

A background image featuring a complex network of black lines and nodes, resembling a fiber optic or data network, set against a light gray background. A semi-transparent red rectangle is overlaid on the left side of the image, containing the main title and subtitle.

CONNECT ILLINOIS

DIGITAL EQUITY + INCLUSION

October 2021

Office of Broadband
Department of Commerce
and Economic Opportunity
Governor J.B. Pritzker



I. EXECUTIVE SUMMARY

The Connect Illinois program launched in 2019, pairing the then-largest state 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 sought to ensure that all Illinois households, businesses, and community anchor institutions had access to affordable, reliable, and high-performing broadband.

At its core, 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.

To create an ecosystem of digital equity and inclusion, the State of Illinois 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 all of 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.

Although still a work in progress, the Connect Illinois digital equity programming and collaborations are a comprehensive 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 outcomes.

II. APPROACH: COMPREHENSIVE, COMPLEMENTARY + COLLABORATIVE

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.

Connect Illinois seeks to achieve what no other state or federal approach has accomplished: universal broadband access to affordable, reliable, and fully scalable broadband. In order to help Illinoisans access, adopt, and use broadband, Connect Illinois leverages broadband infrastructure to drive economic opportunity and increase quality of life.

Combining the work of a 25-member Broadband Advisory Council with established best practices from across the country, the Connect Illinois Broadband 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 any and all state broadband capital investment.

As a lean operation, the Illinois Office of Broadband knew that collaboration would be key: Work with the Illinois-based Benton Institute for Broadband & Society gave rise to the biweekly *Illinois Broadband Connections* newsletter, timely local planning and capacity building through a separate and sustained *Illinois Connected Communities* program, and a mutual interest in broadband data, research, and publication. The University of Illinois—and, in particular, its Extension Services and Illinois Innovation Network—extends the Office of Broadband reach through a consistent and increasingly robust catalog of online content, interactive webinars, and programmatic support. And the office recently launched a new endeavor, focused primarily on mapping and data: the *Illinois Broadband Lab*.

With the promise of historic federal funding to support digital equity and inclusion, Illinois is poised to build on its holistic approach to broadband expansion that treats access, adoption, and utilization as critical components of an integrated strategy.

In 2020, the *Illinois Broadband Advisory Council* commissioned a *Broadband Affordability Study* that revealed key insights into the state's digital divide. The Regional Engagement for Adoption and Digital Equity (READY) program highlights the importance of identifying and replicating best practices in broadband access, adoption, and utilization across the state—and tracking digital indicators that matter most throughout Illinois so that we can mark where we are against where we want to go, measuring progress all along the way.

Understanding that the 1.1 million Illinois households lacking computing devices represents an often-overlooked aspect of the digital divide, in 2020 Illinois launched the *Connect Illinois*



Computer Equity Network to collect, refurbish, and redistribute used computers on an equitable basis in every county. A key nonprofit collaborator, PCs for People, is seeking sourcing partners and booking distribution events throughout the state, anchored by regional distribution hubs in Cook County and the Metro East region.

Rounding out a comprehensive approach to eliminate the digital divide, the Office of Broadband anticipates launching a statewide digital literacy program in the year ahead, and it's working on additional resources to help communities take advantage of the historic state and federal investment in broadband access and adoption. Collaboration with Heartland Forward, including placement of Connection Corps fellows in Illinois, and emphasis on raising awareness for adoption resources, such as the Emergency Broadband Benefit, has added significant value.

Of course, none of this progress would be possible without the support of key strategic collaborators. Each, in their own way, has contributed greatly to the early successes and continued promise toward our shared goal—to Connect Illinois.

III. DEMOGRAPHICS, DATA + DIGITAL EQUITY INDICATORS

Identifying Gaps

Upon inception, the Office of Broadband and Connect Illinois program were guided by a general understanding of the broadband and digital equity landscapes in Illinois. Publicly available information indicated that Illinois ranked sixth nationally for broadband access, with 89.3 percent of households statewide with terrestrial broadband coverage of at least 25/3 Mbps and 62.2 percent of the state population with access to a low-cost plan for wired service.

American Community Survey data provided insight into one aspect of the digital divide – namely, at-home access to wireline broadband subscriptions; desktop or laptop computers; and desktop, laptop, or tablet devices. Key findings indicated concerning gaps:

- 70.4% of Illinois households subscribe to wireline high-speed internet service.
 - 1,441,161 Illinois households do not subscribe to such service.
- 77.0% of households have a desktop or laptop computer.
 - 1,119,013 Illinois households lack computers of this sort.
- 82.6% of Illinois households have either a desktop, laptop, or tablet computer.
 - 846,677 households lack any of these devices.

In addition, the data revealed concerning disparities by race, ethnicity, and age -- confirming these factors as important indicators to internet and technology access and adoption:

- 57.9% of African American households in Illinois have wireline broadband at home, and 62.1% have a desktop or laptop computer.

- 63.4% of Latino households in Illinois have wireline broadband subscriptions, and 69.0% have a desktop or laptop computer.
- 71.2% of White households in Illinois have wireline broadband subscriptions, and 80.4% have a desktop or laptop computer.
- 63.8% of those between the ages of 65 and 74 in Illinois have wireline service, and 73.9% have a desktop or laptop computer. For those ages 75 and older, 44.8% subscribe to high-speed service at home, and 52.3% have a desktop or laptop computer.

Current Conditions

To gain a deeper understanding of gaps in broadband access, adoption, and utilization — as well as to target the focus of its grant and programmatic resources, the Illinois Office of Broadband has been working on another aspect of digital equity: developing state-specific mapping of broadband assets, including available technology, providers, and levels of broadband service. After all, driving investment toward areas of need will require a firm understanding of where broadband is – and where it is not.

In addition to the mapping resources, the data quantified the digital equity task at hand—Illinois households lacking access to standard broadband performance thresholds of 25/3 Mbps, 100/20 Mbps, and 1/1 Gbps.

Illinois Broadband Access Estimates by Speed Tier

	# Unserved Households (Statewide)	# Served Households (Statewide)	% Served Households (Statewide)	# Unserved Households (Rural)	# Served Households (Rural)	% Served Households (Rural)
25/3 Mbps Wireline	311,767	4,525,205	93.55%	229,092	1,437,040	83.23%
25/3 Mbps All Terrestrial	135,928	4,701,044	97.19%	113,288	1,552,845	93.20%
100/20 Mbps Wireline	484,651	4,352,321	89.98%	447,732	1,218,400	73.13%
100/20 Mbps All Terrestrial	454,077	4,382,895	90.61%	424,003	1,242,129	74.55%
1/1 Gbps Wireline	3,870,928	966,044	19.97%	48,337	180,755	10.85%

Mapping

For a more accurate, granular, and timely understanding of broadband access in Illinois, the Office of Broadband contracted for state-specific data and maps. A new interactive Illinois Broadband Map launched in 2021, along with the availability of over 1,700 PDF maps providing standard performance levels by various jurisdictional boundaries -- be it county, school district, legislative or Congressional district.

Recognizing the limitation of current mapping offered by the Federal Communications Commission, this effort leverages otherwise proprietary broadband provider data, direct consumer feedback, and field validation to generate interactive mapping detailing various technology and broadband service tiers available throughout Illinois. Designed to guide investment and programming, to inform policy making, and to engage communities in broadband



planning and all Illinoisans in broadband speed measurement, the mapping will enable analysis of various data layers:

- The new mapping tool combines data from local broadband providers, Illinois households, and field testing of available bandwidth. Illinois residents can enter their home address and access basic information about broadband providers, service levels, and technology availability in their area. Integrating broadband speed test results from the general public will help identify areas where the existing maps may overstate available broadband service and fuel the accuracy of the maps over time.
- For community planners and other stakeholders, the new mapping and speed test tools will provide service level information as well as socioeconomic data and jurisdictional boundaries—information helpful for submitting grant applications, leveraging new federal funding, and developing local plans to improve broadband access and adoption. Unlike other maps before it, the new mapping tool will provide more timely, granular, and accurate data on broadband service.

The Office of Broadband will use the mapping to guide its investment of state and federal funds in pursuit of its ambitious goal of achieving universal broadband access throughout Illinois.

Illinois Broadband Lab

To build on the mapping resources, to contribute additional data, research, and publication capacity, and to supplement Connect Illinois programming, the *Illinois Broadband Lab* launched as a collaborative effort among the State of Illinois, university partners, and key stakeholders, including the Benton Institute for Broadband & Society.

The new interactive state broadband mapping tool, county-level PDF maps, and other resources available through the Illinois Broadband Lab can be accessed here: <http://ibl.illinois.edu/>. In addition, the mapping resources and Illinois Broadband Lab collaboration will support existing programming focused on community planning, capacity building, and regional engagement.

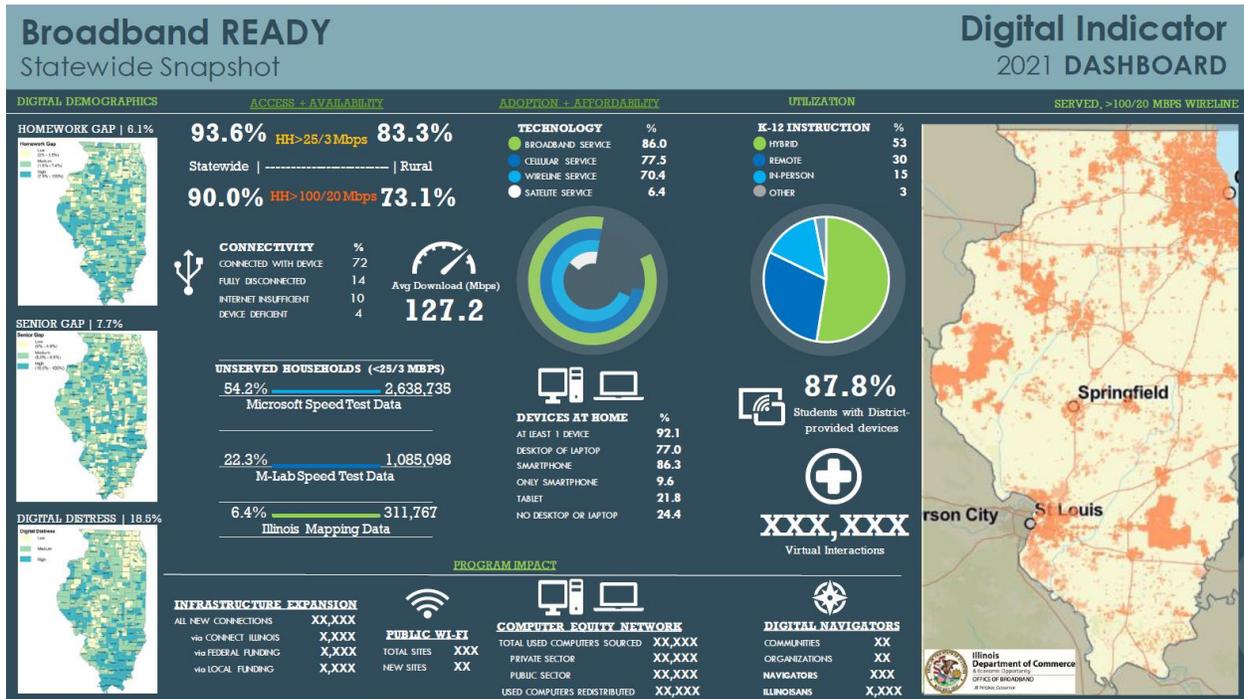
Digital Indicator Dashboard

In 2021, the Office of Broadband introduced the Connect Illinois Digital Indicator Dashboard, a template deliverable for its Broadband READY program—and a key component of the digital equity strategic plan. As regional READY teams identify metrics that matter most to them and innovate with regard to data visualization, the template no doubt will evolve. But the dashboard's intent and utility should remain unchanged: to aggregate community- and regional-level data on a statewide basis and to provide a singular resource showcasing data that's integral to the broadband and digital equity charge.

The dashboard and commitment to data is built on the premise that *what gets measured gets done*. For Connect Illinois stakeholders to go where they want to go, they need to know where

they are—and track progress along the way. After all, Illinois invests heavily in broadband access mapping; why not do more to track other contributing factors to the digital divide?

Draft 2021 Digital Indicator Dashboard



Broadband Affordability Study

In 2020, the Illinois Broadband Advisory Council (BAC) commissioned a study exploring various questions posed by the state's General Assembly related to broadband access, adoption, and affordability, including cost estimates for:

- Universal broadband access where existing broadband infrastructure is insufficient;
- Universal free or affordable broadband access for all residents; and
- Free or affordable broadband access for those in poverty.

To provide thorough analysis, the BAC worked with respected researchers to initiate timely inquiry and discussion regarding the intersection of broadband access, adoption, and affordability. While some costs for requested scenarios explored in the study might have been considered aspirational or even prohibitive, others were well within the realm of doable – in terms of programmatic capacity, scope, and cost. For instance, consider the annual cost of providing affordable broadband to Illinois households in poverty that lack broadband service.



The COVID-19 pandemic exposed the significant stakes of the digital divide, with far too many Illinoisans lacking critical broadband access for remote learning, telehealth, or work from home opportunities. Understandably, the federal policy response focused on shorter-term broadband fixes that provided relatively immediate relief versus longer-term broadband solutions designed for sustainable access. The study discerned such shorter-term fixes from longer-term solutions, while recognizing the value and complementary nature of both approaches.

Among its findings, the study confirmed two critical realities for Illinoisan households:

Sizable "Homework Gap." According to the 2019 American Community Survey, over 285,000 Illinois households with school-aged children lack at-home wireline broadband service. This presented an urgent priority given the pandemic and reliance at the time upon full-time remote learning.

Lack of Home Computers. The same ACS data indicated that over 1.1 million Illinois households do not have at-home access to a desktop or laptop computer.

The Connect Illinois Broadband Strategic Plan speaks to the importance of a holistic approach to broadband investment and programming. This includes focus on broadband access, adoption, and utilization – which provide the programmatic framework for two existing initiatives, the Illinois Connected Communities program designed to build local broadband capacity and the Broadband READY program to promote "Regional Engagement for Adoption + Digital Equity." A third initiative, the Digital Navigator program, is designed to build digital literacy skills both at the local level and through statewide peer-group support. The recently announced Connect Illinois Computer Equity Network seeks to source, refurbish, and redistribute used computers for qualified households throughout the state. Each of these initiatives – including the namesake \$400 million Connect Illinois Broadband Grant Program – either aligns with or could integrate concerted state-led effort toward improved broadband affordability.

IV. PROGRAMMING + PARTNERSHIPS

Connect Illinois Broadband Grant Program

With at least \$400 million available for broadband deployment grants targeting areas of greatest need, 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 will seek 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 magnitude of the Connect Illinois investment is critical to its success: First, it signals – to the public, providers, and policymakers alike – the significance and scale of the broadband access challenge and the Connect Illinois vision. Second, it allows for phased deployment and planning – for both grant applicants and grant administrators. Third, it creates leverage to push private investment and federal funding toward scalable technology that meets the broadband needs of today – and tomorrow.

The Connect Illinois Broadband Grant Program expands broadband connectivity by promoting the values including but not limited to:

- *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.
- *Open access and shared use* preference will acknowledge that collaboration over infrastructure promotes better service for consumers and expanded network coverage for providers, producing a triple win by stretching Connect Illinois to its last-mile limits.

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 anticipation of 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.

Illinois Connected Communities

The ***Illinois Connected Communities (ICC) Grant Program*** began in 2020 to help drive community planning and capacity building for advances in broadband access, adoption, and utilization. The program is part of increasingly robust and comprehensive Connect Illinois digital equity and inclusion programming, a holistic approach designed to help communities identify and address existing broadband equity gaps – with an eye to sustained broadband equity and inclusion.

The ICC program recognizes that communities need to be prepared to take advantage of historic state and federal funding opportunities and that others could benefit from a focus on complementary aspects of the digital divide, such as broadband adoption or utilization. Whatever



a community's focus – and however prepared a community may be to set a broadband vision and take steps toward realizing that vision – the ICC program is designed to support inclusive community planning and capacity building around one or more aspects of an integrated broadband strategy.

By the end of the program, each community will have completed a community-driven, broadband strategic action plan. Communities ranging from Chicago neighborhoods to entire counties comprise an Illinois Connected Communities cohort, with each member community forming an inclusive community steering team and participating in a combination of focused community-specific and cohort-wide activities throughout a period of nine-months.

The Illinois Connected Communities program is a collaborative effort between the Illinois Office of Broadband, the Benton Institute for Broadband & Society, and local philanthropic organizations.

Broadband READY

The *Broadband Regional Engagement for Adoption + Digital Equity (READY) Grant Program* debuted in early 2021. READY seeks to provide a roadmap to eliminating the digital divide through regional collaboration for equitable advances in the areas of broadband access, adoption, and utilization. The program is part of increasingly robust and comprehensive Connect Illinois digital equity and inclusion programming, a holistic approach designed to help regions identify and address existing broadband equity gaps, as well as to leverage new resources for urgent broadband access – with an eye to sustained broadband equity and inclusion.

The *Broadband READY Grant Program* supports a qualified regional entity – such as a community and economic development organization, regional planning council, or institution of higher education – in each of the state's 10 economic development regions. Grantees convene inclusive and regionally representative Broadband READY Teams to balance investment in urgent broadband access expansion with the strategic imperative to identify gaps, integrate resources, and track progress over time. READY Teams work with the Illinois Office of Broadband to leverage grant funds for expanding public broadband access, to integrate complementary programming and resources, and to produce annual Broadband READY reports.

Every regional Broadband READY report consists of three key sections: a region-specific digital indicator dashboard; a current conditions summary, identifying digital equity gaps within the defined ecosystem(s) and highlighting best practices for scaling or replication; and a digital divide elimination plan. Combined, these regional deliverables contribute to a fully integrated state Broadband READY report, the forerunner and annual complement to the Illinois Broadband Equity + Inclusion Strategic Plan.

The Broadband READY program is a collaborative effort with the Illinois Innovation Network and aligns local and regional efforts by forging and strengthening partnerships, identifying scalable or replicable best practice initiatives, and establishing baseline metrics for tracking progress.



Digital Navigators

The *Digital Navigator Grant Program* promotes digital equity and inclusion by supporting new or improved “Digital Navigator” capacity at the community level.

Digital Navigators serve as critical community “experts” to provide assistance for local residents needing improved digital literacy skills and know-how. Digital Navigators work with community organizations and residents directly to address the full digital inclusion process – ranging from at-home broadband connectivity to computer use to digital skills. Working with the Illinois Office of Broadband and program partners through a train-the-trainer model, Digital Navigators assess community digital literacy gaps and provide competent guidance towards resources and program development that is suitable for the community and its residents.

Digital Navigators can be volunteers or cross-trained staff who already work in social service agencies, libraries, health, and more and who offer remote and socially distant in-person guidance. Digital Navigators have support from the Illinois Office of Broadband and program partners through targeted training; local, regional, and statewide digital inclusion resources; and introduction to the full Illinois Digital Navigator peer community network. Digital Navigator communities have an opportunity for continued training, ongoing consultation with the peer network, and additional support and resources.

The Digital Navigator program is a collaborative effort between the Office of Broadband and respected local, state, and national organizations committed to community-based digital equity and inclusion programming and investment.

Computer Equity Network

The *Connect Illinois Computer Equity Network* launched in 2020 to address a key contributing factor to the digital divide: the lack of at-home connected computing devices. Over 1.1 million Illinois households lack at-home desktop or laptop computers. The goal is simple: to put upgraded devices into the homes of as many qualifying Illinois families as possible through regular community distribution events across the state.

Through a first-of-its-kind statewide collaboration, the Computer Equity Network is committed to hosting collection and redistribution events in all 102 Illinois counties. National non-profit, PCs for People, is coordinating the Computer Equity Network, and serving Illinois with a standardized process for refurbishment, distribution, and impact tracking through two hubs in the Metro East and Cook County Chicago Southland regions. The network provides refurbished computers, internet service and tech support to thousands of people in Illinois – with a goal of reaching at least 10,000 households annually.

The Computer Equity Network relied upon funds from key nonprofit and philanthropic organizations to startup the statewide network and continues to collaborate with a variety of organizations to source used computers and distribute them to families in need.