



CONNECT ILLINOIS

Initial Proposal Volume I

Broadband Equity, Access, and Deployment (BEAD)

December 2023



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



UNIVERSITY OF ILLINOIS SYSTEM

OVERVIEW

The Illinois Office of Broadband has drafted the following to meet the requirements for the Volume 1 of the BEAD Initial Proposal:

Requirement 3 – Identification of existing broadband efforts

Requirement 5 – Identification of existing unserved and underserved locations

Requirement 6 – Identification and application of community anchor institutions

Requirement 7 – Detailed challenge process plan

The Illinois Office of Broadband published Volume 1 of the Connect Illinois Initial Proposal for public comment from September 29, 2023, to October 31, 2023. A high-level summary of the comments received during the public comment period and how they were addressed is provided in this document.

Illinois will incorporate any guidance received from the National Telecommunications and Information Association (NTIA) into this draft to ensure compliance with BEAD requirements.

EXISTING BROADBAND EFFORTS (REQUIREMENT 3)

1.1.1 Attachment: As a required attachment, submit the file identifying sources of funding, a brief description of the broadband deployment and other broadband-related activities, the total funding, the funding amount expended, and the remaining funding amount available. Eligible Entities may copy directly from their Five-Year Action Plans.

Table 1 summarizes federal and state funding programs and funds for broadband deployment and other broadband-related activities in Illinois (Req. 1.1.1). The IOB will also submit Table 1 as an attachment, per NTIA guidance. Expended and available breakdown is only available for Broadband access and deployment programs, as required by the BEAD NOFO.

Table 1: Broadband Funding

Source	Purpose	Total	Expended (allocated to projects) ¹	Available
Rebuild Illinois Capital Financing Program Act of 2019	Rebuild Illinois dedicates \$100 million to partnering with internet service providers and local governments to expand access to high-speed internet. It also invests \$20 million in the Illinois Century Network, an existing broadband network serving K-12 schools, higher education, public libraries, museums, state and local governments, and the health care community.	\$120,000,000	\$120,000,000	\$20,000,000
American Rescue Plan’s Capital	The CPF was launched to allow investment in capital assets that meet communities’ critical needs in the short	\$253,682,328	\$253,682,328	\$0

¹ Expended and available breakdown only applies to broadband access and deployment programs.

Source	Purpose	Total	Expended (allocated to projects) ¹	Available
Projects Fund (CPF) ²	and long term, with an emphasis on making funding available for broadband infrastructure. CPF funding accounts for a portion of the \$350 million Round 3 of the Connect Illinois Broadband Grant Program.			
American Rescue Plan's Coronavirus State Fiscal Recovery Fund (CSLFRF) ³	One of the uses of the CSLFRF funds is to invest in water, sewer, and broadband infrastructure. The CSLFRF's allocated funds to the Rebuild Illinois Projects Fund account for about \$46 million of the \$350 million Round 3 of the Connect Illinois Broadband Grant Program.	\$46,317,672	\$46,317,672	\$0
FCC Rural Digital Opportunity Fund (RDOF) Phase I Auction ⁴	The RDOF Phase I auction was held to bring broadband to homes and businesses in census blocks that were entirely unserved by voice and broadband. The broadband services were set to offer download speeds of at least 25 Mbps through bidders who were internet service providers. The total assigned support for Illinois was \$378 million for 19 winning bidders across the state, with about 160,000 locations assigned over 10 years. Of the winning bidders in the original support assigned, CTI Fiber, Connect Everyone LLC, Hawaii Dialogix Telecom LLC, LTD	\$241,378,544	Not state administered program -- amount to be incorporated based on content available on USAspending.gov	n/a

² [Capital Projects Fund](#), U.S. Department of Treasury

³ [State of Illinois Recovery Plan](#), Governor's Office of Management and Budget Report, 2022

⁴ [Auction 904: Rural Digital Opportunity Fund](#); [FCC: Rural Digital Opportunity Fund Phase I Auction Closes](#), as of Jan 2021; [Rural Digital Opportunity Fund: Assignments Total Assigned by State](#); [Auction 904: Rural Digital Opportunity Fund](#); Note: Applicant's name and winning bidder's name may not directly correspond.

Source	Purpose	Total	Expended (allocated to projects) ¹	Available
	Broadband LLC, MCC Network Services LLC, and Space Exploration Technologies Corp—corresponding to about 66,000 locations—had defaulted as of January 13, 2023. AMG Technology Investment Group LLC, Mercury Wireless, Inc., Rural Elective Cooperative Consortium, and Wisper-CABO 904 Consortium—corresponding to 1,300 locations—partially defaulted as of January 13, 2023. As of that same date, approximately 93,000 locations remained earmarked to be served by the providers that were awarded funding. See the appendix for additional details on RDOF-funded projects.			
FCC Connect America Fund Phase II (CAF II) ⁵	In CAF Phase II, the FCC provides funding to service providers to subsidize the cost of building a new network infrastructure or upgrading networks to provide voice and broadband service in areas where it is lacking. The total assigned support for Illinois was \$99 million for nine winning bidders across about 32,000 locations assigned over 10 years. See the appendix for additional details on the projects that have been funded.	\$99,602,495	Not state administered program -- amount to be incorporated based on content available on USAspending.gov	n/a
Rural Utility Service (RUS), United	The Broadband ReConnect Program’s grant and loan funding for high-speed broadband infrastructure was invested	\$164,353,545	Not state administered program --	n/a

⁵ [Connect America Fund Phase II FAQ; Authorized Auction 903 Long-Form Applicants](#) (updated 11/17/2022)

Source	Purpose	Total	Expended (allocated to projects) ¹	Available
States Department of Agriculture’s (USDA) Rural eConnectivity Program (the ReConnect Grant and Loan Program) ⁶	in Illinois in FY2019, FY2020, and FY2022 among 10 recipients in different funding categories. Eight recipients were awarded investments to deploy fiber-to-the-premises across about 1,300 square miles; one recipient was awarded to deploy fiber-to-the-home across approximately 102 square miles; and one recipient was awarded to extend existing broadband service network across about 38 square miles. See the appendix for additional details on the projects that have been funded.		amount to be incorporated based on content available on USAspending.gov	
Emergency Connectivity Fund (ECF), Federal Communications Commission ⁷	The FCC’s ECF program provides funding to schools and libraries to help close the “homework gap” for students who currently lack necessary Internet access or the devices they need to connect to classrooms. As of March 1, 2023, 144,574 broadband connections and 582,975 connected devices have been funded in Illinois.	\$237,852,487	Not state administered program -- amount to be incorporated based on content available on USAspending.gov	n/a
Connecting Minority Communities Pilot Program (CMC),	Three four-year institutions in Illinois were awarded CMC Pilot Program grants: (1) Chicago State University for its Community Navigator program, (2) Dominican University for its “Cross-Campus Digital Literacy” initiative, and	\$8,497,531	Not state administered program -- amount to be incorporated based on	n/a

⁶ [ReConnect Loan and Grant Program](#), USDA U.S. Department of Agriculture; Based on FY19, FY 20, FY 22 funding; one project funded across Illinois and Kentucky

⁷ [Emergency Connectivity Fund](#), FCC

Source	Purpose	Total	Expended (allocated to projects) ¹	Available
National Telecommunications and Information Administration (NTIA) ⁸	(3) St. Augustine College for its initiative to address digital inequities through infrastructure, affordable connections and devices, and training. The IBL plans to support the three recipients in their digital equity initiatives to build collective resources and to share knowledge among stakeholders. The goal is to build a collaborative digital navigator program that is expected to be the foundation for efforts scaled across Illinois.		content available on USAspending.gov	
“Internet for All” planning grant: Digital Equity Act ⁹	Illinois received \$1,515,352.64 to fund activities related to digital equity planning.	\$1,515,353	\$1,515,353	\$0
“Internet for All”: BEAD Equity, Access, and Deployment Program	Illinois received \$5 million to fund activities related to the BEAD Equity, Access, and Deployment Program	\$5,000,000	\$5,000,000	\$0
ACP Outreach Grant ¹⁰	The Affordable Connectivity Outreach Grant Program is meant to foster awareness and enrollment in the ACP. Awardees serve as trusted community messengers about the ACP and are provided with funding to pursue	\$700,000 (directed to the DCEO); \$1,863,719 (total funding)	\$0	\$700,000

⁸ [Connecting Minority Communities Pilot Program](#), NTIA

⁹ [Biden-Harris Administration Awards More Than \\$6.5 Million to Illinois in ‘Internet for All’ Planning Grants](#), December 2022

¹⁰ [FCC Announces \\$66 million in Affordable Broadband Outreach Grants](#), FCC

Source	Purpose	Total	Expended (allocated to projects) ¹	Available
	innovative outreach strategies for reaching historically underserved and unserved communities. ACP Outreach Calls hosted by the IBL are a forum for grantees across the state to collaborate and share best practices for deploying their grant funding.	to 7 awardees in Illinois)		
Governor's Emergency Education Relief (GEER) Funds ¹¹	Illinois' governor dedicated GEER funds to pre-K-12 and higher education to bridge the digital divide. School districts received \$32.5 million to purchase devices, such as laptops and tablets, and \$7.5 million to purchase Wi-Fi hotspots and increase internet connectivity for students and families. Some \$46 million was directed to public universities and community colleges to help institutions' efforts to overcome barriers facing students and caused by the COVID-19 pandemic, including limited access to laptops and wireless hotspots.	\$86,000,000	\$86,000,000	\$0
Elementary and Secondary School Emergency Relief (ESSER) Fund ¹²	ISBE directed ESSER funds in the following three categories: \$33.3 million for laptops and tablets, \$7.1 million for internet connectivity, and \$6.5 million for virtual coaching to support an estimated 4,000 new teachers, who are expected to enter the teaching profession this fall.	\$46,900,000	\$46,900,000	\$0

¹¹ [Gov. Pritzker Announces \\$108.5 Million COVID Funding for PreK-12, Higher Education with Equity Focus](#)

¹² [Gov. Pritzker Announces \\$108.5 Million COVID Funding for PreK-12, Higher Education with Equity Focus](#)

Source	Purpose	Total	Expended (allocated to projects) ¹	Available
Lifeline Program for Low-Income Consumers	Lifeline is an FCC program that helps make communications services more affordable for low-income consumers. Eligible telecommunications carriers (ETCs, or service providers) can offer a discount to eligible low-income consumers on their mobile or fixed (i.e., landline) voice service or broadband (i.e., internet) service and receive a reimbursement from the federal universal service fund. Lifeline Program funding is disbursed in Illinois to incumbent local exchange carriers (ILECs) and competitive eligible telecommunications carriers (CETCs) monthly. ¹³	\$120,038,623 (total as of March 15, 2023) ¹⁴	Not state administered program -- amount to be incorporated based on content available on USAspending.gov	n/a
E-Rate - Schools & Libraries USF Program ¹⁵	The FCC's E-Rate program makes telecommunications and information services more affordable for schools and libraries. With funding from the Universal Service Fund, E-Rate provides discounts for telecommunications, internet access, and internal connections to eligible schools and libraries. The total requested invoice line amount as of April 5, 2023, is \$763 million.	\$592,815,633 (total authorized disbursements as of April 5, 2023) ¹⁶	Not state administered program -- amount to be incorporated based on content available on USAspending.gov	n/a

¹³ [Lifeline](#), Universal Service Administrative Co.; [Lifeline Disbursements Tool](#)

¹⁴ Amount listed represents total for duration of the program.

¹⁵ [E-Rate: Universal Service Program for Schools and Libraries](#), FCC; [E-Rate Invoices and Authorized Disbursements \(FCC Forms 472 and 474\)](#)

¹⁶ Amount listed represents total for duration of the program.

Source	Purpose	Total	Expended (allocated to projects) ¹	Available
Rural Health Care Program ¹⁷	The Rural Health Care Program provides funding to eligible health care providers for the telecommunications and broadband services necessary to provide health care. The program's goal is to improve the quality of health care available to patients in rural communities by ensuring that eligible health care providers have access to telecommunications and broadband services. Illinois has received Rural Health Care Program disbursement since 2012, with an original committed amount of \$79,952,118.78 and a total committed amount of \$68,699,205.45.	\$54,007,789 (total disbursed as of April 5, 2023) ¹⁸	Not state administered program -- amount to be incorporated based on content available on USAspending.gov	n/a
NTIA Broadband Infrastructure Program – Initial Planning Funding ¹⁹	The NTIA issued funds under the Initial Planning Funding phase of the BEAD Program (BEAD-IPF). This award will be used for creation of five-year "Connect Illinois" action plan, identification of unserved and underserved locations, increasing capacity and staffing of Illinois' state broadband office, surveys of underserved, unserved and underrepresented communities to better understand barriers to high-speed Internet adoption, and identification and elimination of digital equity gaps in	\$5,000,000	\$5,000,000	\$0

¹⁷ [Rural Health Care Program](#), FCC; [RHC Commitments and Disbursements Tool](#)

¹⁸ Amount listed represents total for duration of the program. Total listed is for health care providers located in Illinois and receiving the service, whether individual or consortium.

¹⁹ [Biden-Harris Administration Awards More Than \\$6.5 Million to Illinois in 'Internet for All' Planning Grants](#), Broadband USA.

Source	Purpose	Total	Expended (allocated to projects) ¹	Available
	alignment with the Digital Equity program.			
Digital Equity Act – State Digital Equity Planning Grant ²⁰	The State Digital Equity Planning Grants is the first part of the NTIA’s execution of the Digital Equity Act. The award will be used for creation of an Illinois state Digital Equity plan, cohort-wide meetings and kick-off events, data snapshots for each region and state on critical digital equity indicators, and data collection and sharing through the Illinois Broadband Lab collaboration -- such as annual broadband access mapping.	\$1,515,352.64	\$1,515,352.64	\$0

²⁰ [Biden-Harris Administration Awards More Than \\$6.5 Million to Illinois in ‘Internet for All’ Planning Grants](#), Broadband USA.

UNSERVED AND UNDERSERVED LOCATIONS (REQUIREMENT 5)

1.2.1 Attachment: As a required attachment, submit one CSV file with the location IDs of each unserved location including unserved locations in applicable Tribal Lands. Not Applicable for Illinois.

1.2.2 Attachment: As a required attachment, submit one CSV file with the location IDs of each underserved location including underserved locations in applicable Tribal Lands.

Two .csv files are provided as attachments (titled “unserved.csv” and “underserved.csv”) and include location IDs for all unserved and underserved location in Illinois as of November 28th 2023 (Req. 1.2.1 and Req 1.2.2).

For the purposes of the BEAD Program, in accordance with the BEAD Notice of Funding Opportunity, locations are categorized as follows:

Served: locations with speed greater than or equal to 100 Mbps download and 20 Mbps upload (100/20 Mbps)

Underserved: locations less than 100/20 Mbps and greater than or equal to 25/3 Mbps

Unserved: locations with speed less than 25/3 Mbps

Note: locations served exclusively by satellite, services using entirely unlicensed spectrum, or a technology not specified by the Commission for purposes of the Broadband DATA Maps, do not meet the criteria for Reliable Broadband Service²¹ and so will be considered “unserved.” Locations served by only digital subscriber line (DSL) technology will be considered “underserved.” Locations served by fiber-optic technology, Cable Modem/ Hybrid fiber-coaxial technology, or terrestrial fixed wireless technology utilizing entirely licensed spectrum or using a

²¹ As specified in Section I.C. (u) of the BEAD NOFO

hybrid of licensed and unlicensed spectrum meet the criteria for Reliable Broadband Service²², and are considered “served”, “underserved”, or “unserved” as specified above.

1.2.3 Date Selection: Identify the publication date of the National Broadband Map that was used to identify the unserved and underserved locations.

The state is using data last updated November 28th, 2023, with FCC BSL fabric availability data as of June 30th 2023 (Req 1.2.3).

²² As specified in Section I.C. (u) of the BEAD NOFO

COMMUNITY ANCHOR INSTITUTIONS (REQUIREMENT 6)

1.3.1 Text Box: Describe how the statutory definition of “community anchor institution” (e.g., schools, libraries, health clinics) was applied, how eligible CAIs were identified, and how network connectivity needs were assessed, including the types of CAIs that the Eligible Entity intends to serve.

(Req 1.3.1b) Based on the statutory definition of “community anchor institutions” as defined in 47 USC 1702, (a)(2)(E), the Illinois Office of Broadband understood the definition of “community anchor institutions” to mean:

- School or institute of higher education
- Library
- Health clinic, health center, hospital, or another medical provider
- Public safety entity (e.g., fire house, emergency medical service station, police station, or public safety answering point)
- Public housing organization (“including any public housing agency, HUD-assisted housing organization, or Tribal housing organization”)
- Community support organization that facilitates greater use of broadband service by vulnerable populations, including low-income individuals, unemployed individuals, and aging individuals
- Government building
- Park

Based on the statutory definition above, the following criteria were used to determine the inclusion or exclusion of community support organizations not specifically listed in 47 USC 1702(a)(2)(E):

1. Whether the community support organization facilitates greater use of broadband service by vulnerable populations, including, but not limited to, low-income individuals, unemployed individuals, children, the incarcerated, and aging individuals.

The definitions and sources were used to identify the types of community anchor institutions are provided in Table 2 below.

Table 2: Community anchor institution definitions and sources

CAI Type	Category and definition (if necessary)	Source
School or institute of higher education	Colleges and Universities: all Post-Secondary Education facilities as defined by the Integrated Post-Secondary Education System (IPEDS), National Center for Education Statistics (NCES), and US Department of Education (ED) for the 2019-2020 school year.	HIFLD, IPEDS, NCES, and US Department of Education
School or institute of higher education	Supplemental Colleges: additional postsecondary education features from websites of all colleges in Illinois that are not included in the National Center for Education (NCES) Integrated Post-Secondary Education System (IPEDS)	HIFLD, IPEDS, NCES, websites of colleges in Illinois
School or institute of higher education	Private schools: all K-12 schools participating in the FCC E-Rate program or that have an NCES (National Center for Education Statistics) ID in the categories “private schools”, combined with private elementary and secondary education facilities in the United States as defined by the Private School Survey (PSS), National Center for Education Statistics (NCES), and US Department of Education for the 2017-2018 school year.	USAC Open Data, HIFLD, PSS, NCES, US Dept of Education

CAI Type	Category and definition (if necessary)	Source
School or institute of higher education	Public schools: all K-12 schools participating in the FCC E-Rate program or that have an NCES (National Center for Education Statistics) ID in the categories “public schools”, combined with all Public elementary and secondary education facilities in the United States as defined by the Common Core of Data (CCD), National Center for Education Statistics (NCES), and US Department of Education for the 2019-2020 school year.	HIFLD, CCD, NCES, US dept of Education
Libraries	Libraries: all libraries that are members of ILLINET and any additional public libraries, including those participating in the FCC E-Rate program and all libraries and their branches that are members of the American Library Association (ALA). ²³	USAC Open Data, Illinois Secretary of State, ILLINET
Government building	State government buildings: buildings or properties that are owned or leased by state level governments. It includes buildings occupied by the headquarters of cabinet level state government executive departments, legislative office buildings outside of the capitol building, offices and court rooms associated with the highest level of the judicial branch of the state government, and large multi-agency state office buildings.	Homeland Infrastructure Foundation-Level Data
Government building	County government buildings: government center of each county government.	Website of each county government
Health clinic, health center, hospital, or another medical provider	Hospitals: all hospitals identified in data by the following entities: the Defense Health Agency, State of Illinois, the US Department of Veteran Affairs. The data set includes children, chronic disease, critical access, general acute care, long term care, military, psychiatric, rehabilitation,	HIFLD, Defense Health Agency, State of Illinois, US Department of Veteran Affairs

²³ ILLINET is a statewide library alliance, representing academic, public, school, and special libraries that are members of the Illinois' library system.

CAI Type	Category and definition (if necessary)	Source
	special, and women’s hospitals. The data set does not include nursing homes or health centers.	
Health clinic, health center, hospital, or another medical provider	Urgent care facilities: any location that can provide emergency medical care and must provide emergency medical treatment beyond what can normally be provided by an EMS unit, must be able to perform surgery, or must be able to provide recuperative care beyond what is normally provided by a doctor's office.	HIFLD
Health clinic, health center, hospital, or another medical provider	Public health departments: locations of public health departments that may be locally governed, part of a region or district, be an office or an administrative unit of the state health department, or a hybrid of these.	HIFLD
Health clinic, health center, hospital, or another medical provider	Nursing homes: nursing and assisted care facilities.	HIFLD, Illinois Department of Public Health
Public safety entity	Local Law Enforcement: agencies that are "publicly funded and employ at least one full-time or part-time sworn officer with general arrest powers", defined by the US Department of Justice. Federal level law enforcement agencies are excluded from this effort.	HIFLD, DOJ-BJS CSLLEA
Public safety entity	Fire Stations: manned fire stations and buildings from which a fire response occurs, such as a volunteer fire department building to which fire fighters report for duty, but which is not continuously manned. The data includes both private and governmental entities.	HIFLD, US Geological Survey
Public safety entity	FBI Field Offices: represents the FBI Field Office locations in the United States and its territories	HIFLD
Public safety entity	US Court of Appeals.	HIFLD, Department of Justice

CAI Type	Category and definition (if necessary)	Source
Public safety entity	Courthouses: all court buildings that handles county-level court functions, usually located in the city designated as a county seat	HIFLD
Public safety entity	EMS Stations.	HIFLD
Public safety entity	State & Local Prisons and Jails: secure detention facilities with jurisdiction at the local government level, combined with list of correctional facilities provided Illinois Department of Corrections	HIFLD, Illinois Department of corrections
Public safety entity	Federal Prisons: secure detention facilities with jurisdiction at the federal government level.	HIFLD, Federal Bureau of Prisons
Public Housing Organization	Public Housing Agencies and HUD-assisted housing organizations: county-level data on available public housing in Illinois.	Department of Housing and Urban Development
Community Support Organization	Childcare centers: center-based child day care locations (including those located at schools and religious institutes) and does not include group, home, and family-based child day cares.	HIFLD
Community Support Organization	Employment centers: IDES administrative offices, call centers, processing centers, American Job Centers, and IDES local and regional offices.	Illinois Department of Employment Security
Community Support Organization	Reentry support organizations: Non-profit organizations and community centers supporting transition to life after prison, as identified by the Illinois Reentry Guide.	Illinois Re-Entry Resources
Community Support Organization	Senior Centers: Area Agency on Aging.	Illinois Department on Aging
Community Support Organization	Community-Based Organizations (CBOs): Community-based non-profit organizations responsible for connecting	IRS

CAI Type	Category and definition (if necessary)	Source
	low-income individuals to essential resources and social services.	
Park	Parks: state parks, state wildlife areas, state recreational areas, state forests, historic sites, county forest reserve districts, and regional offices of the Illinois Department of Natural Resources.	List provided by Department of Natural Resources

Illinois has used the Initial Proposal public comment process and plans to use the challenge process to ensure that all relevant institutions meeting the CAI criteria are included.

(Req 1.3.1b & c) The IOB has declined one category of institution proposed as a CAI category during the comment period:

- Religious institutions/houses of worship:** The state received two public comments requesting the inclusion of religious institutions/houses of worship in the list of community anchor institutions. The state recognizes the important role that religious institutions can play expanding broadband access for covered populations. During the challenge process, religious institutions that have worked directly with communities to expand broadband access for covered populations can provide evidence to the IOB and subsequently can be included in the list of eligible CAIs under the subcategory of "Community Support Organizations."

With respect to the question on whether religious institutions as a whole should be included as a category of community anchor institutions, the broadband office consulted with NTIA and evaluated the options and has declined to do so. The state has concluded that churches, as part of their mission, do not conduct activities that facilitate greater use of broadband service by vulnerable populations. Thus, while these are important institutions for our communities, they do not qualify under the existing definition of community anchor institutions.

(Req 1.3.1d) The IOB has proposed additional CAI categories under Community Support Organizations because they facilitate greater broadband use among the population they serve.

As a guiding principle, IOB considers the call for universal broadband access to extend behind traditional bricks and mortar facilities to spaces and places where residents can and will gather – to learn, to produce, to experience, to recreate. At the same time, IOB wants to avoid broadband deployment mistakes of the past that have extended fiber without ensuring the inclusion of necessary drops to make the asset useful for future builds and purposes. For these reasons, among others – including the historic undervaluation of CAIs as essential broadband access points, the overstatement of actual CAI broadband access, and the unnecessarily limiting definition of what constitutes a modern-day CAI, IOB took an inclusive approach to confirm CAI locations, to identify CAI needs, and to imagine a world where CAIs leverage universal access to affordable, reliable, high-performance broadband to support the programming, opportunities, and connectivity essential to the communities they serve.

These categories included below were identified in 2023 through direct engagement with state agencies, local governments, various political subdivisions, and related community stakeholders throughout Illinois. This engagement was initiated as IOB introduced to key external stakeholders the BEAD and DE programs, the anticipated statewide listening tour, and other elements of the comprehensive planning initiative undertaken to support preparation of the Five-Year Action Plan, Initial Proposal, and State Digital Equity Plan.

The IOB included any organizations that facilitate greater use of broadband service by vulnerable populations, including low-income individuals, unemployed individuals, and aging individuals. This includes senior centers and job training centers in this category. The Department of Labor maintains a database of “American Job Training” training centers, established as part of the Workforce Investment Act, and reauthorized in the Workforce Innovation and Opportunities Act of 2014. The database can be accessed at the American Job Center Finder. The National Council on Aging (NCOA) helped identify senior centers.

- **Employment centers (Category C)**, which are included in NTIA’s model challenge process, provide places where vulnerable populations, especially unemployed and low-income individuals, can access the internet for free. At employment centers, unemployed and low-income individuals can meet with an employment coach, attend classes to support their job search, and build and update their resume and cover letter. Each of these activities involves accessing the internet – whether to participate in an online training, build a resume on Microsoft Word, research a certain industry of interest, or conduct a practice interview online. Many employment centers also offer free digital skill building trainings and certifications which can be completed on site, and allow individuals to earn certifications which contribute to their job searches.
- **Senior centers (Category C) serve the aging population**, which is described as a covered population in the Digital Equity Act. Senior centers, which are included in NTIA’s model challenge process, are places where seniors can access the internet, in addition to receiving other types of support. Such access to the internet may be through computer labs, online classes and activities, or educational and recreational workshops in group settings. Internet access in senior centers allows older adults to learn, access healthcare, fight isolation and loneliness, and stay connected to family and friends – all critical to their longevity and quality of life. A quality broadband connection is required for these activities – many of which are video-based – to occur.

Additional categories include:

- **Government buildings (Category G)**. Government buildings offer public access to the internet and serve as points of public service delivery for residents without internet at home. The government buildings considered CAIs are county and state government buildings, identified on each county government’s website and using Homeland Infrastructure Foundation-Level Data, respectively. For low-income residents, who are the least likely to have internet at home, these government buildings serve as critical points to access the internet and essential public services, and to complete public service tasks like obtaining a

permit or paying a bill. Without 1 gbps symmetrical broadband service, these important institutions will be unable to offer such essential services and supports to their residents. The list of government buildings was informed by input during the public comment period, and IOB will use the challenge process to further refine the list of eligible CAIs.

- **Childcare centers (category C)** facilitate greater use of the internet by vulnerable populations, especially low-income parents and their children. Childcare centers require access to the internet to facilitate digital skill building among children and parents, host programming and recreational activities for children, and conduct proper outreach and engagement with parents. Quality internet is also necessary to conduct tasks necessary run a childcare institution, such as managing and communicating with customers using an online software platform and leveraging existing e-learning curriculums and educational content for childcare. This is especially important given the shift to hybrid learning models since the start of COVID-19. Educational resources are increasingly online, and that child care centers need access to these resources to enable the children they serve. The list of childcare centers was informed by input during the public comment period, and IOB will use the challenge process to further refine the list of eligible CAIs.
- **Community-based organizations (Category C)** described in this proposal are organizations which provide direct service to vulnerable populations, including low-income, aging, rural, and veteran populations. Organizations have computer labs which are free for local residents to use to learn, access tele-healthcare, support their children’s learning, and stay connected with family and friends. Organizations also offer on-site workshops, classes, and one-on-one support enrolling in public benefits, signing up for internet, and building digital skills. Each of these activities require a quality broadband connection. Example uses include access to food stamps, rental assistance, and other state and federal benefits. Enrolling in each of these types of programs occurs online, and thus requires a quality broadband connection. This further aligns with the state’s Digital Equity Plan, which highlights ensuring that populations such as returning residents have access to the internet as a resource to help them reintegrate into modern society, find a job, learn, and care for their loved ones. The list of

community-based organizations was informed by input during the public comment period, and IOB will use the challenge process to further refine the list of eligible CAIs.

- **Parks (Category K)** are areas where all residents, especially low-income populations in both dense urban areas and in rural areas, can access the internet for free to connect with educational and recreational programming, as well as use the public space to browse the internet, complete homework and school projects, and gather as a community. The IOB's definition of parks includes two types of public spaces:
 - 1) Physical structures in parks (e.g., field houses, ranger stations, museums) where individuals can gather for community programming, access broadband to use the computer, participate in educational opportunities, such as classes and digital skill building, and complete homework or school projects (especially when access is not otherwise available, i.e., for low-income families and rural communities)
 - 2) Open spaces within parks (e.g., pavilions, campgrounds, etc.) where individuals and communities can gather and access broadband to use the computer, participate in educational opportunities, such as classes and digital skill building, and complete homework or school projects (especially when access is not otherwise available, i.e., for low-income families and rural communities)

To be considered a park that is a CAI, the park must be owned and operated by an Illinois county, city, the state of Illinois, or the U.S. Forest Service.

Parks included at CAIs were recommended during the public comment process, and identified through communication with the Department of Natural Resources, who also shared existing connectivity status, as well as future needs. The list of parks will continue to be refined during the challenge process. This will be accomplished through surveying park districts, forest preserves, and other public open space management entities to ensure that their uses and needs are properly represented in the CAI list.

One valuable example of public input regarding parks and open spaces was from the local coordination tour, where the IOB heard from multiple residents that parks are where they go when they cannot connect to reliable internet at home. In public comment submitted to the state, Lake County notes that many of the broadband serviceable locations that are considered underserved, unserved or have low subscription rates are in the vicinity of forest preserves. Lake County Forest Preserve District has an estimated 3 million visitors each year with over 30,000 acres of land. Forest Preserves are open to all and located throughout almost all areas of Lake County, creating a universally accessible place to access broadband.

To assess the availability of 1Gbps symmetrical service at each CAI listed above, the broadband office has:

1. **Cross-referenced relevant data sets.** For libraries and K-12 public schools, the IOB used e-Rate data to determine service availability.
2. **Engaged relevant agencies.** The IOB engaged Illinois Century Network to assess the availability of 1Gbps symmetrical service at all schools, libraries, and government agencies.
3. **Conducted geospatial proximity analysis:** For CAIs other than schools, libraries, and government agencies, a geospatial analysis was conducted to understand each CAI's proximity to BSLs served with mass market 1Gbps symmetrical service, with the assumption that those that are located within 5 miles of mass market 1Gbps symmetrical service likely have access to 1Gbps symmetrical broadband. The analysis divided the state of Illinois into hexagonal areas with side length of 0.3 miles, identified which hexagon had within it a BSL served by mass market 1Gbps symmetrical technology (as indicated in the FCC Broadband Data Map), and marked the area as likely served with 1 Gbps symmetrical broadband. Then, the analysis reviewed whether each CAI fell within hexagons marked as likely served with 1 Gbps symmetrical broadband, and those CAIs that did not were flagged as likely not served by 1 Gbps symmetrical broadband.

The broadband office compiled the list of all CAIs that do not have 1 Gigabit symmetrical broadband service based on steps outlined above. An attachment (titled “cai.csv”) has been provided, which includes the list of eligible community anchor institutions that do not have access to 1 Gigabit symmetrical service, to the best of the IOB’s knowledge.

To assess the network connectivity needs of the types of eligible community anchor institutions listed above, the broadband office:

- **Engaged government agencies.** The broadband office engaged the Illinois Century Network (ICN) which provides internet service to many of the state’s schools, libraries, and government buildings to understand what records they have available regarding the availability of 1 Gbps broadband service to relevant community anchor institutions. The IOB also engaged local governments and digital equity leaders to understand what records they have available regarding relevant community anchor institutions 1 Gbps broadband service availability.
- **Engaged community organizations and nonprofits during the public comment period.** During the initial proposal public comment period, the IOB conducted specific outreach to community orgs to review and provide feedback on the CAI list. The feedback received was incorporated into the cai.csv file submitted with this proposal.

1.3.2 Attachment: As a required attachment, submit the CSV file (named “cai.csv”) that lists eligible community anchor institutions that require qualifying broadband service and do not currently have access to such service, to the best of the Eligible Entity’s knowledge.

The “cai.csv” file is provided as an attachment.

CHALLENGE PROCESS (REQUIREMENT 7)

1.4.1 Yes/No Box: Select if the Eligible Entity plans to adopt the NTIA BEAD Model Challenge Process for Requirement 7.

Yes

No

The State of Illinois will adopt the model challenge process as provided by NTIA (**Req. 1.4.1**) with the following modifications:

1. The state will adopt the DSL modification.
2. The state will conduct the challenge and rebuttal phases for 21 calendar days, timeline dependent on the approval of Initial Proposal Vol 1.

1.4.2 Text Box: If applicable, describe any modifications to classification of broadband serviceable locations in the Eligible Entity’s jurisdiction as “served,” “underserved,” or “unserved,” and provide justification for each modification.

DSL Modification

The broadband office will treat locations that the National Broadband Map shows to have available qualifying broadband service (i.e., a location that is “served”) delivered via DSL as “underserved.” This modification will better reflect the locations eligible for BEAD funding because it will facilitate the phase-out of legacy copper facilities and ensure the delivery of “future-proof” broadband service.

1.4.3 Yes/No Box: Select if the Eligible Entity plans to use the BEAD Eligible Entity Planning Toolkit to identify existing federal enforceable commitments.

Yes

No

1.4.4 Text Box: Describe the process that will be used to identify and remove locations subject to enforceable commitments.

The broadband office will enumerate locations subject to enforceable commitments by using the BEAD Eligible Entity Planning Toolkit, and consult at least the following data sets:

1. The Broadband Funding Map published by the FCC pursuant to IIJA § 60105.
2. Data sets from state broadband deployment programs that rely on funds from the Capital Projects Fund and the State and Local Fiscal Recovery Funds run by the U.S. Treasury.
3. Illinois and local data collections of existing enforceable commitments.

The broadband office will make a best effort to create a list of BSLs subject to enforceable commitments based on state/territory or local grants or loans. If necessary, the broadband office will translate polygons or other geographic designations (e.g., a county or utility district) describing the area to a list of Fabric locations. The broadband office will submit this list, in the format specified by the FCC Broadband Funding Map, to NTIA.²⁴

The broadband office will review its repository of existing state and local broadband grant programs to validate the upload and download speeds of existing binding agreements to deploy broadband infrastructure. In situations in which the Illinois state or local program did not specify broadband speeds, or when there was reason to believe a provider deployed higher broadband speeds than required, the broadband office will reach out to the provider to verify the deployment speeds of the binding commitment. The broadband office will document this process by requiring providers to sign a binding agreement certifying the actual broadband deployment speeds deployed.

²⁴ Guidance on the required format for the locations funded by state or territorial and local programs will be specified at a later date, in coordination with FCC.

The broadband office drew on these provider agreements, along with its existing database on state and local broadband funding programs' binding agreements, to determine the set of Illinois state and local enforceable commitments.

1.4.5 Attachment: As a required attachment, submit the list of the federal, state/territorial, and local programs that will be analyzed to remove enforceable commitments from the set of locations eligible for BEAD funding.

Federal, state, or territorial, and local programs that will be analyzed to remove enforceable commitments from the set of locations eligible for BEAD funding are listed in the attachment "BEAD Initial Proposal Volume I Deduplication of Funding Programs.xlsx" (**Req. 1.4.5**).

1.4.6 Text Box: Describe the plan to conduct an evidence-based, fair, transparent, and expeditious challenge process.

Based on the NTIA BEAD Challenge Process Policy Notice, as well as the broadband office understanding of the goals of the BEAD program, the proposal represents a transparent, fair, expeditious and evidence-based challenge process.

Permissible Challenges

The broadband office will only allow challenges on the following grounds:

- The identification of eligible community anchor institutions, as defined by the Eligible Entity,
- Community anchor institution BEAD eligibility determinations,
- BEAD eligibility determinations for existing broadband serviceable locations (BSLs),
- Enforceable commitments, or
- Planned service.

Permissible Challengers

During the BEAD Challenge Process, the broadband office will only allow challenges from nonprofit organizations, units of local and tribal governments, and broadband service providers.

Challenge Process Overview

The challenge process run by the broadband office will include four phases, spanning 120 days:

Publication of Eligible Locations: Prior to beginning the Challenge Phase, the broadband office will publish the set of locations eligible for BEAD funding, which consists of the locations resulting from the activities outlined in Sections 5 and 6 of the NTIA BEAD Challenge Process Policy Notice (e.g., administering the deduplication of funding process). The office will also publish locations considered served, as they may be challenged. The broadband office intends to publish the set of locations by January 8th, 2024. Note that the publication date is tentative and subject to the timing of NTIA’s approval of Initial Proposal Vol 1.

Challenge Phase: During the Challenge Phase, the challenger will submit the challenge through the broadband office challenge portal. This challenge will be visible to the service provider whose service availability and performance is being contested. The portal will notify the provider of the challenge through an automated email, which will include related information about timing for the provider’s response. After this stage, the location will enter the “challenged” state.

- a. **Minimum Level of Evidence Sufficient to Establish a Challenge:** The challenge portal will verify that the address provided can be found in the Fabric and is a BSL. The challenge portal will confirm that the challenged service is listed in the National Broadband Map and meets the definition of reliable broadband service. The challenge will confirm that the email address is reachable by sending a confirmation message to the listed contact email. For scanned images, the challenge portal will determine whether the quality is sufficient to enable optical character recognition (OCR). For availability challenges, the broadband office will manually verify that the evidence submitted falls within the

categories stated in the NTIA BEAD Challenge Process Policy Notice and the document is unredacted and dated.

- b. **Timeline:** Challengers will have 21 calendar days to submit a challenge from the time the initial list of unserved and underserved locations, community anchor institutions, and existing enforceable commitments are posted. The broadband office intends to start accepting challenges by January 16th, 2024. Note that exact date and length of the challenge phase is tentative and subject to the timing of NTIA's approval of Initial Proposal Vol 1.

Rebuttal Phase: For challenges related to location eligibility, only the challenged service provider may rebut the reclassification of a location or area with evidence. If a provider claims gigabit service availability for a CAI or a unit of local government disputes the CAI status of a location, the CAI may rebut. All types of challengers may rebut planned service (P) and enforceable commitment (E) challenges. If a challenge that meets the minimum level of evidence is not rebutted, the challenge is sustained. A provider may also agree with the challenge and thus transition the location to the "sustained" state. Providers must regularly check the challenge portal notification method (e.g., email) for notifications of submitted challenges.

- a. **Timeline:** Providers will have 21 calendar days from notification of a challenge to provide rebuttal information to the broadband office. The rebuttal period begins once the provider is notified of the challenge, and thus may occur concurrently with the challenge phase. The exact date and length of the rebuttal phase will depend on the timeline of NTIA's approval of Initial Proposal Vol 1.

Final Determination Phase: During the Final Determination phase, the broadband office will make the final determination of the classification of the location, either declaring the challenge "sustained" or "rejected."

- a. **Timeline:** Following intake of challenge rebuttals, the broadband office will make a final challenge determination within 30 calendar days of the challenge rebuttal. Reviews will

occur on a rolling basis, as challenges and rebuttals are received. The broadband office intends to make final determination from April 1st to April 30th, 2024. The exact date and length of the final determination phase will depend on the timeline of NTIA’s approval of Initial Proposal Vol 1.

The IOB will conduct the required BEAD challenge process in the four phases outlined above. More information on the timeline of the challenge process will be posted on the IOB website (<https://dceo.illinois.gov/connectillinois.html>). Relevant stakeholders who have signed up for the state challenge portal will receive email notifications once the challenge timeline is finalized.

Evidence & Review Approach

To ensure that each challenge is reviewed and adjudicated based on fairness for all participants and relevant stakeholders, the broadband office will review all applicable challenge and rebuttal information in detail without bias, before deciding to sustain or reject a challenge. The broadband office will document the standards of review to be applied in a Standard Operating Procedure and will require reviewers to document their justification for each determination. The broadband office plans to ensure reviewers have sufficient training to apply the standards of review uniformly to all challenges submitted. The broadband office will also require that all reviewers submit affidavits to ensure that there is no conflict of interest in making challenge determinations.

Table 4: Allowed challenge types

Code	Challenge type	Description	Specific examples	Permissible rebuttals
A	Availability	The broadband service identified is not offered at the location, including a unit of a multiple	Screenshot of provider webpage. A service request was refused within the last 180 days (e.g., an email or letter from provider).	Provider shows that the location subscribes or has subscribed within the last 12 months, e.g., with a copy of a customer bill.

Code	Challenge type	Description	Specific examples	Permissible rebuttals
		dwelling unit (MDU).	<p>Lack of suitable infrastructure (e.g., no fiber on pole).</p> <p>A letter or email dated within the last 365 days that a provider failed to schedule a service installation or offer an installation date within 10 business days of a request.²⁵</p> <p>A letter or email dated within the last 365 days indicating that a provider requested more than the standard installation fee to connect this location or that a Provider quoted an amount in excess of the provider’s standard installation charge in order to connect service at the location.</p>	<p>If the evidence was a screenshot and believed to be in error, a screenshot that shows service availability.</p> <p>The provider submits evidence that service is now available as a standard installation, e.g., via a copy of an offer sent to the location.</p>

²⁵ A standard broadband installation is defined in the Broadband DATA Act (47 U.S.C. § 641(14)) as “[t]he initiation by a provider of fixed broadband internet access service [within 10 business days of a request] in an area in which the provider has not previously offered that service, with no charges or delays attributable to the extension of the network of the provider.”

Code	Challenge type	Description	Specific examples	Permissible rebuttals
S	Speed	The actual speed of the service tier falls below the unserved or underserved thresholds. ²⁶	Speed test by subscriber, showing the insufficient speed and meeting the requirements for speed tests.	Provider has countervailing speed test evidence showing sufficient speed, e.g., from their own network management system. ²⁷
L	Latency	The round-trip latency of the broadband service exceeds 100 ms ²⁸ .	Speed test by subscriber, showing the excessive latency.	Provider has countervailing speed test evidence showing latency at or below 100 ms, e.g., from their own network management system or the CAF performance measurements. ²⁹
D	Data cap	The only service plans marketed to consumers impose an unreasonable capacity allowance (“data cap”) on	Screenshot of provider webpage. Service description provided to consumer.	Provider has terms of service showing that it does not impose an unreasonable data cap or offers another plan at the location without an unreasonable cap.

²⁶ The challenge portal has to gather information on the subscription tier of the household submitting the challenge. Only locations with a subscribed-to service of 100/20 Mbps or above can challenge locations as underserved. Speed challenges that do not change the status of a location do not need to be considered. For example, a challenge that shows that a location only receives 250 Mbps download speed even though the household has subscribed to gigabit service can be disregarded since it will not change the status of the location to unserved or underserved.

²⁷ As described in the NOFO, a provider’s countervailing speed test should show that 80 percent of a provider’s download and upload measurements are at or above 80 percent of the required speed. *See Performance Measures Order*, 33 FCC Rcd at 6528, para. 51. *See* BEAD NOFO at 65, n. 80, Section IV.C.2.a.

²⁸ *Performance Measures Order*, including provisions for providers in non-contiguous areas (§21).

²⁹ *Ibid.*

Code	Challenge type	Description	Specific examples	Permissible rebuttals
		the consumer. ³⁰		
T	Technology	The technology indicated for this location is incorrect.	Manufacturer and model number of residential gateway (CPE) that demonstrates the service is delivered via a specific technology.	Provider has countervailing evidence from their network management system showing an appropriate residential gateway that matches the provided service.
B	Business service only	The location is residential, but the service offered is marketed or available only to businesses.	Screenshot of provider webpage.	Provider documentation that the service listed in the BDC is available at the location and is marketed to consumers.
E	Enforceable Commitment	The challenger has knowledge that broadband will be deployed at this location by the date established in the deployment obligation.	Enforceable commitment by service provider (e.g., authorization letter). In the case of Tribal Lands, the challenger must submit the requisite legally binding agreement between the relevant Tribal Government and the service provider for the location(s) at issue (see Section 6.2 above).	Documentation that the provider has defaulted on the commitment or is otherwise unable to meet the commitment (e.g., is no longer a going concern).

³⁰ An unreasonable capacity allowance is defined as a data cap that falls below the monthly capacity allowance of 600 GB listed in the FCC 2023 Urban Rate Survey (FCC Public Notice DA 22-1338, December 16, 2022). Alternative plans without unreasonable data caps cannot be business-oriented plans not commonly sold to residential locations. A successful challenge may not change the status of the location to unserved or underserved if the same provider offers a service plan without an unreasonable capacity allowance or if another provider offers reliable broadband service at that location.

Code	Challenge type	Description	Specific examples	Permissible rebuttals
P	Planned service	The challenger has knowledge that broadband will be deployed at this location by June 30, 2024, without an enforceable commitment or a provider is building out broadband offering performance beyond the requirements of an enforceable commitment.	Construction contracts or similar evidence of on-going deployment, along with evidence that all necessary permits have been applied for or obtained. Contracts or a similar binding agreement between the Eligible Entity and the provider committing that planned service will meet the BEAD definition and requirements of reliable and qualifying broadband even if not required by its funding source (<i>i.e.</i> , a separate federal grant program), including the expected date deployment will be completed, which must be on or before June 30, 2024.	Documentation showing that the provider is no longer able to meet the commitment (e.g., is no longer a going concern) or that the planned deployment does not meet the required technology or performance requirements.
N	Not part of enforceable commitment.	This location is in an area that is subject to an enforceable commitment to less than 100% of locations and the location is	Declaration by service provider subject to the enforceable commitment.	

Code	Challenge type	Description	Specific examples	Permissible rebuttals
		not covered by that commitment. (See BEAD NOFO at 36, n. 52.)		
C	Location is a CAI	The location should be classified as a CAI.	Evidence that the location falls within the definitions of CAIs set by the Eligible Entity. ³¹	Evidence that the location does not fall within the definitions of CAIs set by the Eligible Entity or is no longer in operation.
R	Location is not a CAI	The location is currently labeled as a CAI but is a residence, a non-CAI business, or is no longer in operation.	Evidence that the location does not fall within the definitions of CAIs set by the Eligible Entity or is no longer in operation.	Evidence that the location falls within the definitions of CAIs set by the Eligible Entity or is still operational.

Area and MDU Challenge

The broadband office will administer area and MDU challenges for challenge types A, S, L, D, and T. An area challenge reverses the burden of proof for availability, speed, latency, data caps and technology if a defined number of challenges for a particular category, across all challengers, have been submitted for a provider. Thus, the provider receiving an area challenge or MDU

³¹ For example, eligibility for FCC e-Rate or Rural Health Care program funding or registration with an appropriate regulatory agency may constitute such evidence, but the Eligible Entity may rely on other reliable evidence that is verifiable by a third party.

challenge must demonstrate that they are indeed meeting the availability, speed, latency, data cap and technology requirement, respectively, for all locations it serves within the area or all units within an MDU. The provider can use any of the permissible rebuttals listed above.³²

An area challenge is triggered if six or more broadband serviceable locations using a particular technology and a single provider within a census block group are challenged.

An MDU challenge requires challenges for one unit for MDUs having fewer than 15 units, for two units for MDUs of between 16 and 24 units, and at least three units for larger MDUs. Here, the MDU is defined as one broadband serviceable location listed in the Fabric. An MDU challenge counts towards an area challenge (i.e., six successful MDU challenges in a census block group may trigger an area challenge).

Each type of challenge and each technology and provider is considered separately, e.g., an availability challenge (A) does not count towards reaching the area threshold for a speed (S) challenge. If a provider offers multiple technologies, such as DSL and fiber, each is treated separately since they are likely to have different availability and performance.

Area challenges for availability need to be rebutted in whole or by location with evidence that service is available for all BSLs within the census block group, e.g., by network diagrams that show fiber or HFC infrastructure or by subscriber information. For fixed wireless service, the challenge system will offer representative random, sample of the area in contention, but no fewer than 10, where the provider must demonstrate service availability and speed (e.g., with a mobile test unit).³³ For MDU challenges, the rebuttal must show that the inside wiring is reaching all units and is of sufficient quality to support the claimed level of service.

³² A successful MDU challenge converts the status of the location to the lowest level of service across all units. For example, the location is considered unserved if one unit is found to be unserved, even if other units within the MDU reach the underserved or served speed thresholds.

³³ A mobile test unit is a testing apparatus that can be easily moved, which simulates the equipment and installation (antenna, antenna mast, subscriber equipment, etc.) that would be used in a typical deployment of fixed wireless access service by the provider.

Speed Test Requirements

IOB will accept speed tests as evidence for substantiating challenges and rebuttals. Each speed test consists of three measurements, taken on different days. Speed tests cannot predate the beginning of the challenge period by more than 60 days.

Speed tests can take four forms:

1. A reading of the physical line speed provided by the residential gateway, (i.e., DSL modem, cable modem (for HFC),
2. ONT (for FTTH), or fixed wireless subscriber module.
3. A reading of the speed test available from within the residential gateway web interface.
4. A reading of the speed test found on the service provider's web page.
5. A speed test performed on a laptop or desktop computer within immediate proximity of the residential gateway, using speed test applications from the following list of applications approved by NTIA:
 - 1) Ookla [speedtest.net](https://www.speedtest.net)
 - 2) M-lab [Speed Test by Measurement Lab](https://www.measurementlab.net)
 - 3) Cloudflare [Internet Speed Test - Measure Network Performance | Cloudflare](https://www.cloudflare.com/learning/network-layer/what-is-speedtest/)
 - 4) Netflix [Fast.com](https://www.netflix.com/it-it/tech/fast.com)

Each speed test measurement must include:

- The time and date the speed test was conducted.
- The provider-assigned internet protocol (IP) address, either version 4 or version 6, identifying the residential gateway conducting the test.

Each group of three speed tests must include:

- The name and street address of the customer conducting the speed test.
- A certification of the speed tier the customer subscribes to (e.g., a copy of the customer's last invoice).
- An agreement, using an online form provided by the Eligible Entity, that grants access to these information elements to the Eligible Entity, any contractors supporting the challenge process, and the service provider.

The IP address and the subscriber's name and street address are considered personally identifiable information (PII) and thus are not disclosed to the public (e.g., as part of a challenge dashboard or open data portal).

Each location must conduct three speed tests on three different days; the days do not have to be adjacent. The median of the three tests (i.e., the second highest (or lowest) speed) is used to trigger a speed-based (S) challenge, for either upload or download. For example, if a location claims a broadband speed of 100 Mbps/25 Mbps and the three speed tests result in download speed measurements of 105, 102 and 98 Mbps, and three upload speed measurements of 18, 26 and 17 Mbps, the speed tests qualify the location for a challenge, since the measured upload speed marks the location as underserved.

Speed tests may be conducted by subscribers, but speed test challenges must be gathered and submitted by units of local government, nonprofit organizations, or a broadband service provider.

Subscribers submitting a speed test must indicate the speed tier they are subscribing to. If the household subscribes to a speed tier of between 25/3 Mbps and 100/20 Mbps and the speed test results in a speed below 25/3 Mbps, this broadband service will not be considered to determine the status of the location. If the household subscribes to a speed tier of 100/20 Mbps or higher and the speed test yields a speed below 100/20 Mbps, this service offering will not count towards the location being considered served. However, even if a particular service offering is not meeting the speed threshold, the eligibility status of the location may not change.

For example, if a location is served by 100 Mbps licensed fixed wireless and 500 Mbps fiber, conducting a speed test on the fixed wireless network that shows an effective speed of 70 Mbps does not change the status of the location from served to underserved.

A service provider may rebut an area speed test challenge by providing speed tests, in the manner described above, for at least 10% of the customers in the challenged area. The customers must be randomly selected. Providers must apply the 80/80 rule³⁴, i.e., 80% of these locations must experience a speed that equals or exceeds 80% of the speed threshold. For example, 80% of these locations must have a download speed of at least 20 Mbps (that is, 80% of 25 Mbps) and an upload speed of at least 2.4 Mbps to meet the 25/3 Mbps threshold and must have a download speed of at least 80 Mbps and an upload speed of 16 Mbps to be meet the 100/20 Mbps speed tier. Only speed tests conducted by the provider between the hours of 7 pm and 11 pm local time will be considered as evidence for a challenge rebuttal.

Transparency Plan

To ensure that the challenge process is transparent and open to public and stakeholder scrutiny, the broadband office will, upon approval from NTIA, publicly post an overview of the challenge process phases, challenge timelines, and instructions on how to submit and rebut a challenge. This documentation will be posted publicly for at least a week prior to opening the challenge submission window. The broadband office also plans to actively inform all units of local government of its challenge process and set up regular touchpoints to address any comments, questions, or concerns from local governments, nonprofit organizations, and Internet service providers. The broadband office will inform eligible challengers through an email listserv, which includes state and local governments, non-profits and community organizations, and internet service providers. The listserv includes all past participants of the broadband office's stakeholder

³⁴ The 80/80 threshold is drawn from the requirements in the CAF-II and RDOF measurements. See BEAD NOFO at 65, n. 80, Section IV.C.2.a.

engagement events and internet service providers that participated in prior Connect Illinois grant rounds. The broadband office has conducted two information sessions on challenge process for local governments and plans to conduct three more technical assistance sessions for all relevant stakeholders. Information on the webinar series are publicized on the University of Illinois Extension website (<https://registration.extension.illinois.edu/start/illinois-bead-challenge-webinar-series>) and through the bi-weekly newsletter. Relevant stakeholders can sign up on the broadband office website for challenge process updates and newsletters (<https://dceo.illinois.gov/connectillinois.html>). They can engage with the broadband office by a designated email address (Broadband@illinois.gov). The providers will receive email notifications for submitted challenges.

Beyond actively engaging relevant stakeholders, the broadband office will also post all submitted challenges and rebuttals before final challenge determinations are made, including:

- The provider, nonprofit, or unit of local government that submitted the challenge,
- The census block group containing the challenged broadband serviceable location,
- The provider being challenged,
- The type of challenge (e.g., availability or speed), and
- A summary of the challenge, including whether a provider submitted a rebuttal.

The broadband office will not publicly post any personally identifiable information (PII) or proprietary information, including subscriber names, street addresses and customer IP addresses. To ensure all PII is protected, the broadband office will review the basis and summary of all challenges and rebuttals to ensure PII is removed prior to posting them on the website. Additionally, guidance will be provided to all challengers as to which information they submit may be posted publicly.

The broadband office will treat information submitted by an existing broadband service provider designated as proprietary and confidential consistent with applicable federal law. If any of these responses do contain information or data that the submitter deems to be confidential

commercial information that should be exempt from disclosure under state open records laws or is protected under applicable state privacy laws, that information should be identified as privileged or confidential. Otherwise, the responses will be made publicly available.

Plan for ongoing efforts to improve the Illinois Broadband Map, beyond the BEAD challenge process

While the execution of the BEAD Challenge process to fulfill the requirements of the BEAD program will be swift, in order to enable Illinois to meet the broader timeline requirements for completing the final proposal, Illinois plans to periodically execute a similar challenge process, enabling Illinois to continue to refine and improve the maps. This may include continuing use of the challenge portal to periodically accept challenges, collect rebuttals, and make final determinations within the Illinois state map. While this process will not impact the list of unserved and underserved locations the state is obligated to connect via BEAD funds, it can impact how IOB will spend other federal and state broadband deployment funds, until the ultimate goal of closing the digital divide in Illinois is reached.

1.4.6 Optional Attachment: As a required attachment only if the Eligible Entity is not using the NTIA BEAD Model Challenge Process, outline the proposed sources and requirements that will be considered acceptable evidence.

Not relevant since the state is using the NTIA BEAD Model Challenge process.

VOLUME 1 PUBLIC COMMENT

1.5.1 Text Box: Describe the public comment period and provide a high-level summary of the comments received during the Volume I public comment period and how they were addressed by the Eligible Entity. The response must demonstrate:

- a. The public comment period was no less than 30 days; and
- b. Outreach and engagement activities were conducted to encourage feedback during the public comment period.

The IOB's public comment period for both volumes of the Connect Illinois Initial Proposal was held from September 29, 2023, to October 31, 2023.

The following outreach and engagement activities were conducted to encourage the submission of public comments:

- **Publication on the IOB's website:** Both volumes of the Initial Proposal and the eligible CAI list have been posted publicly on the IOB's website under "Federal Broadband." A link to provide comments on both volumes of the Initial Proposal is prominently displayed on the page.
- **Outreach through "Introduction to the Challenge Process" webinar:** The IOB hosted two webinars in October to introduce the BEAD challenge process. The webinar summarized how the state defines community anchor institutions and the state's plan for the challenge process (contingent on NTIA's approval). Participants were encouraged to view the latest draft of the initial proposal and to submit feedback during the public comment period.
- **Outreach through the Illinois Broadband Connection newsletter:** The IOB publicized the Initial Proposal public comment period in its bi-weekly newsletter. All subscribers to the

newsletter received a notification with details on how to participate in the public comment period.

- **Email to partnering organizations using listserv:** The IOB reached out to partners and past participants in the stakeholder engagement process to publicize the public comment period.

A total of **37 comments** from the public were received during the public comment period. A high-level summary of the comments received and the IOB’s response is provided below.

The “Connect Illinois Initial Proposal, Volume 1 Public Comment Draft” will be referred to as the “IL IP Vol. 1 draft.”

Table 5: Summary of public comments received for Volume 1 and the IOB response.

Summary of comments	IOB response
Community Anchor Institutions (Requirement 6)	
Adding additional organizations as CAIs under categories defined in the IL IP Vol. 1 draft	All submitted organizations that fall under the defined categories in the IL IP Vol. 1 draft will be added to the CAI list as eligible CAIs.
Evaluating community needs prior to classifying a CAI as BEAD-eligible	The state assessed the availability of 1 Gigabit symmetrical service by cross-referencing relevant data sets, engaging relevant agencies, and conducting a geospatial proximity analysis. The state posted the full list of CAIs and the list of eligible CAIs during the public comment period to ensure that all relevant stakeholders have the opportunity to give feedback on the list. In alignment with BEAD requirements, identified CAIs that do not have access to 1 Gigabit symmetrical service are BEAD-eligible.
Including public housing, HUD-assisted housing, and low-income community housing under the category “public housing organization”	According to the BEAD NOFO's statutory definition of Community Anchor Institutions (CAIs) and the CAI definition proposed in the IL IP Vol. 2 draft, public housing and HUD-assisted housing organizations are classified as CAIs. Community-based non-profit organizations that support low-income individuals are included as CAIs under

Summary of comments	IOB response
	<p>the category “Community Support Organizations.” It is important to note that public housing, HUD-assisted housing, and low-income community housing are classified as Broadband Serviceable Locations (BSLs,) in the FCC National Broadband Maps and the NTIA requirements and are not considered to be CAIs.</p>
<p>Including County Forest Reserve Districts as CAI</p>	<p>County Forest Reserve Districts will be included as CAIs under “Community Support Organizations.”</p>
<p>Including religious institutions/houses of worship in the list of community anchor institutions, subcategory “Community Support Organization”</p>	<p>The state received two public comments requesting the inclusion of religious institutions/houses of worship in the list of community anchor institutions. The state recognizes the important role that religious institutions can play expanding broadband access for covered populations. During the challenge process, religious institutions that have worked directly with communities to expand broadband access for covered populations can provide evidence to the IOB and subsequently can be included in the list of eligible CAIs under the subcategory of “Community Support Organizations.”</p> <p>With respect to the question on whether religious institutions as a whole should be included as a category of community anchor institutions, the broadband office consulted with NTIA and evaluated the options and has declined to do so. The state has concluded that churches, as part of their mission, do not conduct activities that facilitate greater use of broadband service by vulnerable populations. Thus, while these are important institutions for our communities, they do not qualify under the existing definition of community anchor institutions.</p>
<p>Removing public housing organizations as CAIs</p>	<p>The request does not align with BEAD NOFO's statutory definition of Community Anchor Institutions.</p>
<p>Restricting CAIs to only non-profits and government agencies</p>	<p>The request does not align with BEAD NOFO's statutory definition of Community Anchor Institutions.</p>
<p>Challenge process and modifications (Requirement 7) – pre-challenge modifications</p>	

Summary of comments	IOB response
Support for DSL modification	Consistent with current approach in IP Vol. 1 draft and no further adjustment needed.
Support for designation of certain MDUs in high-poverty or highly unconnected areas as “underserved”	Consistent with current approach in IP Vol. 1 draft and no further adjustment needed.
Considering locations, and/or MDUs, served with DSL as “unserved”	The state plans to adopt Optional Module 2 from the NTIA’s BEAD model challenge process, treating locations that the National Broadband Map shows to have available qualifying broadband service delivered via DSL (i.e., a location that is “served”) as “underserved.”
Considering locations served with licensed and cellular fixed wireless as either “underserved” or “unserved”	The BEAD NOFO’s definition of “Reliable Broadband Service” includes terrestrial fixed-wireless technology using entirely licensed spectrum or using a hybrid of licensed and unlicensed spectrum. The state is bound by the NOFO’s definition of reliable broadband. If a location or group of locations served by fixed-wireless service fails to meet the speed and latency requirements for “served locations,” qualified participants may contest the service availability of such locations through the challenge process.
Declining all modifications except the DSL pre-challenge modification	The request does not align with the state’s goal of ensuring that the map is as accurate as possible prior to the BEAD subgrantee process. The state will review all challenges, rebuttal evidence, and supporting evidence received during the challenge process. Consistent with NTIA’s requirements and pending NTIA review and approval, sustained challenges will result in changes to the Illinois map.
Modifying the MDU pre-challenge modification to include locations that are validated as unserved by EducationSuperHighway’s	The state intends to make the modification as suggested.

Summary of comments	IOB response
desktop assessment process	
Challenge process and modifications (Requirement 7) – timeline of challenge process	
Extending the challenge and rebuttal periods	The state’s challenge process timeline depends on NTIA’s approval of Initial Proposal, Volume 1.
Starting the challenge process in January 2024	The state plans to start the challenge process in January 2024. The exact timeline depends on NTIA’s approval of the IP, Volume 1.
Challenge process and modifications (Requirement 7) – challenge process design	
Limiting permissible challenges from non-profits to locations served by the non-profit	The request does not align with the model challenge process provided by NTIA.
Implementing the two-phase process described in NTIA’s final guidance for de-duplication	The state plans to implement the two-phase process described in NTIA’s final guidance on de-duplication.
Publishing the standard operating procedure for challenge process review	The state plans to adhere to the procedures outlined in NTIA’s model challenge process, which is the same as the process proposed in the IP Vol. 1 draft.
Adopting a “preponderance of evidence” approach in resolving challenges and assigning challengers the burden of proof	The state plans to adhere to the approach outlined in NTIA’s model challenge process, which is the same as the process proposed in the IP Vol. 1 draft.
Designating a single point of contact (POC) within the challenge portal and generating an email to the POC whenever a challenge is received	The state plans to designate a single point of contact in the state challenge portal and to automatically generate an email to the POC whenever a challenge is received.
Imposing evidentiary standards and requirements that will allow	The state plans to adhere to the evidentiary standards and requirements outlined in NTIA’s model challenge process,

Summary of comments	IOB response
for accurate and expedient resolution of challenges	which is the same as the process proposed in the IP Vol 1 draft.
Challenge process and modifications (Requirement 7) – area/MDU challenge	
Modifying the MDU Challenge Module such that three unserved units within an MDU or 10% of the building’s units, whichever amount is smaller , trigger an area challenge	The state acknowledges and supports the objective of ensuring the map is as accurate as possible for MDUs. However, in response to NTIA curing feedback, the state will use the guidelines defined in the NTIA model challenge process.
Challenge process and modifications (Requirement 7) – use of speed-testing data	
Accepting speed test results only if conducted using industry-accepted platforms	The state will provide a list of accepted sources of speed tests, as recommended by NTIA, and consistent with the NTIA model challenge process.
Accepting speed test results only if conducted using equipment recommended by the subscriber’s ISP	The request does not align with the model challenge process provided by NTIA.
Clarifying that speed tests will not be required for locations served by fiber in proving that these locations are served, and that speed tests should only target technologies reporting speed at or near 100/20 Mbps	The request does not align with the model challenge process provided by NTIA.
Challenge process and modifications (Requirement 7) – planned services	
Allowing for the identification of planned-build locations and/or adopting the final guidance’s evidentiary examples that allow planned service to be considered	The state is adopting the model challenge process provided by NTIA regarding planned service, which allows for the identification of planned-build locations.
Adjusting the planned-build completion date to within two years of the date when the state	The state is adopting the model challenge process provided by NTIA regarding planned service and associated timelines.

Summary of comments	IOB response
expects, at the time of the challenge, to award funding	
Permitting a provider to file a declaration detailing the steps it has taken to deploy service in the locations and/or the capital investments set aside for such deployments as evidence to substantiate a planned service challenge	The state is adopting the model challenge process provided by NTIA regarding planned service and associated evidentiary requirements.
Additional comments not directly relevant for the Initial Proposal, Volume 1	
Request for additional equipment	As shared in the Connect Illinois Five-Year Action Plan, the state anticipates that all BEAD funds will be needed for broadband deployment; therefore, it is unlikely that funds will remain for digital inclusion programming. The state has not yet published the state digital equity plan for public comment but recommends that the commenter review that plan and provide comment there.
Sharing commitment to further collaboration as planning proceeds	The state will continue to engage all stakeholders.
Allowing downloads of current BEAD-eligible locations on the IL map	Eligible entities can enter into a license agreement with CostQuest for the Location Fabric by following instructions at the BDC Help Center .
Allowing downloads of MDU locations for pre-challenge modification	The state will make the MDU locations for pre-challenge modification available in the challenge portal.
Articulating a preference for fiber buildout for unserved and underserved locations	The state is abiding by the requirements of the BEAD NOFO and guidance, which include the following definition of a priority broadband project: “NTIA has determined that ‘Priority Broadband Projects’ are those that use end-to-end fiber-optic architecture” (BEAD NOFO, page 42).

Summary of comments	IOB response
Additional comments for NTIA and FCC	
Holding ISPs accountable for accurately measuring and depicting the service provided in rural America	N/A since this is not a request to the state.