hosted several ACP sign-up events and Northstar digital literacy classes • Developed southwest region digital equity Dashboard • High-coordination of digital equity groups within MetroEast region
West Central | Western Illinois University, Macomb	Increase digital equity efforts across region in libraries, increase ACP adoption
	• Contacted every school district in region on ACP • 24 chromebook lending program in libraries • Local ACP hotline at WIU, and 5 fellow-led workshops • Region-wide Digital Access Conference with RAILS • 8 mini grants to libraries for digital equity projects • Incorporated WIU students to assist on surveying accessibility of public websites