Illinois Broadband Advisory Council

Annual **Legislative Report**

January 1, 2024

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Executive Summary

The Illinois Office of Broadband launched its *Connect Illinois Broadband Grant Program* in 2020, complemented by increasingly robust digital equity and community planning programming. The current $350 million Round 3 of *Connect Illinois* combines state Rebuild Illinois bond funding with federal Capital Project Fund and State Fiscal Recovery Fund dollars available to Illinois through the American Rescue Plan Act (ARPA). In 2023, Round 3 inspired over 200 applications requesting more than $1.35 billion in grant support.

In June 2023, the National Telecommunications and Information Administration (NTIA) announced that Illinois would receive over $1.04 billion in funding through the Broadband Equity, Access and Deployment (BEAD) program to support universal access to high-speed throughout the state. In 2024, *Connect Illinois* will align with BEAD program requirements to offer Illinois providers, communities, and other qualified entities an opportunity to leverage this federal funding. Published in July 2023, the *Connect Illinois* Five-Year Action Plan integrated programmatic experience, stakeholder feedback, and data analytics to provide a forerunner to the more formal, binding approach for state use of federal BEAD funding, the Initial Proposal – which in fall 2023 was made available for public comment, revised per public comment received, and shared with NTIA for approval.

Digital equity, not simply broadband network access, has always been a core priority for the Illinois Office of Broadband (IOB, Office). In December of 2023, the Office released its draft State Digital Equity Plan (SDEP) including its vision for digital equity, current state of digital equity barriers, current state of digital equity assets, collaboration and stakeholder engagement and implementation. Illinois is expected to receive over $30 million over five years for digital equity work outlined in the State Digital Equity Plan. The SDEP draws from multiple quantitative and qualitative data sources to assess the digital divide in Illinois, including a statewide listening tour, over 100 other assets shared statewide, and input from a two-month public comment period.

The Office has expanded its technical capabilities by growing its team and developing strategic collaborations that have broadened the Office's reach and activities. In addition to a Director and Grants Manager, the Office now includes an Assistant Director, three Assistant Grants Managers, a Compliance Manager, and three Community Engagement Managers. The Illinois Broadband Lab (IBL, Lab) collaboration with the University of Illinois System contributes experience and expertise to critical areas such as: mapping and data; outreach and communications, and digital navigation.

Throughout 2023, the combined Lab team has connected the state's ten economic regions with the Broadband Regional Engagement & Adoption for Digital Equity (READY) program, supported the Digital Equity Capacity Kickstarter (DECK) Grant Program, crafted programming around the Affordable Connectivity Program (ACP), and stood up the statewide digital navigator network in conjunction with the Lead for America Connection Corps. The Illinois Broadband Lab has created and continued powerful collaborations with organizations such as the Benton Institute for Broadband & Society, Heartland Forward, the Illinois Innovation Network, PCs for People, University of Illinois Extension Services, and many more.

As historic federal funding for broadband infrastructure expansion and digital equity materializes in 2024, the Illinois Broadband Advisory Council will continue to serve as the primary platform for public discussion of Illinois broadband programming, performance, and progress.

The *Connect Illinois* Vision

The *Connect Illinois* program launched in 2019, pairing the largest state-sourced matching grant program for broadband expansion – the $400 million *Connect Illinois Broadband Grant Program* – with an appropriately ambitious commitment to digital equity and inclusion. The investment also included $20 million to enable the existing 2,100- mile Illinois Century Network to provide all school districts in the state with access to free gigabit broadband. Combined, the strategic capital investment seeks to ensure that all Illinois households, businesses, and community anchor institutions have access to affordable, reliable, and high-performing broadband.

The comprehensive *Connect Illinois* vision of broadband ubiquity is one of broadband equity – targeting resources to close gaps and expand opportunity for unserved and underserved communities throughout Illinois. The Illinois Broadband Advisory Council plays a key role in supporting this work – the work of the Illinois Office of Broadband, the state bureau housed within the Illinois Department of Commerce and Economic Opportunity (DCEO) charged with administering the *Connect Illinois Broadband Grant Program* and related work in community planning and capacity building, regional engagement, and digital equity and inclusion.

With over $1 billion in BEAD funding from NTIA supporting high-speed internet across the state, *Connect Illinois* will align with the BEAD program requirements beginning in 2024 to offer sub-grantees access to the federal funding. This alignment gives the cause of universal digital equity and access momentum and weight, allowing the whole of Illinois to benefit over the next five years.

To create an ecosystem of digital equity and inclusion, the State of Illinois also introduced complementary programming to pair with its historic $420 million capital investment that, combined, seeks to address the three key pillars of digital equity: affordable in-home broadband service; access to personal computers; and digital literacy training and ongoing technical support. Over time, this approach has grown to include programs emphasizing local capacity building and planning, regional engagement, digital literacy, used computer refurbishment and distribution, and introduction of on-the-ground support for communities and broadband adoption assistance for households.

To make this possible, the Illinois Office of Broadband is working alongside public, private, nonprofit, and philanthropic partners to raise resources for and awareness of the digital equity challenges facing communities throughout the state. Initial collaboration has been critical to the early success of the *Connect Illinois* program, and it includes strategic cooperation with organizations and institutions such as: the Illinois-based Benton Institute for Broadband & Society; Heartland Forward; Illinois Innovation Network; PCs for People; National Digital Inclusion Alliance; University of Illinois Extension Service; and the University of Illinois System.

The comprehensive *Connect Illinois* programming and collaboration represent a holistic approach designed to empower Illinoisans to participate fully in an increasingly digital economy and society, to help communities identify and address existing broadband equity gaps, and to ensure the state leverages new and existing resources for targeted digital inclusion strategies and sustainable broadband equity outcome.

The Illinois 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 that would 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 A to view the council's current appointed membership.

Meetings of the Broadband Advisory Council

- Regular Meeting: Wednesday, February 15, 2023
- Regular Meeting: Wednesday, May 10, 2023
- Regular Meeting: Wednesday, September 13, 2023
- Regular Meeting: Wednesday, December 13, 2023

February 15, 2023, Meeting: The agenda focused on updates around *Connect Illinois*, Digital Equity and broadband mapping.

Connect Illinois Broadband & Digital Equity Planning Initiative:

In fall 2022, Illinois expanded its capacity to meet requirements of the federal BEAD and Digital Equity programs by adding support through the University of Illinois System and contracted expert consultation. Together, this added capacity would help create a Five-Year Action Plan, as well as the Initial and Final Proposals for BEAD funding and Digital Equity Act planning and engagement. Now this added support is helping to launch the *Connect Illinois* Broadband and Digital Equity Planning Initiative. An overview was provided of the upcoming BEAD funding process as well as the recommended and ongoing steps toward stakeholder engagement and local coordination. These include:

- Informational sessions to inform the public on BEAD and DE opportunities
- Listening sessions and interviews to understand needs and experiences of all stakeholders, as well as phone and online surveys
- Engaging with state and local governmental agencies
- Visiting all 10 Broadband READY regions

Broadband Mapping:

- Ashley Hitt from Connected Nation gave an overview of broadband mapping activities, including bringing together disparate data sets to confirm served, underserved, and unserved areas. New data collection will begin March 1, to be published and incorporated by the end of May. Data now will be granulated to individual broadband serviceable locations, rather than polygons. Field validation is also taking place with engineers evaluating areas based on the map.
- Shubhika Agarwal from the Illinois Broadband Lab gave an overview of FCC Challenge process, including Fabric challenges for locations where fixed broadband internet access service can be installed, and one by Availabilities, for service, speeds, or technology. IBL executed a four-point FCC Challenge strategy:
  - Identify Broadband Serviceable Locations
  - Mobilize partners and consumers
  - Conducted targeted audit and field check
  - Submit bulk challenges

- IBL submitted 87,000 Fabric challenges and 37,000 service Availability challenges. 7,763 Fabric challenges were accepted, and Availability challenges are reviewed on a rolling basis by the FCC. IBL will submit additional Fabric challenges and conduct additional desktop research.

- Jon Wilkins, a consultant to the Illinois Broadband Lab, spoke about the FCC Affordable Connectivity Program and shared details about the consumer subsidy, offering $30 off monthly broadband costs for eligible households and $100 for devices like laptops, tablets, or PCs. This program aligns with the goals of Access, Adoption (Affordability), and Use. The original funding is being exhausted, and there is no indication yet on whether the funding will be extended, refunded, or rolled into another program.

- Matt Schmit announced that the *Connect Illinois* Broadband Grant Program Round 3 Notice of Funding Opportunity remains open as the General Assembly's Joint Committee on Administrative Rules considers proposed administrative rule governing the *Connect Illinois* program.

May 10, 2023, Meeting: The agenda focused on updates around upcoming federal funding, ACP program, ongoing work that drives the upcoming Five-Year Action Plan and State Digital Equity plan, Broadband READY vision, statewide digital navigator network building and *Connect Illinois* Round 3.

BEAD Funding: This is a formula-based allocation based on high-cost areas and unserved BSLs are in each state and territory. This will be the last meeting before the state grant allocations of the BEAD funding will be announced. After announcement, state will have 180 days to develop initial proposal for dispersal. Challenge process is upcoming.

Illinois Broadband Lab Updates:

- Update on the FCC Affordable Connectivity Program. The briefing focused on adoption and affordability of broadband. Low-income households are more likely to not have wireline broadband subscriptions, rely on cellular plans alone, and not have devices to get online. ACP tool allows stakeholders to see how many people in a region are eligible for ACP and how many are enrolled.

- Update on the upcoming *Connect Illinois* Broadband & Digital Equity Planning Initiative and closing the Digital Divide in Illinois using local coordination. IBL has been leading virtual events and stakeholder groups across Illinois, including individuals, state governments, and nonprofits. Three surveys released by the IBL team, hoping to target public housing authorities, community anchor institutions, and other specific audiences including ISPs, residents, governments, and private companies. Input from stakeholders is driving the vision throughout the state, including the upcoming Five-Year Action Plan and the State Digital Equity Plan

- Broadband READY updates included the fact that it covers 10 Economic Development Regions, targeting digital equity and building local capacity and engagement. The goals are:

    o Identify, support, and/or pilot local digital equity initiatives
    o Facilitate statewide listening tour
    o Contribute to State Digital Equity Plan
    o Host and help place Digital Navigators

- Statewide "boots on the ground" network to engage local stakeholders and individuals. Digital Navigation Network uses a train the trainer model to extend reach and ensure sustainable impact. Focused on ACP outreach and enrollment. 10 fellows through Lead for America, one for each of the 10 economic development regions

- New iteration of Accelerate Illinois, titled Broadband Breakthrough, provides a supported broadband strategic planning process for agriculturally centered regions facilitated by the Illinois Soybean Association and the Benton Institute. This program is based on a United Soybean Board Survey of 4000 farmers and their needs regarding broadband. Adrianne Furniss presented highlights from Schuyler County, a recent graduate of the program.

- *Connect Illinois* Broadband Grant Program, administrative rule has been approved and Round 3 merit and mapping review is underway following a nearly year-long pause, targeting Broadband Access, Broadband Innovation and Urban Broadband.

- Amanda Bergson-Shilcock with the National Skills Coalition spoke on closing the digital divide especially for job seekers and skill building. The National Skills Coalition gathered information from employers on what kinds of digital skills they are asking for from job candidates to provide more training for job seekers on those skills. They found that 92% of job skills are digital.

September 13, 2023, Meeting: The agenda focused on updates from the Illinois Office of Broadband and Illinois Broadband Lab, covering infrastructure and programing updates, recapping the statewide listening tour, Five-Year Action Plan and BEAD proposal updates.

Office of Broadband and Illinois Broadband Lab updates included:

- Update about the *Connect Illinois* Round 3 Notice of Funding Opportunity, targeting Broadband Access, Broadband Innovation and Urban Broadband. With a $10 million maximum grant amount, this project serves to provide access to unserved and underserved areas. Agarwal also gave an overview of the merit review and mapping review processes to evaluate and award those grant funds.

- Overview of the *Capacity Kickstarter Grant (DECK)* program, which has accepted applications and is now undergoing merit review. The DECK program can fund programs up to $300,000. This program is targeted toward increasing Affordable Connectivity Plan outreach and enrollment, supporting community technology centers, facilitating digital skill building, and funding feasibility studies for broadband expansion.

- Update on the *Regional Engagement for Adoption & Digital Equity (READY)* program, which will drive broadband collaboration for engagement, evaluation, planning, and progress at regional levels, and align local and regional efforts toward the shared goals of access, adoption, and utilization. The program awards up to $50,000 per region, centered around the state universities and their teams. McBeath also provided a preview of the planned series of regional meetings following up on the 2023 statewide listening tour.

- Overview of the Accelerate Illinois: Broadband Breakthrough program co-hosted by the Benton Institute and the Illinois Soybean Association. This program helps rural farming communities in Illinois to plan strategically for broadband infrastructure and expansion. When agricultural communities can connect to broadband, it can increase corn and soybean yield up to 4% thanks to precision agriculture applications.

- Overview of the Statewide Digital Navigator Network, formed from a $700,000 investment from the FCC as well as partnership with Lead for America American Connection Corps to place 11 digital navigators with the 10 Economic Development Regions. These navigators are focused on ACP Outreach and Enrollment, as well as providing skill building and device acquisition support.

- Recap: Statewide Listening Tour - More than fifty-five listening sessions, with over 1,200 attendees from March to June. Online safety was a particular concern across the state, as was safe access to public wi-fi service. Digital skill building was also an issue that was needed in both rural and urban areas. Other common themes emerged such as outdated broadband infrastructure, lack of ISP competition, limited bandwidth and latency issues, affordability concerns, and lack of broadband being a barrier to economic growth and competition. The team also broke down concerns by economic regions.

- Overview: Five-Year Action plan is published and available online. This plan looks forward at the goals and requirements of the BEAD program that will affect the next 10 years of broadband expansion across the nation and each state. It gives specific preliminary goals toward broadband access, adoption, and use. In addition, Illinois is focused on telehealth, education, and economic development as main impact areas.

Three main objectives of the Five-Year Action Plan

- Develop a fact base on broadband access, equity, and adoption needs

- Set direction for the state to achieve universal broadband access and close the digital divide

- Discuss preliminary implementation plan and provide a foundation for alignment with the draft Initial Proposal and future Final Proposal

December 13th, 2023, Meeting: The agenda focused on updates from the Illinois Office of Broadband and Illinois Broadband Lab, BEAD updates from NTIA, and updates on the State Digital Equity Act Plan as well as the Precision Ag Task Force Report overview.

Precision Ag Task Force Report:

- Broadband and cellular service based on geography as well an increased upload capacity requirement are needed to allow an ecosystem of technologies built to further empower the agriculture industry. Key takeaways from the report were shared regarding four working groups:

  o Mapping and analyzing connectivity on agricultural lands;
  o Examining current and future connectivity demand;
  o Accelerating broadband deployment on unserved agriculture lands; and
  o Encouraging adoption and availability of high-quality jobs.

Illinois Office of Broadband Updates:

- IOB currently has ten full time employees, from only two a few months ago, including a bigger grants management team and community engagement team. Devon Braunstein joined the Office as Assistant Director in December.

- *Connect Illinois Broadband Grant Program* Rd 3 is wrapping up as current mapping and scoring processes are being finalized. *Connect Illinois* Round 4 will leverage BEAD dollars ($1 billion). Round 3 of *Connect Illinois*, which has $350 million available is a combination of state Rebuild bond funding as well as Capital Projects Fund dollars through the American Rescue Plan Act (ARPA). Over 200 applications totaling over $1.35 billion of requests have been received.

- *Digital Equity Capacity Kickstarter Grant Program*: A wide array of applicants have requested funding. Wave 1 awards have been made, and merit review of Wave 2 are underway. IOB is currently still accepting applications through December 22 for Wave 3 and a fourth Wave through January 19, 2024.

- *Accelerate Illinois' Broadband Breakthrough*: Two cohorts have wrapped up and a new cohort kicked off in Bloomington on December 13, 2023. Another cohort in anticipated for May through August **2024.**

Federal Updates from NTIA:

- In 2024 Illinois will start the BEAD challenge process – details will be published on the state website. The state will have 365 days to select subgrantees, who will then have 4 years to complete their projects. BEAD focuses on all who are unserved (less than 25/3 Mbps) or underserved (less than 100/20 Mbps).

- The State Digital Equity Plan draft is ready and open for public comment. It will serve as a benchmark map that the state will use for the next phase, which is the Digital Equity Capacity Program. NTIA will announce the NOFO for the Capacity Program in March or early April, then the state will be able to apply and start the subgrant process.

Illinois Broadband Lab updates:

IBL is looking to expand to serve as the innovation and collaboration hub for Illinois in collaboration with University of Illinois System and Illinois Innovation Network. The IBL website houses a great amount of information such as ACP program, Mapping and Data, Broadband READY program, and online survey tool, etc. Lead for America Connect Corps navigators are placed in each economic development regions, aligned with connecting minority community grant. Plan is underway to expand network to integrate 30+ navigators. Additional updates included a call for collaboration and additional partnership through Broadband READY and call for public comment for the State Digital Equity Plan.

BEAD Mapping Challenge updates:

An overview of the background of the BEAD challenge, including the FCC map, eligibility to make sure that funding goes towards those most needed. Pre-registration is encouraged and currently underway so that stakeholders can stay updated. IBL is working on a challenge map to aggregate data sets. January and February will be when challenges are accepted via the portal, followed by rebuttal which will last three weeks after challenge

notification. IBL will have four weeks in April to adjudicate challenges, considering challenge and rebuttal evidence. In late Spring, IBL will publish final maps after NTIA approval.

Digital Equity Plan Updates:

The vision for digital equity, current state of digital equity barriers, current state of digital equity assets, collaboration and stakeholder engagement and implementation. Illinois is expected to receive about $30-35 million over five years for digital equity work outlined in the State Digital Equity Plan.

BEAD Initial Proposal Vol. 1 and 2 Updates:

A summary of Vol. 1 and 2 requirements, and key goals and the state's proposed modifications to *Connect Illinois*. The IOB plans to implement a three-phased process for deployment, including an RFI, wWave 1 with the focus of hard-to-serve areas and Wave 2 of all remaining locations. The state has incorporated comments in initial proposal Vol. 1 and 2 and will work through NTIA feedback and host technical assistance sessions in early 2024.

The Illinois Office of Broadband

Created in September 2019, the Office of Broadband is housed within the Illinois Department of Commerce and Economic Opportunity, the state's largest grant-making authority. As a primary charge, the Office is responsible for administering the *Connect Illinois Broadband Grant Program*. In addition, the Office 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 Broadband 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 has expanded its technical capabilities by growing its team and developing strategic collaborations that have broadened the Office's reach and activities. Matt Schmit has served as Deputy Director of Broadband since September 2019. The Office now includes an Assistant Deputy Director, Grants Manager, three Assistant Grants Managers, a Compliance Manager, and three Community Engagement Managers. The Illinois Broadband Lab collaboration with the University of Illinois System contributes experience and expertise in critical areas such as: mapping and data; outreach and communications; and digital navigation. A growing statewide digital navigator network has placed full-time community engagement practitioners in each of the state's ten economic regions.

To add value to its programming, leverage external resources, and enhance its capacity, the Office forged strategic collaborations with the Illinois-based Benton Institute for Broadband & Society, Heartland Forward, the Illinois Innovation Network, University of Illinois Extension Services, and the nonprofit, PCs for People.

These collaborations have made possible the following Office activity and non-capital programing:

- Illinois Broadband Connections, a biweekly newsletter that has published 88 editions to date reaching over 2,000 subscribers.

- Ambitious 54-stop statewide listening tour to collect data and insights from residents, community-based organizations, and local officials to inform the *Connect Illinois* Broadband and Digital Equity Planning Initiatives, which focus on maximizing the federal Bipartisan Infrastructure Law funding Illinois receives for broadband infrastructure and digital equity.

- Five-Year Action Plan for broadband access and deployment in parallel with its State Digital Equity Plan for broadband adoption and application. These plans will contribute to an updated *Connect Illinois* Broadband Strategic Plan, which will articulate and guide the State's accessible, integrated, and comprehensive approach to eliminate the digital divide.

- Accelerate Illinois' Broadband Breakthrough, and Illinois Connected Communities, a local planning and capacity building project. It has engaged over 50 communities through expert-led, structured curriculum; A new six-county cohort made up of mostly rural communities has kicked off in December 2023.

- Broadband READY, a regional framework that leverages expertise from higher education, planning, and economic development.

- Computer Equity Network, with PCs for People, a statewide computer refurbishing and redistribution network, with regional hubs in Cook County, Metro East, and Southern Illinois.

- Lead for America - a national non-profit that administers Americorps Fellowships, a two-year program with ten digital navigators.

- Illinois Broadband Lab (IBL), a collaboration with the University of Illinois System to support Office programming, grow capacity, and facilitate data collection, mapping, and research. IBL has been instrumental in assisting with broadband mapping and dashboard building, as well as building a comprehensive digital literacies curriculum.

Connect Illinois Broadband Grant Program

As part of his historic $45 billion Rebuild Illinois investment strategy, in 2019 Governor J.B. Pritzker included $420 million to expand access to high-speed broadband internet across the state. A critical commitment to closing gaps and expanding opportunity, the *Connect Illinois* program is central to the Governor's Five-Year Economic Plan to revitalize and grow the Illinois economy with an emphasis on equitable growth.

Now, with approximately $1.4 billion in state and federal funding available for broadband deployment grants targeting areas of greatest need – and with significantly more expected via the Infrastructure Investment and Jobs Act, *Connect Illinois* is an equity-driven infrastructure program, first and foremost. Challenges tied to population sparsity, geography, or low take rate continue to stand as barriers to broadband ubiquity. In particular,

Connect Illinois seeks to address disparities in broadband access and adoption in rural regions and black and brown communities across the state. Understandably, private investment has doubled down on relatively profitable service territories – growing the broadband access gap as a result. *Connect Illinois* funding will address this market failure and recalibrate the business case for new deployments, connecting communities and individual consumers with scalable service throughout the state.

The *Connect Illinois* Broadband Grant Program expands broadband connectivity by promoting values such as:

- Competitive matching grants will leverage all available private, local, and federal funds to pair with the necessary state funding to make a deployment viable.
- Applicant inclusive approach will inspire a wide array of proposals, including but not limited to those from providers, cooperatives, municipalities and local governments, nonprofits and other organizations created for the purpose of extending broadband access.
- Community-driven approach will promote direct engagement among providers, local communities, and individual stakeholders to collaborate and build toward a shared community technology vision.
- Affordability focus will ensure that the *Connect Illinois* program takes a comprehensive approach to promoting broadband access through broadband equity, addressing one critical barrier to adoption: a consumer's cost to connect.

Leveraging broadband for innovation in economic development or quality of life requires more than a fast connection. This is particularly true when it comes to empowering communities to participate in a broadband deployment or encouraging consumers to utilize broadband once it is available. Accordingly, Illinois compliments its historic investment in broadband infrastructure with value-added work to prime the broadband pump – through a complimentary and increasingly comprehensive approach to digital equity and inclusion programming.

Combining the work of the Broadband Advisory Council with established best practices from across the country, the *Connect Illinois* Strategic Plan articulates goals for universal statewide broadband access to spur advances in economic development, as well as innovation in healthcare delivery, education, and agriculture. From its beginning, the plan has emphasized the role of digital equity and inclusion as foundational to future state broadband capital investment. Because *Connect Illinois* will align with the Broadband Equity, Access, and Deployment (BEAD) Program from 2024 onward, the Illinois Office of Broadband also released the *Connect Illinois* Five-Year Action Plan to build upon the strategic plan.

The *Connect Illinois* Broadband Grant Program focuses on expanding broadband connectivity through matching grants for broadband infrastructure projects in unserved and underserved areas. This program can transform the state's investment into a potential total public-private investment of $2 billion or more in state and non-state public/private sources.

Connect Illinois Round 3, which has $350 million dollars available, is a combination of state Rebuild Illinois bond funding as well as federal Capital Projects Fund and State Fiscal Recovery Fund dollars through the American Rescue Plan Act (ARPA). To date, over 200 applications requesting more than $1.35 billion in grant support have been received in Round 3 alone.

Digital Equity Capacity Kickstarter Grant Program

In 2023, the Illinois Office of Broadband also launched the Digital Equity Capacity Kickstarter (DECK) Grant Program to sustain existing local initiatives and support other proven and pilot ideas ahead of federal Digital Equity Capacity Grant Program funding expected in late 2024. The initial DECK grant opportunity included $1 million to support 23 grants awarded to 22 organizations ahead of historic federal funding to shrink often overlooked aspects of the digital divide.

The first three DECK application deadlines inspired roughly $10 million in grant requests, with applications focusing on one or more of the following categories established in the DECK Notice of Funding Opportunity:

- **Outreach and Adoption** to facilitate awareness of and enrollment in low-cost broadband programs, such as the Affordable Connectivity Program (ACP). Related activities may include: conducting outreach to community members; supporting enrollment in ACP and other low-cost broadband offerings; and complementing initiatives supported by formal federal ACP Outreach Grant funding.

- **Digital Skill Building, Navigation, and Use** to provide advice, assistance, and tech support to community members on the use of digital tools and platforms or to coach, train, and guide residents individually or in group settings 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** to establish, administer and expand Community Technology Centers (CTCs) and support basic computer literacy training programs through these centers; and to provide access to computers, internet connectivity, and related training to Illinois communities with demonstrable need.

- **Access Expansion Feasibility** to identify and advance a community's broadband access vision and goals; to evaluate market options, consumer demand, and stakeholder alignment; to engage internet service providers and build public sector leadership; and to consider next steps for public- private partnership, grant funding, etc. to increase broadband access and connectivity.

The first wave of grantees includes the following organizations, [announced](#) in November 2023:

Association House of Chicago	Metropolitan Family Services
Brighton Park Neighborhood Council	North Lawndale Employment Network
Center for Changing Lives	Northwest Side Housing Center
The Center: Resources for Teaching & Learning	The QUILT Corporation
Chicago Urban League	scaleLit
Coalition for a Better Chinese American Community	Southwest Organizing Project (SWOP)
Digital Leaders Now	TCA Health
Erie Family Health Centers	Touch Gift Foundation
Gads Hill Center	The Trep School
Growing Home	Women's Business Development Center
McLean County	YMCA of Metropolitan Chicago

Accelerate Illinois' Broadband Breakthrough

[Broadband Breakthrough](#) is a community engagement and broadband infrastructure planning program that focuses on rural farming communities. Two cohorts have completed the program, and a new cohort began in December 2023. A final cohort is expected to run from May through August 2024.

Illinois Broadband Lab

The Illinois Broadband Lab (IBL, Lab) serves as the innovation and collaboration hub between the Illinois Office of Broadband and the University of Illinois System. The IBL hosts programming around the Affordable Connectivity Program (ACP), Broadband Mapping and Data, and the Broadband READY program. The IBL also facilitates a digital navigator program through the Lead for America Connection Corps, where digital navigators are placed in each of Illinois' economic development regions. Plans are underway to expand this network to 30+ navigators. Current programming is funded through a Federal Communications Commission (FCC) ACP Outreach Grant awarded to the Office of Broadband.

Broadband Regional Engagement & Adoption for Digital Equity (READY)

[Broadband Regional Engagement for Adoption + Digital Equity (READY)](#) grants are provided to qualified regional entities—such as a community and economic development organization, regional planning council, or institution of higher education—to explore opportunities for equitable advances in the areas of broadband access, adoption, and utilization. The program is designed to identify current digital inequities as well as next steps in creating digital inclusion ecosystems through regional collaboration. It seeks to provide scalable solutions for broadband utilization across all 10 Illinois economic development regions. The program was designed as a forerunner to provisions included in the [Digital Equity Act](#), signed into law as part of the Infrastructure Investment and Jobs Act, and serves as a foundation for [Office of Broadband work in Digital Equity + Inclusion](#).

Each READY region seeks to implement a Digital Equity Impact Project—often around digital literacy or device distribution—and serves as a key collaborator for regional digital equity work related to the state's Digital Equity Plan.

Regional Breakdown

Central | University of Illinois Springfield

Project Summary: Center for State Policy and Leadership (CSPL) at the University of Illinois Springfield (UIS) proposes a strategic partnership and collaboration to perform outreach and address digital literacy, particularly as it relates to healthcare. Initially, this project will concentrate in Sangamon County and partner with the Culturally Integrated Education for Latinos Organization (CIELO). Consultants with expertise in community health workers will assist to design and develop a detailed project plan, outreach and training plan and evaluation plan. CSPL will work with Continuing and Professional Education (CAPE) at UIS to utilize a learning management system and build any necessary curriculum. Then CSPL will continue in partnership with CIELO and other consultants to hire and train Community Health Workers (CHW) in Sangamon County to provide digital literacy curriculum and employ UIS students to provide hotline and virtual technical assistance in Sangamon County. The model aims to be employed in other counties beyond Sangamon County in the future.

East Central | University of Illinois Urbana – Champaign

Project Summary: The East Central READY team will advance a new partnership with the Parkland Community College's Support Workforce Training (SWFT) program, building on the partnerships with the

Housing Authority of Champaign County, the Champaign-Urbana Public Health Department, Urbana's Cunningham Township, and Project Success of Vermilion County that was seeded from a Broadband Equity Project (awarded $50K from State of Illinois' DCEO since 2020). The renewed READY funding from the DCEO allows the East Central READY team to develop a pilot Civic Empowerment and Artificial Intelligence in the Community Curricula for Parkland Students that will expand the Civic Empowerment Curricula previously developed with partner organizations. The Parkland partnership will allow the READY team to test a scaling of this curricula for the adult learners in SWFT who are all being trained to enter jobs in healthcare, trucking and factories where new AI technologies are being integrated. The curricula will empower community members to gain literacy around these trends in relation to workplaces in Illinois, while also developing practical literacy on existing resources should potential harms arise.

North Central | Illinois State University

Project Summary: The North Central Region, led by Illinois State University (ISU) and in conjunction with McLean County, will work closely with an AmeriCorps Lead for America Digital Navigator, as well members of the McLean County Regional Planning Commission to build upon existing digital equity efforts underway in the region, particularly those from the Broadband Breakthrough program, a previous program in partnership with Illinois Innovation Network, Illinois Soybean Association, and other key partners to expand broadband access and agriculture yields in rural counties across Illinois. The team will partner with the computer refurbishing nonprofit PCs for People to conduct device distribution and Affordable Connectivity Program outreach events in Bloomington-Normal and Peoria communities and to host ACP enrollment events.

Northern Illinois | Chicago State University, Northern Illinois University

Project Summary: The first Cohort of the Northern Region began as a collective including Northeast, Northwest, and the Northern Stateline. In the second year of the READY Teams, 2022 the regions were separated as listed Northern Stateline, Northwest, and Northeast. Currently, these regions will be led by both University and Community College Administrators. The Northwest READY Region leaders will include Northern Illinois University and Harper Community College. The Northern Stateline READY Team leaders will include Rockford Community College. The Northeast READY Team leaders will include Chicago State University. The Northeast READY Team is unique in that it is made up of the DCEO sub region map that indicate the County Clusters of t region. The approach to this Region is to work with broadband Leaders in each subregion to understand their needs and to assess the how to address the digital inequity gaps as it relates to access, adoptability, and use. We work with local government including County Administrators who have been tasked manage Broadband Offices as that of Cook and Lake County respectively.

The three most northern regions of the state have joined forces with their READY ambitions to coordinate various initiatives already underway in Chicago, Cook County, and northern Illinois. Chicago State University—with several key partners—was awarded a National Telecommunications and Information Administration (NTIA) Connecting Minority Communities grant to enact the Advancing Broadband Equity through Learning Intermediaries in the Neighborhoods of Chicago (ABE-LINC program), which will tackle the digital divide by expanding broadband, distributing laptops and improving digital literacy through

navigators conducting community outreach and training. Together, CSU and Northeastern Illinois University will run the digital navigator program that will provide training on basic digital literacy, digital conduct, online resources and tools, and internet subscriptions and device purchases. The navigators will also provide laptops to households of priority neighborhoods to fill gaps in the ability to access telehealth resources and educational and employment opportunities. These efforts will compliment targeted digital literacy and library-focused initiatives across northern Illinois.

Southeast | Eastern Illinois University

Project Summary: The Southeast READY team seeks to focus its efforts on connecting the 13 rural counties in the Southeast Region of Illinois by building a list of stakeholders and convening plan for regional stakeholders. The team will identify issues related to the equitable distribution of broadband in the 13 rural counties. This will include a database of knowledge skills and capacities to assist regional efforts around grant seeking & other digital equity initiatives. The team aims to be a regional source for both infrastructure and digital literacy coordination, devoting funds to secure a grad assistant dedicated to these efforts. The team also intends to engage with a 3-county cohort participating in the Broadband Breakthrough broadband-agriculture program to connect this community broadband planning with region-wide workforce development initiatives.

Southern | Southern Illinois University Carbondale

Project Summary: SIU Carbondale will finalize an instructional guide to establishing Community Technology Centers in rural communities in the southern 19 counties. They will develop a written document which outlines the partners to be engaged, steps to be taken, and potential sources of funding and support. They aim to partner with Shawnee College to provide information and programs related to expanded broadband access, technical assistance, consultative services, and the establishment of Community Technology Centers in one, or more, of the communities of Cairo, Mounds, Mound City, and/or Ullin. They also will provide continuing support for the Eurma C Hayes Community Technology Center to include technical assistance, consultative services, and educational programs, as requested.

Southwest | Southern Illinois University Edwardsville

Project Summary: The Southwest READY team will be building upon previous work from its involvement in the READY program, using funding to develop a train-the-trainers program whereby a cohort of 10 Community Broadband Advocates (CBA) are trained to provide digital literacy workshops in their communities. Training will be delivered by a Digital Equity Project Manager and will equip CBAs with effective pedagogical strategies and digital literacy skills. Upon completion of the training, CBAs will work with the SIUE-Southwestern Region team and Project Manager to identify community-based organizations and audiences where 8-week digital literacy workshops can be offered. All survey data collected from the workshops will be summarized into the Digital Equity Dashboard for the Southwestern Region, and this data will be combined with an expanded dataset of open-source quantitative data that are available pertaining to broadband accessibility and community demographics. The final dashboard will be freely shared so that communities have the tools they need to advocate for needed broadband resources.

West Central | Western Illinois University

Project Summary: The Western Illinois University (WIU) School of Computer Science, Illinois Institute of Rural Affairs (IIRA), Malpass Library, Department of Communication, and Social Media Lab propose to enhance digital literacy and improve broadband utilization in the West Central region through a variety of integrated projects. The intent is to make WIU's Malpass library a regional hub for community libraries and serve as a resource for communities. WIU will host a conference for librarians in the region to create a sense of connectedness, share resources, and engage a listening session to best serve those that have contact with various communities. Educational training sessions will be hosted for businesses, organizations, and individuals to better utilize digital tools when engaging with the public. Sessions will also present instructive information on cybersecurity and will assist with rural library inclusion through the Reaching Across Illinois Library System (RAILS), covering the northern half of Illinois. Further successful Chromebook and hotspot device distributions will continue, as well as ongoing digital literacy outreach through the hiring of a grad assistant.

Digital Navigators and the Affordable Connectivity Program

In January 2023, the Illinois Office of Broadband, in conjunction with the Illinois Broadband Lab, received a $700,000 grant from the Federal Communications Commission to conduct outreach and enrollment in the Affordable Connectivity Program (ACP). ACP is a $30 monthly broadband subsidy for qualifying households, provided by the FCC.

The grant was used to develop a statewide digital navigator network. IOB and IBL entered into an agreement with Lead for America – a national non-profit that administers Americorps Fellowships – to recruit and train 10 American Connection Corps (ACC) Fellows to serve as Digital Navigators in each of the DCEO economic regions.

Fellows were placed with university and government partners associated with the Broadband READY initiative. The Fellows' primary responsibility is to promote the Affordable Connectivity Program to eligible families within their regions through outreach, engagement, and enrollment assistance programs and events.

In 2024, the Fellows will continue to build relationships with community organizations and agencies to provide ACP outreach, enrollment assistance and additional access program enrollment. The Fellows will also begin providing digital skills classes and training using the NorthStar Digital Literacy Assessment. IBL was provided a subscription through the partnership with Lead for America.

Computer Equity Network

The IBL partners with PCs for People to distribute refurbished computers to communities in Cook County, Chicago, and the Southern Region in Bellville. PCs for People has distributed over 21,000 devices in Illinois to date, with almost 7,000 in 2023 alone. Illinois' average household size is 3 people, which would equate to almost 65,000 people served since PCs for People's inception in 2021. In addition, they have helped connect 915 households to the internet.

Projects of Illini Science Policy Scholars

Digital Literacies Curriculum Development

The 'Digital Literacies Odyssey' represents a groundbreaking effort to enhance digital literacies across diverse demographics in Illinois. Literacies (rather than literacy) signifies a state-wide shifting of paradigm. Initially targeting learners through the [Partners for Reentry Opportunities in Workforce Development (PROWD) grant program](#), the curriculum is aiming to provide recommendations for senior citizens, immigrants, and groups with traditionally low digital literacy levels. Comprehensive market research was conducted to understand the digital literacy landscape along with collaboration with community organizations.

Social Media

Illinois Broadband Lab has aimed to increase its social media presence and invite public participation in Broadband Equity, Access, and Deployment (BEAD) and Digital Equity (DE) planning efforts, Illinois Office of Broadband and partner initiatives, and broadband infrastructure and digital equity research. IBL has added [LinkedIn](#) and [Twitter](#) pages as well as [TikTok](#) and [Instagram.](#)

ArcGIS Dashboard Development and Utilization

The [ArcGIS dashboard](#) was developed last year as a tool for visualizing various data sources. Its creation marked a significant step in understanding and improving broadband usage and access.

Initially, the dashboard was designed to aggregate and display different data points, helping to visualize the use and access of broadband across various regions. This visual representation aimed to provide a clear understanding of broadband distribution and its accessibility. It now focuses on deeper aspects of broadband access, including accessibility, affordability, and adoption. This evolution reflects a growing need to understand how broadband impacts socio-economic factors such as housing values, rent costs, agriculture production, and internet availability on farms. Additionally, the dashboard incorporates data on the social vulnerability index and telehealth data, offering a more comprehensive view of broadband's role in societal dynamics and will interpret how it has impacted the livelihoods of the residents.

Tableau Dashboard Development and Telehealth Data Analysis

Through this initiative, the IOB is developing and enhancing Tableau dashboards to provide insightful visualizations for broadband access and telehealth data in Illinois. This initiative aligns with the broader goal of understanding and improving digital infrastructure and healthcare services in the state.

The Tableau dashboard primarily concentrates on visualizing data related to READY Regions in different counties of Illinois. The dashboard includes broadband and telehealth data. This includes analyzing and visualizing telehealth-related data to understand the extent of its usage and impact in different counties.

Illinois Broadband Mapping

Connected Nation (CN) was selected as the broadband data collection and mapping contractor in support of the Illinois broadband development efforts after an RFP process by the Department of Commerce and Economic Opportunity (DCEO). The project is maintained by the Illinois Office of Broadband. CN has been conducting research and internet service 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. For 2023 work, deliverables were provided in June 2023 and December 2023, including the comprehensive public interactive map and the scaled-down embedded public interactive map.

Notable Changes

The Federal Communications Commission (FCC) move from Form 477 Census-based (polygon) representation of broadband deployment data to Fabric Broadband Service Location (BSL) point-based is an overall improvement to data accuracy but has impacted people's understanding of the data. BSL data provides the actual locations of service but can present a challenge for rendering the data for understanding by the public. CN has investigated numerous ways outside of hex binning to come up with a better representation.

While the FCC uses BSLs to represent homes, businesses and other locations, it is important to keep in mind that this is a relatively new approach. Although Illinois and states across the country are migrating to the use of BSLs, historic broadband data collection – both at the state and federal levels – has focused on provider-offered data, often triangulated for accuracy against consumer speed test and field validation data. In the tables below, Connected Nation uses households as the metric to discuss broadband connectivity in Illinois. Because BSLs include more than just households, BSL counts will differ than household counts.

Data Collection and Provider Participation

The Digital Divide cannot be closed without understanding where the gaps in broadband service are, and broadband mapping is an essential part of that. Having the location intelligence on where broadband services are available by various technologies and speeds allows for the analysis of where broadband isn't available and where attention and potential funding should be directed.

Through the broadband provider outreach process, CN works with providers to develop current and complete geographic representations of residential broadband service areas where their various technology offerings are available across the state. Broadband data are developed and maintained by providers in a wide variety of formats, so CN works with providers on the unique data they have and standardizes the information for understanding and analyzing the broadband landscape.

CN reviews, processes, and analyzes received provider data in addition to conducting independent research on network offerings, licenses, state and federal broadband databases, and other sources to compare, produce, and refine broadband service areas as needed.

Additionally, if a provider is unable or unwilling to participate in the broadband mapping project, CN works to estimate the provider's service area based on known information, public data, state and federal filings, and 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.

The broadband data, maps, and analyses are mainly focused on fixed broadband services, with technologies of cable, DSL, fiber, and fixed wireless. Based on the most recent data collection cycle where provider outreach and research occurred for broadband mapping deliverables submitted to Illinois Office of Broadband (IOB) in November 2023, below are statistics on how the data collection breaks down.

Broadband Provider Data Collection December 2023	
Outreach and Research Summary (by Provider)	
Total Viable Providers	131
Participating	90
Non-Participating	39
Viable Providers Not Yet Mapped	2
Outreach and Research Summary (*by Provider Platform*)	
Total Viable Provider Platforms	191
Participating Data	134
Non-Participating Data	51
Viable Provider Platforms Not Yet Mapped	6
Provider Data Vintage (*by Provider*)	
New Viable Providers Participating/In-Progress Since June 2023	15
Provider Data Vintage (*by Provider Platform*)	
Newly Participating & Processed Since June 2023	11
Newly Participating Provider; Single Data Platform In-Progress	4
New Non-Participating (Non-Responsive, Refused; in Progress) & Processed since June 2023	14
Final Data Granularity & Data Source	
June 2023 to December 2023 FCC Fabric Version	2.0 to 3.2
Data Source: FCC BDC Available During Processing Period	62
Data Source: Provider-Supplied	87
Data Source: Provider-Supplied/Converted to Address/Fabric	30
Data Source: Other	6

Total viable providers increased from 113 to 131 in 2023. Of the 131 viable broadband providers in the state, service area data from 30 provider platforms were used in the final data aggregation of 2023, and then converted to address data to be included on the broadband maps. For the remaining, updated BDC data was provided and used with a combination of data. Two providers refused or remained non-responsive and unable to be located / obtained / estimated prior to the development of the December 2023 maps; these providers will be a focus again for the next set of deliverables.

Field Validation Activities

A critical component of the Illinois broadband mapping project is field validation. For field verification, experienced 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 the 2023 contract year, field verification was conducted in advance of the June and December map updates.

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. Nonetheless, areas are identified through our desktop research and community feedback 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, especially related to the Broadband Data Collection (BDC) reported data. Field validation activities provide an opportunity to 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 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, and/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 the services were built out as expected.

Based on consultation with IOB, it was determined that broadband testing in rural areas for the counties of Effingham, Clinton, St. Clair and Clay was warranted. This field verification work was conducted in January of 2023 to verify Antenna Structure Registration (ASR) locations and clusters of at least 100 homes in reported gaps in coverage. This field verification work centered on Watch Communications and a detailed report was provided to IOB. For a second round in October, CN processed challenges against T-Mobile, Frontier, Rise Broadband and Mediacom totaling 35,786 locations that were challenged.

The field validation activities in January and October 2023 resulted in the verification of technology and speed provided valuable input for data refinements and updates that were incorporated into the June and December 2023 Illinois broadband mapping deliverables.

Broadband Availability Statistics

Below are broadband availability statistics on how the percent of served households across the state has changed over the last three years. The first table represents all fixed broadband services, including cable, DSL, fiber, and fixed wireless. The second table represents only wireline broadband services of cable, DSL, and fiber. There have been increases in the percent of served households at the four measured speed levels with each set of broadband mapping updates, reflecting continued expansion of broadband availability, even as some broadband service areas have become more detailed and granular, sometimes decreasing the total area served as more accurate and precise data is developed. Of note, universal 1 Gbps symmetrical is the goal of NTIA's BEAD program.

Change in Illinois Statewide Broadband Availability Estimates by Speed Tier Among Fixed Technologies: Cable, DSL, Fiber, Fixed Wireless					
Speeds	Jun 2021	Nov 2021	May 2022	Nov 2022	Dec 2023
25 Mbps Download x 3 Mbps Upload	97.19%	97.83%	98.11%	98.26%	98.51%
100 Mbps Download x 20 Mbps Upload	90.61%	93.42%	93.23%	78.50%	95.61%
100 Mbps Download x 100 Mbps Upload	n/a	n/a	31.33%	30.68%	45.69%
1 Gbps Download x 1 Gbps Upload	20.08%	23.93%	24.10%	24.16%	32.1%

Change in Illinois Statewide Broadband Availability Estimates by Speed Tier Among Wireline Technologies: Cable, DSL, Fiber					
Speeds	Jun 2021	Nov 2021	May 2022	Nov 2022	Dec 2023
25 Mbps Download x 3 Mbps Upload	93.55%	94.01%	94.28%	94.29%	93.53%
100 Mbps Download x 20 Mbps Upload	89.98%	92.44%	92.93%	70.74%	92.59%
100 Mbps Download x 100 Mbps Upload	n/a	n/a	28.53%	28.59%	44.36%
1 Gbps Download x 1 Gbps Upload	19.97%	23.36%	23.20%	23.27%	32.09%

Similar to the statewide numbers, rural availability continues to increase, but at a slower pace and therefore lags behind urban and suburban areas. It should be noted that the definition of a rural area changed with the 2020 Census. This affected the availability statistics between November 2021 and May 2022.

Change in Illinois Statewide RURAL Broadband Availability Estimates by Speed Tier Among Fixed Technologies: Cable, DSL, Fiber, Fixed Wireless					
Speeds	Jun 2021	Nov 2021	May 2022	Nov 2022	Dec 2023
25 Mbps Download x 3 Mbps Upload	93.20%	94.70%	86.67%	88.07%	92.32%
100 Mbps Download x 20 Mbps Upload	74.55%	82.27%	54.49%	49.59%	78.1%
100 Mbps Download x 100 Mbps Upload	n/a	n/a	21.37%	19.72%	37.39%
1 Gbps Download x 1 Gbps Upload	10.85%	14.25%	11.62%	12.59%	24.62%

Change in Illinois Statewide RURAL Broadband Availability Estimates by Speed Tier Among Wireline Technologies: Cable, DSL, Fiber					
Speeds	Jun 2021	Nov 2021	May 2022	Nov 2022	Dec 2023
25 Mbps Download x 3 Mbps Upload	83.23%	84.25%	56.67%	56.91%	66.67%
100 Mbps Download x 20 Mbps Upload	73.13%	79.90%	47.46%	40.89%	62.09%
100 Mbps Download x 100 Mbps Upload	n/a	n/a	15.13%	16.27%	30.95%
1 Gbps Download x 1 Gbps Upload	10.85%	14.25%	11.62%	12.59%	24.62%

Evaluating the percentage of served households across the state is one way of viewing the data. Another meaningful approach to understand 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 unserved by broadband among fixed technologies and wireline technologies. At the current federal broadband definition of 25 Mbps download and 3 Mbps upload, it is estimated there are 55,922 Illinois households without access to fixed broadband. A reduction of over 30,000 households since our last report. This number exponentially increases as higher speeds are analyzed.

Illinois Households Unserved by Broadband Among Fixed Technologies: Cable, DSL, Fiber, Fixed Wireless		
Speed	Unserved Households Nov 2022	Unserved Households Dec 2023
25 Mbps Download x 3 Mbps Upload	87,001	55,922
100 Mbps Download x 20 Mbps Upload	1,074,613	161,063
100 Mbps Download x 100 Mbps Upload	3,464,714	2,031,496
1 Gbps Download x 1 Gbps Upload	3,790,832	2,539,999

Illinois Households Unserved by Broadband Among Wireline Technologies: Cable, DSL, Fiber		
Speed	Unserved Households Nov 2022	Unserved Households Dec 2023
25 Mbps Download x 3 Mbps Upload	285,540	241,902
100 Mbps Download x 20 Mbps Upload	1,462,595	277,158
100 Mbps Download x 100 Mbps Upload	3,569,570	2,081,159
1 Gbps Download x 1 Gbps Upload	3,835,167	2,540,255

Similar to the overall statewide statistics, the broadband data were analyzed in rural areas to estimate the number of unserved rural households at the designated speed levels.

Illinois RURAL Households Unserved by Broadband Among Fixed Technologies: Cable, DSL, Fiber, Fixed Wireless		
Speed	Unserved Households Nov 2022	Unserved Households Dec 2023
25 Mbps Download x 3 Mbps Upload	66,380	54,168
100 Mbps Download x 20 Mbps Upload	280,394	154,433
100 Mbps Download x 100 Mbps Upload	446,554	441,547
1 Gbps Download x 1 Gbps Upload	486,242	531,565

Illinois RURAL Households Unserved by Broadband Among Wireline Technologies: Cable, DSL, Fiber		
Speed	Unserved Households Nov 2022	Unserved Households Dec 2023
10 Mbps Download x 1 Mbps Upload	239,714	N/A*
25 Mbps Download x 3 Mbps Upload	328,821	235,074
100 Mbps Download x 20 Mbps Upload	465,773	267,332
100 Mbps Download x 100 Mbps Upload	N/A*	486,939
1 Gbps Download x 1 Gbps Upload	486,242	531,565

Note: For relevance, 10/1 Mbps replaced with 100/100 Mbps for rural reporting.

Shifting from statewide to county level statistics, the tables below 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, most served is based on the percent of served households in the county.

Top Ten Most Served Counties By Percent Served Households					
	25 x 3 Mbps Fixed Broadband		100 x 20 Mbps Fixed Broadband		1 x 1 Gbps Fixed Broadband	
	County	% Served	County	% Served	County	% Served
1	FORD	100	HARDIN	100	ADAMS	90.19
2	HARDIN	100	COOK	99.93	CLAY	90.06
3	COOK	99.97	MOULTRIE	99.81	EDWARDS	79.09
4	DUPAGE	99.97	DUPAGE	99.76	ROCK ISLAND	76.95
5	MARSHALL	99.97	DOUGLAS	99.75	ST. CLAIR	75.84
6	GRUNDY	99.96	WILL	99.41	KENDALL	75.50
7	DOUGLAS	99.95	LAWRENCE	98.91	WAYNE	74.88
8	KNOX	99.90	ROCK ISLAND	98.85	WILLIAMSON	72.70
9	WILL	99.87	HENRY	98.72	PULASKI	72.29
10	MOULTRIE	99.81	STARK	98.72	CASS	72.01

Perhaps more important than knowing the top served counties across the state is an analysis of the bottom ten counties. The following table shows the bottom ten most unserved counties, where most unserved is based on the percent of households in the county served by fixed broadband. It should be noted there are 32 Illinois counties without any access to 1 Gbps download and 1 Gbps upload broadband service (i.e., 0% served), while two counties do not have any access to 100 Mbps download and 20 Mbps upload broadband.

Bottom Ten Most Unserved Counties By Percent Served Households					
25 x 3 Mbps Fixed Broadband		100 x 20 Mbps Fixed Broadband		1 x 1 Gbps Fixed Broadband	
County	% Served	County	% Served	County	% Served
1 CALHOUN	58.10	CALHOUN	45.31	CALHOUN	0
2 ALEXANDER	71.11	PIKE	55.51	PUTNAM	0
3 JASPER	71.64	JASPER	59.20	DEKALB	0
4 CLARK	78.06	PUTNAM	59.95	MACOUPIN	0
5 POPE	81.15	CLARK	60.19	GREENE	0
6 BROWN	81.72	CARROLL	64.88	EDGAR	0
7 WASHINGTON	83.56	LEE	67.02	SCHUYLER	0
8 SANGAMON	83.72	MENARD	67.58	STEPHENSON	0.04
9 BOND	84.39	JO DAVIESS	68.27	LEE	0.05
10 CRAWFORD	84.44	ALEXANDER	68.33	BUREAU	0.05

In addition to analyzing the bottom ten counties by the percent of served households, it's also important to note the number of unserved households, as the number and percent can vary depending on the total population of a county. Below is a table of the bottom ten most unserved Illinois counties, by the number of households unserved by fixed broadband.

	Bottom Ten Most Unserved Counties By Number of Unserved Households (HH)					
	25 x 3 Mbps Fixed Broadband		**100 x 20 Mbps Fixed Broadband**		**1 x 1 Gbps Fixed Broadband**	
	County	**Unserved HH**	**County**	**Unserved HH**	**County**	**Unserved HH**
1	ST. CLAIR	2,370	ST. CLAIR	5,418	COOK	811,193
2	JO DAVIESS	1,860	OGLE	5,094	DUPAGE	198,953
3	MACOUPIN	1,747	LAKE	4,794	LASALLE	190,894
4	MARION	1,690	KANKAKEE	4,494	WILL	171,614
5	CLARK	1,538	LEE	4,370	MCHENRY	99,151
6	MADISON	1,503	MCHENRY	4,362	WINNEBAGO	97,040
7	KANKAKEE	1,497	JO DAVIESS	4,101	MADISON	77,045
8	SANGAMON	1,388	STEPHENSON	3,464	KANE	74,287
9	MONROE	1,324	MACOUPIN	3,412	ST. CLAIR	57,599
10	CRAWFORD	1,264	TAZEWELL	3,372	MACON	39,748

Next Steps

Connected Nation will continue to follow a four-pronged approach to broadband mapping and analysis:

1. Independent Research
2. Provider Relationships/Outreach
3. Field Validation
4. Crowdsourced Data/Resident Feedback

The next set of Illinois broadband mapping deliverables are scheduled to be published at the end of May 2024.

Federal Funding

The state commitment to broadband investment has been enhanced through significant funding through the ARPA Capital Projects Fund and IIJA Broadband Equity, Access, and Deployment (BEAD) programs.

The Capital Projects Fund (CPF) allocation for Illinois is $254 million; with an additional $46 million in State Fiscal Recovery Fund dollars, ARPA accounts for $300 million of the $350 million Round 3 of the *Connect Illinois Broadband Grant Program.* The BEAD program is similarly formula-driven, with the state's number of unserved and underserved locations determinative to the Illinois formula allocation of $1.04 billion.

Although the CPF and BEAD programs are similar in resembling block-grant support to states for further distribution to subrecipient grantees determined by the state, there are some important differences – for instance, in terms of eligibility thresholds and performance standards:

Program	Connect Illinois	Capital Projects Fund	Broadband, Equity, Access, and Deployment (BEAD)
Source	Rebuild Illinois Capital Plan	American Rescue Plan Act (ARPA)	Infrastructure Investment and Jobs Act (IIJA)
Funding Agency	Illinois Department of Commerce and Economic Opportunity	US Dept. Of Treasury	National Telecommunications and Information Administration (NTIA)
2023 Activity	$350M "Round 3" of *Connect Illinois* Broadband Grant Program	$350M "Round 3" of *Connect Illinois* Broadband Grant Program	Completion of Five-Year Action Plan detailing how Illinois will extend access to all unserved locations and as many underserved locations and Community Anchor Institutions as possible
Eligibility Threshold	Below 100/20 Mbps wireline	Below 100/20 Mbps wireline	Ranked Priorities 1) unserved at or below 25/3 Mbps 2) underserved between 25/3 and 100/20 Mbps 3) Community Anchor Institutions
Performance Standard	Scalable to 100/100 Mbps	100/100 Mbps upon deployment	100/20 Mbps: Five-Year Action Plan to determine appropriate technology mix (e.g. wireline vs licensed fixed wireless)
Funding Timeline	"Round 3" of *Connect Illinois* expected to make grants in 2024	"Round 3" of *Connect Illinois* expected to make grants in 2024	"Round 4+" of *Connect Illinois* expected to make grants in 2025-2028

In addition, the Digital Equity Act provides $2.75 billion to promote digital equity and inclusion, with programs for digital equity plan development, Digital Equity Capacity Building grant and Digital Equity Competitive grant.

Capital Projects Fund

The $10 billion Capital Projects Fund is the primary broadband provision included in the American Rescue Plan Act (ARPA). The fund is administered by the U.S. Department of the Treasury and awards the equivalent of state block grant funding for broadband infrastructure expansion, among other narrowly defined eligible uses. Funding is awarded on a formula basis driven by the state's population, rurality, and poverty metrics relative to those of

the country at large. The State of Illinois chose to use its full Capital Projects Fund allocation of $253.7 million to support Round 3 of its *Connect Illinois Broadband Grant Program*.

The following is excerpted directly from Treasury's [website](#):

Funding Objectives. The COVID-19 public health emergency revealed and continues to reinforce our understanding that communities without access to high-quality modern infrastructure, including broadband, face impediments to fully participating in aspects of daily life, such as remote work, telehealth, and distance learning. Treasury is launching the Capital Projects Fund to allow recipients to invest in capital assets that meet communities' critical needs in the short- and long-term, with a key emphasis on making funding available for broadband infrastructure. The Capital Projects Fund aims to:

- *Directly support recovery from the COVID-19 public health emergency by strengthening and improving the infrastructure necessary for participation in work, education, and health monitoring that will last beyond the pandemic.*

- *Enable investments in capital assets designed to address inequities in access to critical services.*

- *Contribute to the Administration's goal of providing every American with the modern infrastructure necessary to access critical services, including a high-quality and affordable broadband internet connection.*

A key priority of this program is to make funding available for reliable, affordable broadband infrastructure and other digital connectivity technology projects. Recipients may also use funds for certain other capital projects, such as multi-purpose community facilities, that enable work, education, and healthcare monitoring, including remote options.

The following capital projects are identified in the Capital Projects Fund Guidance as being eligible uses of Capital Projects Fund grant funding:

- *Broadband Infrastructure Projects: the construction and deployment of broadband infrastructure designed to deliver service that reliably meets or exceeds symmetrical speeds of 100Mbps so that communities have future-proof infrastructure to serve their long-term needs.*

- *Digital Connectivity Technology Projects: the purchase or installation of devices and equipment, such as laptops, tablets, desktop personal computers, and public Wi-Fi equipment, to facilitate broadband internet access for communities where affordability is a barrier to broadband adoption and use.*

- *Multi-Purpose Community Facility Projects: the construction or improvement of buildings designed to jointly and directly enable work, education, and health monitoring located in communities with critical need for the project.*

Read the *State of Illinois Capital Projects Fund Performance Report* [here](#).

Broadband Equity, Access, and Deployment (BEAD) Program

The $42.5 billion Broadband Equity Access, and Deployment (BEAD) Program is the primary broadband provision included in Infrastructure Investment and Jobs Act (IIJA). The program is administered by the National Telecommunications and Information Administration (NTIA) within the U.S. Department of Commerce. The program awards the equivalent of state block grant funding for broadband infrastructure expansion, with funding awarded on a formula basis driven by the state's estimated number of unserved locations. Given the close alignment between the BEAD program and the *Connect Illinois* Broadband Grant Program, the Illinois Office of Broadband plans use all $1.04 billion Illinois BEAD funding to support subsequent rounds of its *Connect Illinois* Broadband Grant Program.

According to NTIA's website, eligible uses of BEAD Program funding include but is not limited to:

- Planning for the deployment of high-speed Internet, including conducting research, collecting data, outreach, and training
- Deploying or upgrading Internet in unserved or underse*rved areas or improving service to community anchor organizations*
- Installing Internet and Wi-Fi in multi-unit residential buildings
- Adoption and digital equity programs
- Workforce development programs and vocational training

The BEAD Program rules require states to prioritize funds in this order:

- Connect unserved locations (available service is 25/3 megabits per second or less)
- Connect underserved locations (available service is at least 25/3 Mbps but less than 100/20 Mbps)
- Connect Community Anchor Institutions to gigabit symmetrical service (1,000/1,000 Mbps)

The BEAD Program is a decade-long investment, with full funding dependent upon local coordination, detailed planning, and NTIA approval regarding use of funds. *Connect Illinois* Round 4 will align with BEAD and include rules that fully implement BEAD requirements mandated by NTIA, including for disbursement, subgrantee reporting, and ongoing monitoring. The state has incorporated comments in initial proposal Volume 1 and 2 and will work through NTIA feedback and host technical assistance sessions in early 2024. Volume 1 and 2 of BEAD proposals as well as BEAD map challenge process can be found here.

BEAD Next Steps:

The BEAD program requires states to challenge the accuracy of the Federal Communications Commission broadband map's designation of unserved and underserved locations, and Community Anchor Institutions eligible for BEAD funding. An accurate map ensures federal funds go where they are needed most. Illinois intends to launch its challenge process in January 2024 and it will be open for at least two weeks. The challenge process includes a public challenge period, opportunity for rebuttals from internet service providers, and adjudication by the IOB. Learn more about the BEAD challenge process at DCEO.illinois.gov/BEADchallenge.

Following the challenge process and finalization of the Illinois broadband map, the state will have 365 days to select subgrantees, who will then have four years to complete their projects.

As summarized in Illinois' Initial Proposal Volumes 1 and 2, the IOB plans to implement a three-phase process for broadband deployment, including a Request for Information (RFI), Wave 1 with a focus on hard-to-serve areas, and Wave 2 for all remaining locations. Following a public comment period, the state has incorporated public feedback in Initial Proposal Volumes 1 and 2 and is participating in NTIA's feedback and curing process.

Digital Equity Program

In July 2022, the $2.75 billion Digital Equity Act and related Digital Equity Program were included in the Infrastructure Investment and Jobs Act (IIJA). The program is administered by the National Telecommunications and Information Administration (NTIA) within the U.S. Department of Commerce. The program awards the equivalent of state block grant funding for various digital equity initiatives, with funding awarded on a formula and competitive basis. This funding in allocated as an initial formula-driven planning grant, a formula-driven capacity grant to invest in various initiatives, and an eventual competitive grant opportunity for non-state entities.

In December 2022, NTIA announced that Illinois will receive the full $1.52 million available to fund various planning activities ahead of its full Digital Equity Capacity Grant allocation. According to NTIA's website, eligible uses of Digital Equity Program funding include but is not limited to:

- Develop, implement, and oversee digital equity plans
- Make awards to other entities to help in developing digital equity plans
- Improve the online accessibility and inclusivity of public resources
- Implement digital equity plans and digital inclusion activities
- Provide digital literacy and skills education to covered populations
- Facilitate the adoption of high-speed Internet by covered populations

On December 4, 2023, the Illinois Office of Broadband published its State Digital Equity Plan draft. The plan draws from Illinois' ambitious 54-stop statewide listening tour, integrates thorough data analysis, and builds upon years of community outreach and engagement. The draft is included among other planning documents the state has created to meet NTIA requirements for BEAD funding.

Appendices

Appendix A: Broadband Advisory Council Members

BAC Member	Organization
Matt Schmit, Chair	Illinois Dept of Commerce & Economic Opportunity
Deno Perdiou	AT&T
Melia Carter	Verizon
Ted Fetters	Comcast
Rick Holzmacher	Illinois Rural Broadband Association
Zak Horn	Metro Communications
Steven Hill	Satellite Broadcasting & Communications Assoc
Josh Shallenberger	Shelby Electric Coop
Anne Slaughter	Illinois Library Association
Deb Alfredson	Illinois Association of Housing Authorities
Jeff Newell	Illinois Community College Board
David Antonacci	Illinois Board of Higher Education
Bill Bodine	Illinois Farm Bureau
Ryan Gruenenfelder	AARP
Lori Sorenson	Illinois Dept of Innovation and Technology
Paula Basta	Illinois Dept of Aging
Susan Satter	Illinois Attorney General
Jim Zolnierek	Illinois Commerce Commission
Curt Suttman	Illinois Municipal League (City of Freeport)
Kim McCullough	Illinois Dept of Healthcare and Family Services
Tejas Shah	Community Appointee
Caroline Sanchez Crozier	Community Appointee
Dominic Watson	Community Appointee
Sen David Koehler - D	Illinois State Senate
Sen. Jil Tracy - R	Illinois State Senate
Rep. Aaron Ortiz - D	Illinois State House of Representatives
Vacant	Illinois State House of Representatives

Appendix B: Resources and Publications

BEAD Proposal Drafts (Current to 12/2023)

Volume 1
https://dceo.illinois.gov/content/dam/soi/en/web/dceo/connectillinois/documents/il-bead-initial-proposal-vol-1.pdf

Volume 2
https://dceo.illinois.gov/content/dam/soi/en/web/dceo/connectillinois/documents/il-bead-initial-proposal-vol-2.pdf

Broadband Advisory Council Act (Public Act 100-833)
https://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=100-0833

Broadband Advisory Council Meetings and Materials https://dceo.illinois.gov/connectillinois/meetingsmaterials.html

Broadband Advisory Council Affordability Study https://dceo.illinois.gov/connectillinois/affordabilitystudy.html

Capital Projects Fund Overview
https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/capital-projects-fund

Chicago Digital Equity Council
https://www.chicago.gov/city/en/sites/digital-equity-council/home.html

Connect Illinois Five-Year Action Plan
https://dceo.illinois.gov/content/dam/soi/en/web/dceo/connectillinois/documents/connect-il-five-year-action-plan.pdf

Cook County Digital Equity
https://www.cookcountyil.gov/service/digital-equity

Cook County Digital Equity Plan
https://www.cookcountyil.gov/sites/g/files/ywwepo161/files/documents/2023-10/FINAL-Cook%20County%20DE%20Plan_pages.pdf

Common Sense Media Federal Broadband Funding Opportunities
https://www.commonsensemedia.org/sites/default/files/featured-content/files/federal_broadband_funding_guide.pdf

Connect Illinois Broadband Strategic Plan
https://dceo.illinois.gov/content/dam/soi/en/web/dceo/connectillinois/documents/broadband-strategic-plan-2-5-20.pdf

Connect Illinois Digital Equity + Inclusion Framework
https://dceo.illinois.gov/content/dam/soi/en/web/dceo/connectillinois/documents/il-broadband-equity-inclusion.pdf

Fixed Wireless Technologies and their Suitability for Broadband Delivery
https://www.benton.org/sites/default/files/FixedWireless.pdf

Illinois Broadband Lab
https://ibl.illinois.edu/index.html

Illinois Broadband Map

https://gis.connectednation.org/portal/apps/webappviewer/index.html?id=caedfe7ce8924660a4ce62de6a75a7fd

Illinois Office of Broadband Website

https://dceo.illinois.gov/connectillinois.html

Illinois State Digital Equity Plan Draft (Current 12/2023)

https://dceo.illinois.gov/content/dam/soi/en/web/dceo/connectillinois/documents/202311-draft_illinois-state-digital-equity-plan_v1130.pdf

University of Chicago Internet Equity Initiative

https://datascience.uchicago.edu/broadband

State of Illinois Capital Projects Fund Performance Report

https://dceo.illinois.gov/content/dam/soi/en/web/dceo/connectillinois/documents/il.cpfannualperformancereport-final.pdf