Connecting New Jersey

New Jersey State Digital Equity Plan
Approved by NTIA, March 25, 2024

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1 Executive Summary

The Bipartisan Infrastructure Law ("BIL") included a historical amount of funding for broadband. BIL included both the Broadband Access, Equity, and Deployment ("BEAD") Program, which will fund infrastructure investment to bring high-speed internet to households across the US and the Digital Equity Act ("DEA"), which aims to bridge the digital divide for vulnerable populations. These two federal programs will unlock significant funding for New Jersey to advance digital equity goals.

The New Jersey Office of Broadband Connectivity ("OBC") is spearheading the effort to implement New Jersey's vision for digital equity. New Jersey's digital equity vision is for every resident to have the confidence and competence to harness the power of the internet, devices, and digitally accessible services. Digital equity can help New Jersey bridge economic and achievement disparities among covered populations, enabling them to lead fulfilling lives with dignity.

To achieve this vision, New Jersey will pursue four goals:

1. Ensure **access to affordable high-speed internet** for every New Jerseyan both in their home and in their communities.
2. Ensure that every New Jerseyan has the **confidence and competence they need to achieve their goals** using computers and the internet. These goals may be related to:

   o Accessing education
   o Finding employment
   o Building a business
   o Obtaining healthcare
   o Accessing government services
   o Understanding and using online information
   o Engaging civically; and
   o Maintaining cybersecurity

3. Ensure that every New Jerseyan has **access to devices (e.g., a laptop, tablet, or desktop computer) software, assistive technologies, training, and technical support** to achieve their well-being.
4. Ensure that every New Jerseyan has **efficient and effective digital experiences with state government** to obtain information or services.

In advancing these goals, the purpose of the State Digital Equity Plan is to:

1. Identify the digital equity resources and programs (called "assets") that exist across New Jersey to better understand where the state has strong resources and potential gaps.

2. Analyze the broadband-related needs of vulnerable residents (called "Covered Populations" in the DEA) through data and community engagement sessions to identify areas for potential investment.
3. Propose strategies to close digital equity gaps across key indicators.
4. Propose opportunities for collaboration and partnership among the state, municipal and local governments, nonprofits, and the private sector to create long-term solutions.

This draft Digital Equity Plan is informed by over a year of coordination across many stakeholder groups. OBC received input from over 120 stakeholder meetings, two working groups focused on digital equity and workforce development topics, and hundreds of comments via OBC's public website. Participating stakeholders included digital equity organizations; services organizations and non-profits; public housing authorities; municipalities; internet service providers; resident focus groups (e.g., aging individuals, veterans); state agencies; and others detailed in Section 4.1 (Stakeholder and Community Engagement). OBC also conducted data analysis and a public survey to inform the fact base for this plan. A list of organizations with which OBC collaborated as it developed the plan is included in the required Local Documentation Tracker attachment.

As a result of these efforts, OBC made several key observations.

- **New Jersey has strong overall broadband adoption, but the digital divide persists.** As of 2021, New Jersey had one of the highest rates of broadband adoption in the US, with 92% of New Jersey residents reporting having some type of internet subscription. However, this progress masks inequities among Covered Populations. OBC will track these gaps over time and leverage this data to make decisions on future digital equity investments.

- **Barriers to broadband adoption and affordability vary among different New Jersey residents.** For example, for seniors, a distinct barrier is the availability of training and resources to help them build digital skills, while for some individuals with disabilities, a distinct barrier is the affordability of assistive technologies, which are software and hardware that can help residents use computers (e.g., screen readers for blindness). The New Jersey Digital Equity Plan focuses on the varied needs of Covered Populations in the strategies proposed in Section 2.3 (Strategies and Objectives) and the activities proposed in Section 5 (Implementation).

- **There is high demand for investments in digital equity.** In public meetings, residents belonging to Covered Populations expressed high demand for digital literacy resources, improvements in broadband and device affordability, and increased accessibility of government websites and services. These comments informed not only the state's digital equity goals, but also the proposed activities discussed in Section 5 (Implementation).

- **New Jersey has many local programs addressing important aspects of digital equity, but there is an opportunity to increase statewide coordination and services.** OBC will seek to empower and coordinate local initiatives, as well as to invest in new initiatives where gaps exist. See Section 5.1 for additional discussion of this topic.

This Digital Equity Plan offers a cohesive view of the state's needs, resources, vision, and ambitions regarding digital equity. New Jerseys' draft Digital Equity plan was posted for public comment from October 31 through November 30, 2023. During this time, OBC received a wide range of comments providing additional insights that have informed this document.

2 Introduction and Vision for Digital Equity

The 2021 Bipartisan Infrastructure Law ("BIL"), also known as the Infrastructure and Investment Jobs Act ("IIJA"), provided over $1.2 trillion in funding for infrastructure, and specifically, over $45B for broadband-related funding. The two largest pieces of legislation related to digital equity in BIL were:

1. The Broadband Equity Access and Deployment ("BEAD") Program which allocated $42.5B to expand access to high-speed internet in all 50 states and territories. New Jersey is expected to receive approximately $264M under BEAD to advance this goal. This funding will be leveraged to build infrastructure ("deployment") to connect all New Jersey households to high-speed internet. If this goal is met, any residual funding could then be allocated to "non-deployment" activities, such as digital equity programs.
2. The Digital Equity Act ("DEA"), which allocated $2.75B to build community skills, technology, and capacity to drive meaningful adoption of high-speed internet services. New Jersey's allocation under this program is not yet finalized. Funding is expected to be awarded in 2024.

These programs will be administered by the National Telecommunications and Information Administration ("NTIA"), housed with the federal Department of Commerce. NTIA has asked all states to propose plans for both programs, and to ensure these two planning processes are highly coordinated. In anticipation of these new funding sources, the New Jersey Office of Broadband Connectivity ("OBC") has led planning for over a year in partnership with the New Jersey State Library ("NJSL") and other agencies.

As part of the BEAD planning effort, OBC released the draft Initial Proposal Volume 1 for public comment from October 23 to November 30, 2023 and the draft Initial Proposal Volume 2 for public comment from November 9 to December 08, 2023. Public comment and NTIA feedback were incorporated and OBC submitted the complete Initial Proposal on December 22, 2023. These documents detail New Jersey's planned approach for BEAD deployment.

This draft Digital Equity Plan focuses on the Digital Equity Act funding opportunity. It proposes a statewide digital equity strategy that meets requirements set forth by NTIA so that New Jersey may qualify for its allocation under the DEA. In the long run, OBC and NJSL expect the State's digital equity program to continue to be refined and implemented beyond the DEA and associated funds. For example, New Jersey has projects underway to leverage funding from the Coronavirus Capital Projects Fund and from the American Rescue Plan funds for digital equity goals that are being pursued independent of the DEA. OBC will seek to bring together as many sources of funding as possible to advance the digital equity goals articulated in this strategy.

This section establishes a vision for New Jersey to bridge the digital divide (2.0), documents the existing digital equity efforts occurring across the state and their significance for the Digital Equity Plan (2.2), and sets specific goals and measurable objectives that will help the state track progress on digital equity priorities (2.3).

2.1 Vision

> "Every New Jerseyan deserves access to reliable, affordable, and fast broadband internet. Unfortunately, too many residents and businesses, especially in rural and low-income areas of our state, are still unable to take advantage of broadband internet access. Along with our congressional delegation and our Legislature, we are working to ensure that those living and working in New Jersey have access to reliable high-speed broadband services."
> - Governor Phil Murphy

Access to high-speed internet is a 21st century necessity. Students require internet to access complete coursework and learning, workers require internet to do their jobs, patients need internet to access telehealth, and entrepreneurs use the internet to run their businesses. Internet access has become so important that the United Nations has included it in the Universal Declaration of Human Rights.[1] Enabling broad based adoption of internet services was a foundational goal of the Bipartisan Infrastructure Law and is a priority for the state of New Jersey as well.

New Jersey's definition of digital equity

New Jersey's digital equity vision is for every resident to have the confidence and competence to harness the power of the internet, devices, and digitally accessible services. Digital equity can help New Jersey bridge economic and achievement disparities among covered populations, enabling them to lead fulfilling lives with dignity. In line with this vision, four overarching goals set forth the aspirations of the Digital Equity Plan:

- Ensure **access to affordable highspeed internet** for every New Jerseyan both in their home and in their communities.
- Ensure that every New Jerseyan has the **confidence and competence they need to use computers and the internet** to achieve their goals. These goals may be related to accessing education; finding employment; building a business; obtaining healthcare; accessing government services; understanding and using online information; engaging civically; and maintaining cybersecurity.
- Ensure that every New Jerseyan has **access to devices, software, assistive technologies, training, and technical support** to achieve their well-being.
- Ensure that every New Jerseyan has e**fficient and effective digital experiences with state government** to obtain information or services.

OBC has identified strategies and activities under these goals which largely focus on populations prioritized within the Digital Equity Act, called "Covered Populations." According to the DEA, Covered Populations refer to specific vulnerable communities.

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[1] Brookings Institution article: "The Internet as a Human Right"

Table 1. Covered Populations and Descriptions

CP #	Covered Population	NTIA Description ([link to source](#))
1	**Low-income households**	Referred to in the DEA as individuals who live in "covered households," or households whose income is not more than 150% of the poverty level. This is defined as a household of three individuals with total income at or below ~$35,000 in New Jersey as of 2023.[a]
2	**Aging individuals**	Individuals age 60 or older.
3	**Incarcerated individuals**	Individuals incarcerated in state-level prisons or detention centers. Though not required by NTIA, the New Jersey Digital Equity Plan will also prioritize serving *returning citizens* with digital equity resources and programs.
4	**Veterans**	All persons aged 18 years and older who served in the armed forces in the past but are no longer on active duty.
5	**Individuals with disabilities**	All persons with one or more disabilities[b] in the resident population.
6	**English language-learners**	English learners are defined as individuals who speak a language other than English at home and speak English less than "very well" and/or individuals with low levels of English literacy.
7	**Communities of color**	Individuals who are members of a racial or ethnic minority group. Though not required by NTIA, the New Jersey Digital Equity Plan will also prioritize tribes that are state-recognized, even if not federally recognized.
8	**Rural residents**	Individuals who primarily reside in a rural area, using rural areas as defined by the federal government.

[a] According to the Census Bureau, from 2017-2021, the average household size in New Jersey was [2.66 persons](#). This figure was rounded to 3 persons per household to calculate the income threshold for eligibility for DEA. According to the Census Bureau, the [2022 poverty threshold](#) for a 3-person household, including 2 minor dependents, was $23,578. 150% of this value is $35,367, or the approximate threshold for a "low-income household" under the DEA.

[b] [Disability status](#) is determined from the answers from these six types of difficulty, which include hearing, vision, cognitive, ambulatory, and self-care difficulties, independent living difficulty. For children under 5 years old, hearing and vision difficulty are used to determine disability status. For children between the ages of 5 and 14, disability status is determined from hearing, vision, cognitive,

ambulatory, and self-care difficulties. For people aged 15 years and older, they are considered to have a disability if they have difficulty with any one of the six difficulty types.

In this Digital Equity Plan, OBC presents a vision and goals that acknowledge the critical importance that access to the internet has for *all* covered populations in all facets, stations, and stages of life.

2.2 Alignment with Existing Efforts to Improve Outcomes

As required by the DEA, OBC has taken inventory of existing work at the state- and local-levels to advance digital equity. This section provides a summary overview of this work and how OBC will coordinate with and build on their success. Across all these efforts, OBC will build the capacity of existing organizations and programs, fill gaps, and increase connectivity to enable cross-pollination of best practices. Each of these efforts is aligned with state plans in workforce, education, health, and civic engagement. OBC plans to continue reviewing related goals across other state priorities, such as workforce, education, and health, as it further defines its grant programs.

2.2.1 Broadband infrastructure

The *Capital Projects Fund* is a $10B fund passed in 2021 as part of the American Rescue Plan (ARP) to provides states and territories with funding for capital projects that enable work, education, and health monitoring in response to the Covid-19 pandemic. New Jersey has two primary broadband-related initiatives underway with this funding.

- The *State of New Jersey* received a $50 million Capital Projects Fund award in 2023 to add or improve broadband infrastructure to more than 28,000 households in unserved and underserved areas of the state. This funding will be administered by OBC and deployed alongside BEAD to provide families with internet access.
- The *New Jersey State Library* ("NJSL") received a separate $32.7 million Capital Project Funds award in 2023 to offer a competitive grant opportunity. The purpose of the program is to expand the capacity of community facilities to offer workforce, healthcare monitoring, and education programs with capital improvements that improve connections to the internet. The grant opportunity targets high-need areas of the state and is open to community centers (nonprofit, municipal, county), public libraries, full-service community schools and community health centers. These initiatives will be rolled out from 2024 through 2026.

The *Broadband Access Study Commission* ("BASC") shall report its findings, conclusions, and recommendations to the Governor and, pursuant to section 2 of P.L.1991, c.164 (C.52:14-19.1), evaluate barriers to broadband access for all covered populations of New Jersey, including barriers related to physical access, deployment, and affordability of broadband services. OBC has used data collected as part of the BASC process to inform the DEP.

The *New Jersey Cybersecurity and Communications Integration Cell ("NJCCIC")* works within the NJ Department of Homeland Security and Preparedness to provide services to state government agencies, municipalities, schools, and residents to improve the state's preparedness for cybersecurity. For example, NJCCIC conducts monthly security audits of all

state agency websites to identify vulnerabilities, attempted attacks and to highlight best practices. A weekly newsletter, distributed to 14,000, provides timely updates on the state of cybersecurity in New Jersey to multiple audiences and provides recommendations for actions.

2.2.2 Broadband affordability

Affordable Connectivity Program

The Federal Communications Commission ("FCC")'s landmark [Affordable Connectivity Program ("ACP")](#) is a federal program to help low-income families get online. It provides a discount of up to $30/month toward internet service for eligible households and up to $75/month for households on qualifying Tribal lands.[2] Some providers also offer a discount of up to $100 per household toward a one-time qualifying purchase of a computer, laptop, or tablet through ACP. (See Section 3.1.2 for a discussion on ways New Jersey is increasing uptake of this program.)

Five entities in New Jersey have received nearly $2 million in outreach and enrollment grants from FCC for ACP to date.[3]

Table 2. FCC ACP Outreach and Enrollment Awardees

ACP Outreach and Enrollment awardee	Amount
Computers4People	$326,920
HOPES Community Action	$300,000
Invest Newark/Newark Community Economic Development Corporation	$400,000
New Jersey State Library, an affiliate of Thomas Edison State University ("NJSL"), which administers in partnership with New Jersey Department of Public Health ("NJDOH")	$400,000
Jersey City Housing Authority in partnership with EveryoneOn (via the FCC Your Home, Your Internet and ACP Navigator Programs)	~$500,000

Connecting Minority Communities Grants

The Connecting Minority Communities Pilot Program (CMC) is a $268M fund administered by the NTIA to provide Historically Black Colleges and Universities (HBCUs), Tribal Colleges and Universities (TCUs), and Minority-Serving Institutions (MSIs) funding for the purchase of broadband internet access service and eligible equipment or to hire and train information

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[2] [FCC ACP Program](#)
[3] [FCC ACP Outreach Funding Grantee Announcement](#)

technology personnel. There are two awardees in New Jersey: *Rutgers University* ($2.8M) and *Felician University* ($2.3M).

Together with other entities across the state that focus on broadband affordability (detailed in Section 3.1.5), New Jersey's digital equity programs will leverage these organization's experience and capacity to improve broadband affordability.

2.2.3 Workforce development

According to the National Skills Coalition, nearly 33% of US workers lack the digital skills required for many jobs, including a range of basic tasks from using a mouse to highlighting text on a screen to sorting email responses.[4] This puts these workers at an increasing disadvantage in the job market. Further, lack of access to and adoption of high-speed internet services is a barrier for New Jerseyans to find and maintain work.

The *Jobs NJ* plan is integral to Governor Murphy's vision of a stronger and fairer New Jersey for workers. The plan addresses New Jersey's talent challenges from two sides: increasing the supply of skilled workers and creating talent solutions that connect companies to job-seekers. To do this, there is a three-prong approach: 1) expand access to opportunity; 2) train individuals for in-demand jobs; 3) match talent to jobs. There are several digital equity efforts underway to achieve these goals.

The *New Jersey Comprehensive State Plan for Workforce Development* supports New Jersey's local communities in workforce development through local workforce boards and One-Stop Career Centers. A new Comprehensive State Plan for Workforce Development under the Workforce Innovation and Opportunity Act ("WIOA") will be developed in March 2024. This new plan[5] will identify additional ways that cross-sector collaboration can support digital equity to serve residents looking to build skills for job opportunities.

Additionally, the New Jersey Department of Labor deploys WIOA Title 2 Adult Education and Family Literacy Act ("Title 2") resources to provide grants to organizations, including nonprofits and public libraries, which offer programs and services aimed at building workforce readiness, including certifications in Information Technology skills. Thousands are served by these grants every year.

The *New Jersey State Library* has launched an initiative called the *NJSL + Partners Literacy Library* to position the state's large network of community libraries as centers for New Jersey residents to build digital literacy skills. Within this initiative, NJSL has launched two pilot programs:

- The Hub & Spoke Libraries initiative to provide uniform digital literacy training and credentialing for adult residents at "literacy labs" in state libraries. NJSL selected three "hub" libraries that will serve as regionally-based training labs, and 11 "spoke" libraries that provide additional digital literacy support. The goal of the Hub & Spoke Libraries

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[4] National Skills Coalition Report
[5] WIOA is a federal program that provides funds to states to help workers obtain training and find employment

project is to create a standardized and replicable library-based digital literacy certification program to assist New Jersey's workforce. Participants have access to free, high quality training materials, videos, classroom instructors, and mini lessons. Between December 2022 and June 2023, more than 1,700 people have been served and 64 industry-recognized certificates obtained. Hub & Spoke libraries may also connect with their local Workforce Development Boards and American Job Centers to create a consistent referral, participant intake, and data sharing system using WIOA Title 2 funds.

- The Access Navigators pilot project placed a cohort of skilled trainers ("digital navigators") into select libraries across the state to provide individualized assistance to residents seeking employment, job training, or digital competence. Twelve libraries covering nine counties were selected to host a cohort of navigators.

The New Jersey Digital Equity Plan will leverage the strengths of these pilots to make digital literacy opportunities available to members of all Covered Populations who want to build their skills to find and maintain jobs.

2.2.4 K-12 education

"While the Covid 19 pandemic brought devices to virtually all K12 students in 2021, families with more than one child found that they were unable to afford the increased bandwidth that would allow their children to work online at the same time, severely hampering access". - insight from community discussion

Home access to high-speed internet is critical for K-12 students. The *New Jersey Department of Education* ("NJDOE") made significant strides in closing the digital divide for students during the Covid-19 pandemic. To help expand access to internet connectivity and devices, the Murphy Administration launched the $54M Digital Divide Grant in July 2020. As a result of these investments, nearly 225,000 students were able to get online, closing the state's digital divide for K-12 by an estimated 97 percentage points.[6]

However, more work remains. In a return-to-school environment, NJDOE is now refocused on connecting schools. One illustrative investment is a tool called NJTrax.[7] NJTrax was created prior to the pandemic to better understand: 1) technological readiness of schools and school districts (i.e., adequacy of infrastructure and connectivity) and 2) the efficacy of digital learning practices within the classroom (e.g., curriculum, technology/device access, professional learning). [8] With NJTrax, DOE is leading an effort to collect high-quality data on the technological readiness of schools that will be critical to the state's overall digital equity planning.

Relatedly, NJTrax relies upon voluntary survey contributions from schools and school districts to obtain data. Given existing challenges with response rates, NJDOE introduced the

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[6] NJ Department of Education press release
[7] NJ Trax website
[8] Sustainable Jersey Schools

Sustainable Jersey Digital Schools Initiative to incentivize contributions. The Sustainable Jersey Digital Schools Initiative tracks school and school district actions across 100+ variables, awarding points for both data contributions and actions taken to improve performance.[9] The program serves a dual purpose of recognizing progress made in digital learning within NJ schools as well providing data visibility for the state on digital equity goals.

Finally, the *New Jersey Cybersecurity and Communications Integration Cell ("NJCCIC")* runs programs that teach cybersecurity literacy to children as young as elementary school age. In doing so, NJCCIC is helping to create a cybersecurity literate generation in New Jersey.

2.2.5 Adult and aging individual education

Continuing education is critical to advancing growth, prosperity and opportunity across New Jersey. The initiatives below currently serve adult populations with digital equity- related programs. First, "Where Opportunity Meets Innovation: a Student-Centered Vision for New Jersey Higher Education" is a state higher education plan released in 2019. It is a blueprint for how the state will strengthen the quality of, and access to, state colleges and universities. The plan includes several goals that will be enabled by digital equity. For example, the plan seeks to ensure that "New Jersey students [have] clear and comprehensible financial information" related to their education. Digital equity can help students build information literacy to assess financial tradeoffs of degree options well before matriculating in any institution.

For residents not engaged with the formal education system and not proficient English speakers, local adult literacy collaboratives in each county bring together organizations with similar goals in adult literacy to coordinate services including digital literacy training. As part of WIOA, Title 2 programs provide instruction or services in adult education and literacy services, including workplace, family and English literacy programs. These local contracted consortia include school districts, community colleges, public vocational schools and community organizations (e.g., *Literacy New Jersey).*

The *NJ Department of Labor* administers Skill Up NJ, a series of free online courses that can help adults build digital literacy skills. Course content ranges from basic work readiness skills for new workers to tailored training for high-level professionals and management. Offerings include trainings on Microsoft Office, Adobe, and Quick Books, among many others.[10]

The New Jersey Department of Human Services' Commission on the Blind and Visually Impaired ("CBVI") works in partnership with the New Jersey *Talking Book and Braille Center ("TBBC")* to deliver accessible devices and software to eligible Commission clients throughout the state. The devices are on long-term loans to clients for educational and workforce purposes and technical support is also provided. This ongoing project addresses the state goal to ensure residents have access to appropriate devices. OBC will partner with CVBI and TBBC to coordinate efforts targeted at serving individuals with disabilities (a Covered Population).

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[9] Sustainable Jersey Schools
[10] NJ DOL – SkillUp NJ website

The *New Jersey State Library,* with funding from the Library Services and Technology Act through the Institute of Museum and Library Services, provides more than 91 public libraries access to the award-winning Northstar Digital Literacy Standards and Assessment tool. Northstar assess a participant's skill level in a variety of basic computer skills and provides tailored educational content that helps people improve their skills. Written at a sixth-grade level with some modules available in Spanish, it is accessible to people with low levels of English language literacy. Northstar allows users to track their progress and gain credentials in specific digital skills. This project aligns to the state's goal to ensure every New Jerseyan has the confidence and competence they need to use computers and the internet. (See Section 2.3 for a discussion on how this tool may be leveraged to meet future digital literacy goals.)

The *New Jersey Department of Corrections,* the *State Parole Board*, and several higher education institutions partner on an adult education initiative called the New Jersey Scholarship and Transformative Education in Prisons (NJ-STEP). Focused on returning citizens, the program (a) provides higher education courses toward a college degree for students while they are incarcerated, and (b) assists in their transition to college life upon release from prison.[30] This coursework includes an emphasis on digital skills-building, with a focus on pathways to employment after incarceration. Partner institutions include Rutgers University, Princeton University, Raritan Valley Community College, and Drew University.[31] OBC will coordinate with NJ-STEP to identify potential areas of opportunity to accelerate this impact for incarcerated individuals (a Covered Population).

2.2.6 Healthcare

The internet is important to help all covered populations obtain access to healthcare – whether related to scheduling an in-person appointment, researching a particular condition, or having a telehealth appointment, among other use cases.

The *New Jersey State Library* partnered with the East Brunswick public library to improve access to telehealth services through public libraries. Grant funds from the American Recovery Plan Act received through the Institute of Museum and Library Services were used to purchase more than 400 iPads for approximately 150 library locations in all corners of the state. The iPads were pre-configured to provide direct access to high-quality consumer health and telehealth applications. Library staff are trained to provide appropriate health reference services. Some libraries circulated the devices for in-library checkout and others circulated the devices for home use by library patrons. While the devices were distributed in 2022, services will continue indefinitely.

2.2.7 Civic and social engagement

Civic engagement is the cornerstone of democracy and increasingly enabled by technology. Information literacy is critical to ensure that all Covered Populations can consume information that is high-quality and accurate.

Jersey Civic Engage is an initiative from the *Office of the Secretary of State*, which is also responsible for election monitoring and voting integrity. *Jersey Civic Engage* fosters ongoing civic engagement across the state. Its tools and resources are designed to increase voter and civic participation, particularly for youth. Online news sources and social media sites are

integral to all types of engagement, and there may be opportunities to take lessons from the state's emerging K-12 Information Literacy Standards to educate residents on techniques for assessing the accuracy of information found online.

2.2.8 Other essential services

Multiple levels of government (e.g., state, county, city) and the private sector (e.g., banking, water, electricity) deliver essential services to Covered Populations throughout New Jersey.

New Jersey's *Office of Innovation* has created a Resident Experience Initiative, which is "streamlining, simplifying, and improving" how the state delivers services. Many of its projects support Covered Populations. The State's *Data Hub* provides important information across a variety of topics affecting Covered Populations (e.g., education, human services, transportation). The New Jersey *Office of Information Technology*'s IT Business & Technology Strategic Plan provides a roadmap for "addressing the NJ Digital Experience legislation (*P.L.2021, c.392).*"

OBC also coordinated with other Agencies to support delivery of information about the Affordable Connectivity Program (ACP) through existing program outreach, which often included essential services (e.g., programs led by the Department of Health). OBC plans to continue working with other state programs to share information about ACP or successor programs and other broadband-related services or opportunities.

2.2.9 Other state and municipal efforts

OBC will also partner with municipalities and local governments that have developed digital equity strategies. To date, OBC has engaged with City of Newark, the Jersey City Housing Authority, Atlantic City, and Plainfield to learn from their programs and incorporate their insights into the statewide strategy. OBC has not identified any tribal plans focused on digital equity. New Jersey does not have any federally recognized Tribal nations. Work with the three state-recognized Tribal nations will continue to be coordinated through the New Jersey Commission on American Indian Affairs.

> "Addressing the needs of people living in Jersey City Housing Authority units, the JCHA distributed 80 refurbished laptops and mini-desktops in 2023; filling just a fraction of the need." - insight from Jersey City Housing Authority digital inclusion efforts

Moving forward, OBC will continue outreach to municipalities to inventory their digital equity plans and obtain insights on their needs. The inventory below reflects all municipal and tribal (state-recognized) digital equity plans of which OBC is aware to date.

Table 3: Example Municipal Plans

City	Description
Newark	The City of Newark manages Newark Fiber, in partnership with GigXero (Newark Fiber's ISP). The city has a plan to enable citywide connectivity, increase broadband competition, and lower prices for residents by providing broadband connectivity to low-income housing units, public spaces (e.g., parks, recreation centers, transportation hubs), and small businesses. In addition to GigXero, the city partners with Rutgers University, BlocPower, and other organizations to implement initiatives.
Jersey City / Jersey City Housing Authority	The Jersey City plan was created in partnership with the Jersey City Housing Authority (JCHA), which leads ACP enrollment, and EveryoneOn, a digital equity national nonprofit. The plan seeks to close the digital divide in Jersey City by training community-based digital navigators to enroll residents. JCHA also runs digital literacy trainings for residents, among other digital equity initiatives.
Atlantic City	Atlantic City's Restart and Recovery Workgroup, launched in 2020, includes a Workforce Development subcommittee tasked with improv access to broadband in Atlantic City. As the BEAD program unfolds, the group will leverage funds to improve opportunities for digital literacy skill building and broadband access in the city.
Plainfield	Plainfield SmartCity has developed a plan to bring digital access to underserved households. In the first stage, the city will install Wi-Fi at a pedestrian plaza with 100 mb download speed for use by community members. The city will also install a fiber optic backbone, connecting the city to Union County's fiber optic network. In doing so, it will connect 21 municipal sites throughout Plainfield to high-speed internet.

2.3 Strategy and Objectives

In addition to setting four aspirational goals for the state (Section 2.1), OBC has also established measurable objectives for each goal, in line with DEA requirements. Each of these goals aligns to specific topics required by the Digital Equity Act:

(a) The availability of, and affordability of access to, fixed and wireless broadband technology
(b) The online accessibility and inclusivity of public resources and services
(c) Digital literacy
(d) Awareness of, and the user of, measures to secure the online privacy of, and cybersecurity with respect to, an individual; and
(e) The availability and affordability of consumer devices and technical support for those devices.

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These DEA topics align to the state's goals as follows:

Table 4. Alignment between NTIA required measurable objective topics and New Jersey digital equity goals

New Jersey Digital Equity Goal	Aligned NTIA Topic
Goal 1: Everyone has access to **affordable highspeed internet** in their home and communities.	(a) The availability of, and affordability of access to, fixed and wireless broadband technology
Goal 2: Ensure that every New Jerseyan has the **confidence and competence they need to use computers and the internet** to achieve their goals.	(c) Digital literacy (d) Awareness of, and the usership of, measures to secure the online privacy of, and cybersecurity with respect to, an individual; and
Goal 3: Ensure that every New Jerseyan has **access to devices, computers, software, assistive technologies, training, and technical support** to achieve their well-being.	(e) The availability and affordability of consumer devices and technical support for those devices
Goal 4: Everyone has **efficient and effective digital experiences with state government** to obtain information or services.	(b) The online accessibility and inclusivity of public resources and services

Each of these goals will also be associated with distinct strategies, measurable objectives, and key performance indicators ("KPIs") to track progress. Additionally, the DEA requires each topic be associated with a measurable objective specifically for Covered Populations. Tables 5-8 provide detail on OBC's response.

Table 5. Goal 1 strategies and metrics

Goal 1	Strategies	Outcome metrics (Measurable objectives)	Leading indicators
Ensure **access to affordable highspeed internet** for every New Jerseyan both at their home and in their communities	1.1 **Build internet infrastructure** to ensure all covered populations have internet access, focusing on where it is needed most[a]	Connect 100% of unserved locations for all Covered Populations (i.e., those with less than 25 Mbps downstream and 3 Mbps upstream today) by 2028 Upgrade to 100% of underserved locations for all Covered Populations (i.e., those with less than 100 Mbps down/ 20 Mbps up today) by 2028	Share of BEAD funds disbursed to subgrantees in each year
1.2 **Increase broadband subscriptions** among New Jersey residents	1.2 **Increase broadband subscriptions** among New Jersey residents	% of eligible residents enrolled in ACP above current rate For all Covered Populations, New Jersey will target reducing the gap from the state average for broadband subscriptions. Short term improvement of 40% with long-term improvement leading to 100% of each Covered Population meeting or exceeding the state average by 2028. Targets to be revised annually as DEA funded programs are implemented. *See Table 9.*	Funding provided for ACP enrollment efforts

[a] The focus of the Broadband Equity and Access Deployment Program is on building internet infrastructure, targeting unserved and underserved areas of the state to bring service levels to at least 100/20 Mbps. (This ratio refers to internet download/upload speeds.) BEAD is required to serve 100% of unserved locations in the state and New Jersey is committed to also upgrading underserved locations.

Table 6. Goal 2 strategies and metrics

Goal 2	Strategies	Outcome metrics (Measurable objectives)	Leading indicators
Ensure that **every New Jerseyan has the confidence and competence they need to achieve their goals** using computers and the internet. These goals may be related to: Accessing education; finding employment; building a business; obtaining healthcare; accessing government services; understanding and using online information; civic engagement; and cybersecurity	2.1 **Create digital skills standards** and partnerships to implement them	Improvement from baseline of zero to passing score (85%) using DEA funded digital literacy assessments (e.g., Northstar), by each Covered Population. Interim approach: Short-term goal of 25% average passing for all Covered populations; long-term goal of 90% by 2028 with goals to be revised annually as DEA funded projects are implemented. *See Approach 2 (pg 26) for methodology and rationale for zero baseline*	Count of organizations implementing Digital Literacy standards Funding allocated to organizations providing Covered Populations with digital skills trainings
2.2 **Increase digital skills for key life activities** and goals related to education, workforce/economic development, healthcare, etc.	2.2 **Increase digital skills for key life activities** and goals related to education, workforce/economic development, healthcare, civic engagement, cybersecurity, etc.		
2.3 **Strengthen the collaboration between organizations** that help build digital skills of New Jersey residents	2.3 **Strengthen the collaboration and coordination between organizations** that help build digital skills of New Jersey residents	n/a	Count of community of practice sessions No. of attendees reporting inc. confidence in ability to offer dig. literacy services to Covered Populations

Table 7. Goal 3 strategies and metrics

Goal 3	Strategies	Outcome metrics (Measurable objectives)	Leading indicators
Ensure that every New Jerseyan has **access to devices, computers, software, assistive technologies, training, and technical support** to achieve their well-being	3.1 **Increase the affordability** of computers, software, assistive technologies, training, and technical support	For all Covered Populations, New Jersey will target reducing the gap from the state average for device access. Short term improvement of 40% with long-term improvement leading to 100% of each Covered Population meeting or exceeding the state average by 2028. Targets to be revised annually as DEA funded programs are implemented. *See Table 9.*	Count of subsidized devices to Covered Populations Total subsidy awarded toward devices supporting Covered Populations
3.2 Increase the availability of computers, software, assistive technologies, and technical support	3.2 **Increase the availability** of computers, software, assistive technologies, training, and technical support		
3.3 Increase resources for device technical support to residents (especially individuals with disabilities)	3.3 **Increase resources** for device technical support to residents		Count of residents that have received technical support from programs funded by DEA funds
3.4 Strengthen the collaboration between organizations that help build digital skills of New Jersey residents	3.4 **Strengthen the collaboration and coordination between organizations** that help build digital skills of New Jersey residents		Count of community of practice sessions Number of attendees reporting increased capacity to offer access to computers, software, assistive technologies, training, and technical support

Table 8. Goal 4 strategies and metrics

Goal 4	Strategies	Outcome metrics (Measurable objectives)	Leading indicators (additional proposed KPIs in Section 5)
Everyone has **efficient and effective digital experiences with state government** to obtain information or services	4.1 **Simplify the "front end" resident experience to access government services** online **(i.e., both eligibility and use)**, using principles of human-centered design 4.2 **Collaborate with executive branch state agencies to improve "back end" data infrastructure**, data management policies and practices, and cybersecurity of state websites	Increase in state websites that provide easily accessible digitized applications. Increasing the number of executive branch agency websites that are mobile-responsive Sign-up completion rates for redesigned web pages before and after redesign	Percentage of executive branch state agency websites adhering to human-centered design best practices

Goal 4 Note: Interim approach: For all above, assume a baseline of zero using DEA funds and a goal of 95% of funded projects in this category meeting their objectives. Projects may focus on, for example, Covered Populations such as: Low-income households, Aging population, People with disabilities and people with language barriers to ensure easier online navigation while seeking assistance on state sites. See Approach 2 below (pg 27) for long-terms approach, including methodology and rationale for zero baseline and how further information will be collected).

Measurable Objectives (Additional Detail)

OBC will track progress across all these measurable objectives, but New Jersey does not have equal data to baseline the current state of these topics across all Covered Populations.

Accordingly, the state has taken two approaches (i.e., **Approach 1 and Approach 2**) to setting measurable objectives by Covered Population for each of the five NTIA-identified topics (a)-(e).

Approach 1: Setting measurable objectives where data exists on the state's baseline

Census data provides a current state assessment of (a) availability of and access to broadband and (e) availability and affordability of devices. Across all Covered Populations, OBC will use Census data to set quantitative goals to close the gaps from the state average. For example, as of 2021 Census data, 72.0% of seniors have a broadband subscription, compared to 80.7% state average. Thus, the state's target is to close this gap of ~8.8 p.p. (additional detail on the gaps by Covered Population can be found in Section 3 Needs Assessment).

The proposed targets for (a) and (e) are shown on Table 9 below. New Jersey will continue to leverage annual Census data to record and track these gaps in the future. The state will assess the progress in closing gaps to prioritize future investments.

Table 9. Measurable objective by Covered Population for NTIA topics (a) and (e) using 2021 ACS 1-Year Survey Estimates[11]

Dash indicates cell has no data

Covered Population	(a) Gap from state average: % of households with broadband subscriptions	(e) Gap from state average: % of households with device access excl. smartphones
State average	80.7%	88.9%
1. Low-income households	-19.3 p.p.	-17.8 p.p.
2. Aging households	-8.8 p.p.	-7.6 p.p.
3. Incarcerated individuals (See below)	-80.7(See below)	-88.9 (See below)
4. Individuals with disabilities	-14.7 p.p.	-7.9 p.p.
5. English language learners	-18.4 p.p.	-19.8 p.p.
6. Veterans	-7.5 p.p.	-4.3 p.p.
7. Communities of color	-	-
i. American Indian/Alaskan Native	-8.8 p.p.	-4.1 p.p.
ii. Asian	+9.0 p.p.	+ 7.1 p.p.
iii. Black/African American	-4.8 p.p.	-4.2 p.p.
iv. White	+1.8 p.p.	+1.7 p.p.
v. Hispanic/Latino	-6.9% p.p.	-6.4 p.p.
vi. Some other race	-1.1 p.p.	1.9 p.p.
vii. Two or more races	-0.3 p.p.	-2.1 p.p.
Rural residents	-1.5 p.p.	-1.8 p.p.

OBC has tentatively set the gap at -80.7 p.p. and -88.9 p.p., for incarcerated individuals given NTIA guidance to establish a baseline of 0 (i.e., the state average is 80.7%, so OBC is setting the gap at -80.7 p.p., implying that there is no adoption). The State is aware that most facilities are not well-connected.

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[11] Census data (tables S2801 and S2802)

Approach 2: Setting measurable objectives following the investment of DEA funds

As an interim approach, NTIA has recommended OBC establish zero as a baseline where data is not currently available. OBC has adopted this within its plan for DEA funded activities, for Covered Populations. These are currently labeled as such in the DEP.

The State does not have baseline data for any Covered Population in the following categories:

- (b) the online accessibility and inclusivity of public resources and services

- (c) digital literacy

- (d) awareness of, and the usership of, measures to secure the online privacy of, and cybersecurity with respect to, an individual.

(b) (i.e., online accessibility and inclusivity)

Long-term approach: NJ OBC with support from DE funding, will convene an interagency committee in 2024 to identify government services that serve Covered Populations to prioritize for website redesign. At the same time, OBC will review the metrics established in this document against newly collected data. Revised metrics will then inform these digital re-design activities, incorporating human-centered and universal design principles, which could include:

- Simplifying the front-end digital sign-up process for government services that disproportionately serve Covered Populations
- Creating a "one-stop-shop" webpage to enable residents to sign up for multiple services at once, and/or
- Improving "back end" interagency data sharing and management that facilitates easier sign-ups for government services.

Once the committee prioritizes activities, it will set corresponding measurable objectives and KPIs to track the impact of its initiatives over time. OBC will proceed with the measurable objectives and KPIs proposed by the committee to the extent that they do not compromise personally identifiable information and collecting them does not impede access to government services. OBC will report back to NTIA on the aligned approach, targeting March 2025.

(c) (i.e., digital literacy) and (d) (i.e., online privacy, cybersecurity)

Long-term approach: OBC regards (d) to be a subset of (c) - that is, cybersecurity literacy is a subset of overall digital literacy. Since no baseline data for digital literacy or digital skills exist today, OBC will convene a broad-based Digital Literacy Committee in 2024 to recommend standards and determine an approach for statewide baselining and assessment for Covered Populations. One option under exploration is leveraging the Northstar Assessment, which has already been implemented across a subset of libraries in the state. For more detail on this asset, see Section 3.1.

In the area of cybersecurity literacy standards, OBC will work collaboratively with NJCCIC, and where appropriate, leverage the considerable work that is currently being done there to create standards and an approach to baselining and assessment.

OBC plans to co-develop the approach and strategies with residents who are members of Covered Populations, community stakeholders, and statewide organizations to ensure the relevance of the measurable objectives to the needs of New Jerseyans.

3 Asset Inventory and Needs Assessment

To respond to the Digital Equity Act, in this section OBC provides an inventory of current assets in the state related to digital equity as well as an analysis of needs for Covered Populations. This section better illustrates the state's positioning with relation to its digital equity vision – including what assets New Jersey can harness and where potential investment could help bridge gaps.

3.1 Asset Inventory

Many digital equity-related activities and programs across New Jersey are supported by the public, nonprofit, and private sectors. To document these activities and programs, also called "assets," OBC began a stakeholder engagement process in December 2022. Stakeholders engaged include:

- Residents who are members of Covered Populations (e.g., aging population, veterans, people with disabilities)
- Non-profit organizations representing or related to Covered Populations (e.g., service organizations, digital equity advocacy organizations)
- Internet service providers
- New Jersey state agencies and municipal governments

(More detail on stakeholder engagement that has informed the plan to date is in Section 4.1.)

Additionally, OBC created a website to gather public input on assets that could be recorded in the state inventory, linked here. Finally, OBC launched the Digital Equity working group in December 2022, which also supported the buildout of the asset map. (More information on the contributions of the working group are in Section 4.1.) OBC also updated this inventory as a result of public comment.

The asset inventories below are segmented into three tables, each of which has a different set of New Jersey assets.

The first table documents which New Jersey assets relate to the Affordability Connectivity Program (which advanced both broadband adoption and affordability). While the future of the ACP is uncertain at the federal level, it will remain a considerable asset in the short term.

The second table documents all programs advancing digital equity by focus area. These programmatic focus areas include:

- Free or low-cost public broadband access
- Broadband affordability initiatives
- Device access and technology support
- Upskilling, education, and certification
- General digital equity resource and advocacy groups

The third table documents "tools," which are resources and information sources that can be leveraged to implement the state strategy. The three types of tools include:

- End-user adoption tools and resources
- Research and analysis
- Organizations and working groups

$ = advances broadband affordability

= advances broadband adoption

Table 10: Affordable Connectivity Program Assets[12]

Asset Subcategory	Asset	Description	Covered Populations
FCC National Competitive Outreach Program: Grants to promote ACP uptake	Computers 4 People	Nonprofit based in Hoboken that provides low- or no-cost refurbished computers, laptops and tablets through a network of nonprofit organizations serving Covered Populations Awarded $326,920 for ACP outreach and enrollment	All
	Newark Community Development Corp/Invest Newark	Invest Newark sponsors Newark Fiber, an initiative to bring high-speed, low-cost internet service to all parts of Newark, focusing on Covered Populations Awarded $400,000 for ACP outreach and enrollment	All
	HOPES Community Action Partnership	Nonprofit focused on social, educational, and training needs of New Jersey communities, including digital literacy Awarded $300,000 for ACP outreach and enrollment	All

[12] FCC ACP Outreach Funding Grantee Announcements

Asset Subcategory	Asset	Description	Covered Populations
	New Jersey State Library (with NJ Department of Health)	Awarded $400,000 for ACP outreach and enrollment, with a focus on central and south Jersey	All
ACP Navigator Pilot Program (NPP): grants to third parties to help eligible households complete and submit ACP forms; **Your Home, Your Internet**: grants to increase outreach and participation in ACP	Jersey City Housing Authority	JCHA received two outreach grants to support enrollment and outreach for the ACP for all residents of Jersey City Housing Authority.	All

Table 11: Digital Equity Programs

Asset type	Asset	Description	Covered Populations
Upskilling, education, and certification	One-Stop Career Centers	With oversight from county Workforce Development Boards, these programs include in-person or virtual industry certifications and digital skills programs (e.g., Passaic County One-Stop Career Center, Greater Raritan Workforce Development Board Literacy Committee)	All
	NorthStar Online Learning training, assessments, and certifications	Northstar is offered by 91 libraries in 18 out of 21 New Jersey counties. Residents can test their digital skills and gain credentials through targeted learning opportunities. Credentials can be used to document skills for employment.	All
	Community colleges and vocational schools	Courses on strengthening computer skills are available through various education channels in New Jersey (e.g., Bergen Community College offers a paid "Computer Skills for the Workplace" program and free technology and business skills classes; Morris County Vocational School District and County College of Morris' are participants in Intel's "AI for Workforce Program")	All
	FCC Connecting Minority Communities awards	The two New Jersey recipients are Rutgers University and Felician University. Both are using federal Connecting Minority Communities awards to strengthen digital infrastructure in their surrounding communities (e.g., trainings for incarcerated individuals and teaching telehealth best practices for students in science fields at Felician)	All

Asset type	Asset	Description	Covered Populations
	Montclair Gateway to Aging in Place	mGAP is a program designed for aging individuals and teaches participants how to navigate in the digital world	Aging individuals
	NPower New Jersey	Provides tuition-free technology training, certifications mentorship, device assistance, and job placement assistance to veterans, veteran spouses and young adult job seekers. The program offers wrap around services that address common barriers to training and employment in the Information Technology sector	Veterans
	LiteracyNJ	With sites in all 21 counties, locations offer intake services and orientation in basic digital literacy.	All
	Department of Human Services with GetSetUp New Jersey	Provides free, live virtual classes for New Jerseyans ages 60 and older.	Aging individuals
	Princeton University Prison Teaching Initiative – NJ STEP	The Prison Teaching Initiative is a partner with the NJ STEP program. It brings Princeton faculty to incarcerated students through curriculum development, course design and teaching.	Incarcerated
	Rutgers University- Newark – NJ STEP	The NJ STEP program is using an NTIA Connecting Minority Communities grant to bring digital access and digital literacy skill building to residents of two Residential Community Release programs. The initiative is one aspect of a more holistic educational program offered by Rutgers that is focused on addressing the educational deficits that incarcerated people experience.	Incarcerated

Asset type	Asset	Description	Covered Populations
	Raritan Valley Community College - NJ STEP	The college educates ~500 inmates a semester at seven state correctional facilities. As students transition back into the community, a STEP Completion Counselor helps those who have not yet completed their Associate's degree enroll in community colleges near their residence. Once a student is enrolled, the STEP team's Completion Counselor works with them to finish their Associate's degree work and continue on to admission at Rutgers University or other four-year state schools.[12]	Low-income households, Incarcerated
	NJ Reentry Corporation Workforce Development and Job Training NJ Reentry Corporation	Wrap around services for reentering incarcerated citizens that include workforce and job training programs.	Incarcerated
	Camden Dream Center	The Camden Dream Center works with people of color living in poverty, offering wide-ranging STEM education to people of all ages. The goal is to prepare people to enter employment in the information technology sector.	Low-income households, Communities of color

Asset type	Asset	Description	Covered Populations
	Achievement Center Ocean County College Collaboration	The Ocean County Achievement Center is a collaborative partnership with Ocean County College, Ocean County PIC, Inc., Rutgers Transitional Education and Employment Management (T.E.E.M.) Gateway, and Goodwill's Helms Academy. The Ocean County Achievement Center provides free services to out-of-school young adults between the ages of 16 to 24, including for digital literacy/trainings.	Low-income households
	PerScholas	PerScholas offers tuition-free training for careers in IT in the Newark area. PerScholas' mission is to advance economic equity through rigorous training for tech careers and to connect skilled talent to leading businesses.	All
	Coop Careers	Coop Careers' mission is to overcome unemployment through digital skills training. Currently, COOP serves 2,000 first-generation, low-income college graduates annually, closing gaps through peer connections and its head-heart-hustle program. Available to those in commuting distance to NYC.	Low-income households

Asset type	Asset	Description	Covered Populations
Upskilling, education, and certification	Jersey City Housing Authority with AT&T and Digitunity	AT&T, Digitunity, and Jersey City Housing Authority partner to offer ongoing and free digital literacy workshops for low-income households at affordable housing communities throughout the state (e.g., TJ Stewart Apartments in March, JCHA Berry Gardens in February) Furthermore, JCHA's Resident Empowerment & Communication ("RECE") Team maintain updated one-click resource listings of local job openings, training opportunities, and supportive events, shared weekly by email or text to subscribers. The RECE team also provides hybrid and in-person opportunity fairs, skill training and workforce trend programming.	All
	NJ Community College Consortium for Workforce and Economic Development	Eighteen community colleges from across the state offer a Workplace Literacy and Basic Skills Training Program with digital literacy components. This partnership also includes the New Jersey Business & Industry Association, the New Jersey Community College Consortium for Workforce and Economic Development, and the New Jersey Department of Labor and Workforce Development.	All
	Senior Planet	Senior Planet by AARP is offered by Bergen County, Division of Senior Services, and Jewish Federation of Southern NJ, Burlington, Camden and Gloucester counties. Senior Planet includes tools and curriculum to help older adults access technology and use it to enhance their lives.	Aging individuals

Asset type	Asset	Description	Covered Populations
	Hopeworks	Hopeworks is a social enterprise that uses technology, healing, and entrepreneurship to transform lives; on average, over 99% of young adults (aged 17-26) entering Hopeworks are unemployed, making less than $400 annually. Young adults completing the Hopeworks program (e.g., web design and GIS) make, on average, over $44,000 annually, with a 12-month retention rate of over 90% in their jobs.	Low-income households aged 17-26
Device assistance and technology support	Division of Deaf and Hard of Hearing	The Division of Deaf and Hard of Hearing (DDHH) at the NJ Department of Human Services provides free equipment to people who are deaf or hard of hearing and also low-income. Their device program has offered laptops, cell phones, and tablets.	Individuals with disabilities
	TDI Connect	TDI Connect refurbishes computers and laptops donated by companies and schools, and distributes the computers in collaboration with Trenton non-profits to individuals and groups who do not currently have a computer or laptop	All
Device assistance and technology support	Computers 4 People	Computers 4 People donates recycled laptops across New Jersey, hosts PC Building Classes for teenagers to combine digital skills with hardware assembly, and accepts device donations from the public	All
	New Outlook Pioneers Morris Club	In Morris Plains, New Outlook Pioneers Morris Club refurbishes donated technology and distributes at low or no cost to people in need.	All
	PlanITROI Digital Dreams Project	The Digital Dreams project is committed to connecting families with devices, especially in support of K12 students.	All

Asset type	Asset	Description	Covered Populations
	TDI Connect	TDI Connect refurbishes donated technology and distributes at low or no cost to people in need in Hamilton and the surrounding area.	all
	Laptop Upcycle	In Glen Ridge, Laptop Upcycle refurbishes donated technology and distributes at low or no cost to people in need.	All
	Electronic Access Foundation	Headquartered in Morristown, the organization refurbishes donated technology and distributes at low or no cost to people in need.	All
	Jersey City Housing Authority, with various providers	The Jersey City Housing Authority, working with local computer refurbishers and other partners, aims to equip all Jersey City Housing Authority households with access to a capable device and digital skills training. JCHA has established high-speed internet access through Starry and Andrena at most public housing sites, free through ACP subscription	Low-income households
	Sustainable Jersey Digital Schools	The Sustainable Jersey Digital Schools Program, a component of the Sustainable Jersey for Schools program operating out of the Sustainability Institute at TCNJ, supports digital equity in New Jersey K-12 schools through the Equitable Access to Digital Learning Action. This Action is part of the Digital Schools Star certification process. Districts are urged to assess their effectiveness in supporting the digital learning needs of diverse student learning groups, identify and implement successful strategies that foster student engagement through technology for these groups, and measure outcomes based on their efforts	Low-income households

Asset type	Asset	Description	Covered Populations
Resource and advocacy groups	Digital Inclusion Practitioners of New Jersey	Convenes organizations and individuals interested in digital equity to host workshops, builds relationships with stakeholders and promotes digital skills acquisition and broadband adoption	All
	Formerly Incarcerated College Graduates Network	FICGN is a network of college graduates who have been to prison. It includes people from varied educational backgrounds (AA to JD/Ph.D./EdD) as well as careers. This network will provide general academic and career support to its members. They may also change the social narrative surrounding incarceration to lessen stigma and create opportunities for returning citizens.	Incarcerated
	Urban League of Essex County	The Urban League of Essex County offers digital skill building that improves the lives of disadvantaged residents, promoting social and economic advancement. It offers relevant programs and services in education, employment, housing, and economic development that empower communities and change lives.	Communities of color
Free or low-cost public broadband access	Burlington County Connect	The county has announced a new initiative to expand free public Wi-Fi to all county-owned buildings and properties. The network already offers 200+ wireless access points across 20 County-owned buildings and has connected 100K+ users	All

Asset type	Asset	Description	Covered Populations
Device assistance and technology support; Upskilling, education, and certification	Talking Book and Braille Center with the Commission for the Blind and Visually Impaired	The State Library's Talking Book and Braille Center partners with the New Jersey Commission on the Blind and Visually Impaired (NJCBVI) to offer home delivery of computers, speech and magnification assistive technology, and technical support to NJCBVI clients. The Center's staff also provide training and technical support at public libraries through the Library Equal Access Program (LEAP)	Individuals with disabilities
	WGU-T-Mobile Digital Online Access Scholarship	If selected, this scholarship will provide recipients with the technology they need to pursue an online degree. The scholarship will provide recipients with equipment that will eliminate barrier to internet access. Students will be able to pick which devices they most need assistance with - including a laptop, a hotspot with internet access and/or a webcam	Low-income households
Free or low-cost public broadband access; Upskilling, education, and certification	Family Success Centers	Family Success Centers provide wrap-around services for families in New Jersey. Programmatic offerings include digital literacy classes in parallel to homework help, youth development, healthy living and other support programs (e.g., Highlands Family Success Center)	Low-income households

Asset type	Asset	Description	Covered Populations
Free or low-cost public broadband access; Upskilling, education, and certification	Xfinity Lift Zones	Comcast, along with nonprofit partners and city leaders, operates 36 Lift Zones in New Jersey. These zones offer hundreds of hours of free, educational, and digital skills content. 50% of low-income households in major Comcast markets are within walking distance from Lift Zones	All
Device assistance and technology support; Upskilling, education, and certification	Tools 4 School Technology Program	United Way in Hunterdon County has partnered with ExxonMobil employees to upload new software onto laptops donated by the company, loan laptops to students, and offer 1-1 digital skills and training programs	Low-income households
Free or low-cost public broadband access; Device assistance and technology support; Upskilling, education, and certification	NJ public libraries	99% of New Jersey's 499 public library locations offer free internet and computer access. Loaner programs for mobile hotspots are offered by many libraries across the state (e.g., Newark Public Library, Burlington County Library System). Other services include personalized workshops, digital credentialing programs, and online courses (e.g., Gloucester County Library System computer classes, Red Bank Library Eisner Opportunity Lab, Ocean County Library Computer Skills Center, Plainfield Library Digital Literacy Courses, Long Branch Library Technology and Career Center, Burlington County Library Device Lending. Sussex County Library Chromebooks program).	All

Table 12: Digital Equity Tools

Asset Subcategory	Asset	Description	Covered Populations
Research and analysis	Internet Inequity Research Report	Published by Project Ready in January 2023, this report contains key findings on broadband adoption and affordability challenges	All
	Digital Divide in New Jersey Schools Report	Distilled findings, by school district, from a 2020 school technology survey conducted by NJDOE	Low-income households
	Office of Broadband Connectivity	State-wide sessions held by OBC to provide information to families, community members, and small businesses about connecting to high-speed internet and accessing grants (detailed further in the Stakeholder Engagement Process)	N/A
	New Jersey Future	Conducts research on broadband and other initiatives related to land use and sustainable growth	N/A
	Office of Broadband Connectivity's New Jersey State Broadband Survey	OBC launched a broadband survey and speed test application in November 2022, engaging in direct outreach to local government, paid social media, paid radio streaming services, and redirect advertising. As of August 2023, OBC has received nearly 6,000 responses that can be disaggregated by type or respondent (e.g., residential vs business), adoption status, and geography. Goals: Provide information on broadband access, usage, and equity for individuals and small businesses in New Jersey – Facilitate real-time reporting on survey responses, including geographic locations – Inform OBC and the BASC about the level of service available to households and nonresidential establishments, and differences across counties	All

Asset Subcategory	Asset	Description	Covered Populations
	NJTrax	Tool used by NJDOE to better understand, across school and school districts: 1) technological readiness (i.e., infrastructure, connectivity) of schools and school districts and 2) digital learning practices within the classroom (e.g., curriculum, technology/device access, professional learning).	Low-income households
End-user adoption tools and resources	Jersey City Wi-Fi Hotspot Map	The city government's website offers centralized information about free public Wi-Fi (including whether Wi-Fi is at a kiosk or library)	All
End-user adoption tools and resources	New Jersey Library Association Wi-Fi Locator Map	Published by the New Jersey Library Association, the Wi-Fi Locator Map shows every New Jersey public library which offers free public Wi-Fi	All
	Jersey City Housing Authority	Maintains an online set of resources and calendars related to digital inclusion activities, essential skills training for workforce advancement, and career-track training opportunities in digital technology fields	All

Asset Subcategory	Asset	Description	Covered Populations
Organizations and working groups	Broadband Access Study Commission	The Commission shall report its findings, conclusions, and recommendations to the Governor and, pursuant to section 2 of P.L.1991, c.164 (C.52:14-19.1created through P.L. 2021, Ch. 161, is charged with developing recommendations to help the State achieve affordable and equitable broadband access for all residents and businesses, including physical access, deployment, and affordability of broadband service. The Commission is evaluating the impediments to broadband service within the state and the feasibility of establishing community broadband networks.	All
Organizations and working groups; Research and analysis	Office of Broadband Connectivity's Virtual Roundtables	OBC, in partnership with NTIA, hosted 7 monthly virtual roundtables with stakeholders to share program updates and learn about challenges related to broadband infrastructure and equity across the state. OBC will continue hosting these events at least through 2023 as they are a key pillar of the outreach strategy. Goal to identify obstacles faced by residents, business, providers, anchor institutions and other stakeholders relative to broadband deployment and equity	All

Asset Subcategory	Asset	Description	Covered Populations
	Office of Broadband Connectivity's Digital Equity Working Group	OBC and NTIA lead a working group of key digital equity stakeholders who discuss issues and potential opportunities regarding digital equity across the state. The intent of this group is to have a multiplier effect for covered populations. Goals: -- Gain a diverse range of perspectives from residents and businesses digital equity across the state – Map different organizations and assets related to broadband equity -- Track progress over time on different issues and develop solutions	All
	Office of Broadband Connectivity's Workforce Development Working Group	Drawn from Department of Labor and industry (telecommunications and broadband), with invitations made to labor and worker representatives, this group focuses on both the potential shortage of telecommunications deployment and maintenance roles and the need for occupational digital skills across a variety of non-technical jobs. Goals: – Support OBC's work to address potential shortages within the broadband workforce – Provide feedback to the State's workforce plan and provide real-world experience from industry and engagement with covered populations – Learn about different resources, opportunities, and challenges in the state related to digital skills and workforce development	All

3.1.1 Digital Inclusion Assets by Covered Population

See Section 3.1.0 (Tables 11 and 12) for a mapping of digital inclusion assets by Covered Population. Many assets in the state cover all eight Covered Populations.

3.1.2 Existing Digital Equity Plans

OBC will partner with institutions and municipalities that have developed digital equity plans. Municipal and local plans that OBC is aware of and has engaged to date are discussed in Section 2.2.

At the state level, the chief partner is the New Jersey State Library ("NJSL"), which has its own digital equity plan: "Leading the Way to Digital Equity." NJSL is implementing a multi-year digital equity strategy that builds the capacity of public libraries to serve as community anchor institutions that provide internet access to Covered Populations.

The state's public libraries are well-used by residents. In 2022, they welcomed more than 21 million visitors and offered almost 8,000 public access internet computers. These computers were used 2.3 million times and public access Wi-Fi, which is available at most public libraries, saw even higher usage at 5.7 million sessions. NJSL seeks to leverage this critical statewide asset through its plan as described in Table 13.

Table 13: New Jersey State Library Digital Equity Plan

NJSL priority	Activities
Provide digital literacy resources	**Launching a digital literacy assessment and curriculum tools:** Today, NJSL provides a pilot group of 91 New Jersey public libraries with free access to the NorthStar Digital Literacy assessment tool and curriculum for patron use (described in more detail in Section 2.3). The plan involves expanding access to include 85% of the states' 299 public library administrative entities, which together operate 499 public library locations.
	Providing digital literacy classes: In 2021-2022, NJSL provided grants to public libraries to offer digital literacy classes through NJSL + Partners, a network of over 30 libraries that offer patrons access to digital skills training and certification. The program continues under the leadership of the Plainfield Public Library as "Labor and Literacy Labs."
	Creating digital literacy trainings in partnership with Rutgers University School of Social Work: Library supervisors and social work interns will receive in-depth training on digital literacy and community resources that offer Covered Populations free or low-cost access to the internet, to devices and to more advanced digital literacy and skills trainings. Social work interns will provide basic digital skills training to patrons as part of their work in libraries.
Make library capital improvements to facilitate learning	**Funding construction:** From 2024-2030, NJSL is administering $32.7 million from a Capital Projects Fund competitive grant that will allow libraries and a selection of community centers (including public health facilities) to make capital improvements that support resident access to education, healthcare, and employment opportunities made possible through internet access and computer technology tools. For example, during weather-related emergencies, libraries may be the only publicly available source for internet access. Installing a back-up generator can go a long way to easing the challenge of extreme weather events on entire communities when libraries are equipped to do so. Grants will be awarded in 2024 and related services will be offered by grantees through 2030.
Grow digital equity programs focused on Covered Populations	**Driving ACP enrollment:** Through an Affordable Connectivity Program ("ACP") grant from the FCC, NJSL and the NJ Department of Health are partners in outreach and enrollment activities to enroll eligible New Jersey families in the ACP.
	Expanding internet for public libraries: Jersey Connect is a program offered by NJSL that provides backbone technology services, including internet access and technical support, to more than 300 library locations in the state.
	Increasing device access: NJHealth Connect, funded with American Recovery Plan Act funds from the Institute of Museum and Library Services, provided 150 library locations with iPads specially configured with high-quality and vetted telehealth applications.

3.1.3 Existing Digital Equity Programs

See Section 3.1.1 for the NJ digital equity assets that are programs.

3.1.4 Broadband Adoption

OBC will review the role of multi-sector partnerships to support adoption. In addition, OBC understands adoption as a subset of affordability. See Section 3.1.5 for detailed information on affordability, a key driver of adoption.

See Section 3.1.1 for New Jersey's broadband adoption-focused digital assets.

3.1.5 Broadband Affordability

See Section 3.1.1 for New Jersey's broadband affordability-focused digital assets.

3.2 Needs Assessment

To surface the current state of digital equity gaps across the state, OBC has conducted a "needs assessment" to baseline access to internet and unique barriers faced by specific groups of New Jerseyans.

While the analysis covers digital equity gaps by each Covered Population, Covered Populations are not mutually exclusive. For example, a New Jersey resident could be low-income, age 60+, and a returning citizen. Each of these characteristics could present unique barriers for a resident to use digital products and services, which are addressed later in this section.

Table 14: Covered Population Share and Count *(See 7.2 for sources and methodology)*

Covered Population	Share of state population	Count (households)
Statewide total	100%	~3,500,00
Low-income households	16.6%	~580,000
Aging individuals	37.6%	~1,300,000
Incarcerated individuals[a]	0.1%	~13,200
Veterans	5.1%	~180,000
Individuals with disabilities	14.1%	~500,000
English language learners	5.7%	~200,000
Communities of color[b]	42.2%	~1,500,000
American Indian or Alaskan Native	0.1%	~2,600
Asian	8.9%	~300,000
Black/African American	12.3%	~430,000
Two or more races	2.5%	~90,000
White alone	57.8%	~2,000,000
Hispanic/Latino	17.8%	~625,000
Some other race	0.6%	~22,000
Rural residents	11.3%	~400,000

Table 15. Gaps in Broadband Access and Adoption by Covered Population *(See 7.2 for sources and methodology)*

Covered Populations	Share of households with internet subscription	Gap to state average	Share of households with a broadband subscription	Gap to state average	Share with device access beyond smartphone	Gap to state average
Statewide Total	**92.1%**	-	**80.7%**	-	**88.9%**	-
Low-income households	79.8%	**-12.3** p.p.	61.5%	**-19.3** p.p.	71.2%	**-17.8** p.p.
Aging individuals	85.8%	**-6.3** p.p.	72.0%	**-8.8** p.p.	81.3%	**-7.6** p.p.
Incarcerated individuals	-	-	N/A	-	N/A	-
Veterans	86.8%	**-5.3** p.p.	73.3%	**-7.5** p.p.	84.6%	**-4.3** p.p.
Individuals with disabilities	80.3%	**-11.8** p.p.	66.0%	**-14.7** p.p.	81.0%	**-7.9** p.p.
English language learners	82.3%	**-9.8** p.p.	62.4%	**-18.4** p.p.	69.1%	**-19.8** p.p.
Communities of color[a]	-	-	-	-	-	-
American Indian or Alaskan Native	89.5%	**-2.6** p.p.	71.9%	**-8.8** p.p.	84.9%	**-4.1** p.p.
Asian	97.6%	**+5.5** p.p.	89.7%	**+9.0** p.p.	96.1%	**+7.1** p.p.
Black/African American	89.5%	**-2.6** p.p.	75.9%	**-4.8** p.p.	84.8%	**-4.2** p.p.
Two or more races	93.4%	**+1.3** p.p.	80.4%	**-0.3** p.p.	91.0%	**+2.1** p.p.
White	92.4%	**+0.3** p.p.	82.5%	**+1.8** p.p.	90.6%	**+1.7** p.p.
Hispanic/Latino	89.9%	**-2.2** p.p.	73.8%	**-6.9** p.p.	82.5%	**-6.4** p.p.

Covered Populations	Share of households with internet subscription	Gap to state average	Share of households with a broadband subscription	Gap to state average	Share with device access beyond smartphone	Gap to state average
Some other race	92.5%	**+0.4** p.p.	79.7%	**-1.1** p.p.	90.8%	**+1.9** p.p.
Rural residents	91.9%	**-0.2** p.p.	79.2%	**-1.5** p.p.	87.1%	**-1.8** p.p.

ᵃ All race categories except Hispanic/Latino exclude Hispanic/Latino

Internet and broadband subscriptions by Covered Population

"Internet subscription rate" refers to the rate at which New Jerseyans have any type of household internet subscription. "Broadband subscription rate" refers to the rate at which New Jerseyans have a high-speed broadband plan, excluding those who only have mobile access. To assess the baseline by Covered Population, OBC used 2021 Census ACS data.

As shown on Table 15, ~92.1% of New Jersey residents have some type of internet subscription and 80.7% have some type of broadband subscription. However, several Covered Populations fall behind this average. This gap is most acute for low-income households, English language learners, and individuals with disabilities.

(Sections 3.2.2 and 3.2.3 describe in further detail the affordability and adoption issues that may contribute to these subscription rate gaps.)

Device access by Covered Population

In addition to internet and broadband adoption, device access is another critical component of digital equity, because even if residents have internet available and can afford a broadband subscription, access to a computer may be prohibitively costly or devices can be difficult to navigate.

Moreover, many households have access to only smartphones. While smartphones can enable many digital activities, OBC's goal is to ensure that all New Jerseyans have access to devices beyond smartphones to ensure they have full use of the internet and can easily conduct important life tasks (e.g., those that requires a computer). As shown on Table 15, device access is a particularly significant issue for low-income households and English-language learners.

(Sections 3.2.2 and 3.2.3. of the New Jersey Digital Equity Plan describe in further detail the affordability and adoption issues that may be contributing to these device access gaps.)

3.2.1 Covered Population Needs Assessment

This section details barriers that are specific to each Covered Population, leveraging OBC-led stakeholder discussions, Census data, and other research.

For each Covered Population, a needs assessment is provided which details (1) digital equity gaps for that Population and (2) barriers to digital equity specific to the Population.

To assess (1) OBC leveraged ACS Census data. A full methodology is included in the Appendix.

To assess (2), OBC leveraged public data sources including but not limited to: Census data, national and state-level broadband data and research (e.g., Education Superhighway, NTIA), in-person and virtual stakeholder discussions, website feedback, and an OBC-administered survey.

Table 16. Barriers by Covered Population

Covered Population	Associated barriers
Low-income households	• Internet affordability • ACP enrollment
Aging individuals	• Internet affordability (especially on fixed-incomes) • Digital skills • Mobility • Concerns over internet safety
Incarcerated individuals	• Infrastructure
Veterans	• Awareness of internet access benefits • Higher likelihood of age 60+, disability status, and rural residence
Individuals with disabilities	• Mobility • Accessibility of internet devices, tools, and digital literacy resources • Income • Available speed
English language learners	• Accessibility of public resources (including digital equity resources) in non-English language options • Higher likelihood of low-income status
Communities of color	• Higher likelihood of low-income status
Rural residents	• Infrastructure and provider availability • Higher likelihood of low-income status or disability

3.2.1.1 Low-income households ("Covered Households")

Table 17: Low-income Households Snapshot

Snapshot: Low-income households	
% of state population	16.6%
% with internet subscription	79.8% (**-12.3** p.p. gap)
% with high-speed broadband subscription	61.5% (**-19.3** p.p. gap)
% with access to device beyond smartphone	71.2% (**-17.8** p.p. gap)

Low-income households (called "Low-income households" by NTIA) are defined as a "household, the income of which for the most recently completed year is not more than 150 percent of an amount equal to the poverty level, as determined by using criteria of poverty." Based on the federal definition, this would imply an annual income for a three-person household of ~$35,500.[13]

In New Jersey, there are ~**580,000** low-income households, or roughly **1 in 6** of the state's households.[14] Their rate of broadband adoption, **61.5**%, lags the state's average of **80.7**% while device access (other than a smartphone) at **71.2**% similarly trails the state average of **88.9**%.

This gap is in line with historical trends because income is a significant predictor of broadband access and device adoption. Table 17 shows that New Jersey households earning <$25K annually had broadband subscription rate 17 percentage points lower than households earning more than $75K/year.

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[13] According to the Census Bureau, from 2017-2021, the average household size in New Jersey was 2.66 persons. This figure was rounded to 3 persons per household to calculate the income threshold for eligibility for DEA. According to the Census Bureau, the 2022 poverty threshold for a 3-person household, including 2 minor dependents, was $23,578. 150% of this value is $35,367, or the approximate threshold for a "low-income household" under the DEA.

[14] Source: U.S. Census Bureau American Community Survey 2021 1-year estimates

Figure 1: Map of distribution of low-income households by Census tract

Share of New Jersey's households with household income below $35K[15][16]
by Census Tract (% of CT households)
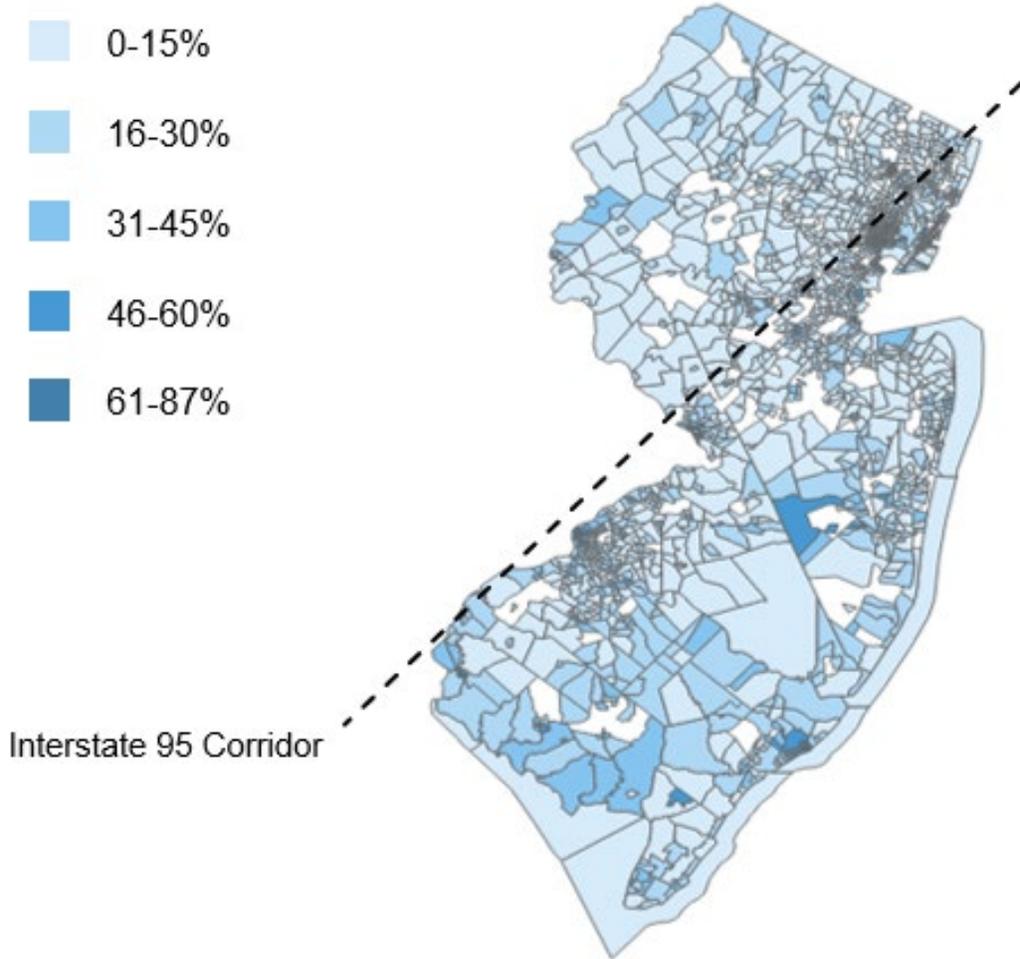
Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates (Table S1901); TIGER Shape Files 2010 Census Tracts; Tableau

Figure 1 illustrates that there is a larger share of Census tracts with a high-share of low-income households south of the I-95 corridor.

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[15] Household income in the past 12 months, in 2021 inflation-adjusted dollars.
[16] White Census Tracts indicate lack of sufficient data.

Table 18: Household Income Bands and Broadband Subscription Rates

Ranges of Household Income	% of households in range with no broadband subscription[17]
<$20K	34%
$20K-75K	15%
$75K+	4%

 Further, this challenge is more pronounced in some parts of the state where the poverty rate is higher, like Atlantic, Camden, Cumberland, Hudson, Mercer, and Passaic counties.

Figure 2: Poverty Level and Smartphone Only Share by County[18]

Share of residents below the poverty level and households with smartphones only by county
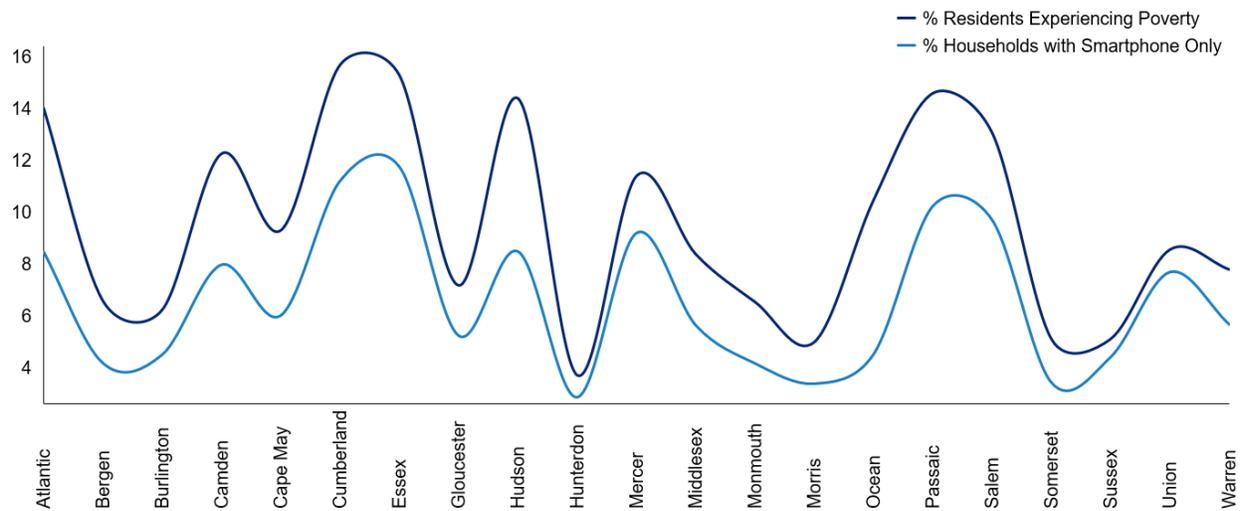
Barriers for Low-Income Households

Barrier 1: Internet affordability

Using the internet can be costly. For high-speed internet, users must purchase a broadband subscription, which can range from $25-125+/month for New Jersey plans. Second, a user must purchase a device, such as a computer or tablet, and associated tools, such as a mouse and keyboard. Individuals with disabilities may have to pay even more for assistive technologies that help them use computers. In public engagement sessions, OBC heard from residents across the state how broadband subscription costs can represent a significant and prohibitive share of monthly income.

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[17] U.S. Census Bureau, American Community Survey 5-Year 2021 Table S2801.
[18] PolicyMap analysis of U.S. Census Bureau, American Community Survey 5-Year 2021 data (Table S1701 for poverty and Table S2801 for device access).

Barrier 2: ACP enrollment

As described in Section 2.2, the ACP is a federal program that offsets the cost of a broadband subscription with a $30/month discount. It can also be applied as a $100 credit toward devices. Relative to the national average, New Jersey lags in enrolling residents in the Affordable Connectivity Program ("ACP"). Among households eligible for the ACP nationwide, the average enrollment is 37%, compared to New Jersey's 25%.[19] The neighboring states of Delaware, Pennsylvania, New York also have adoption rates higher than New Jersey (32%, 33%, and 47% respectively).

Section 3.1.2 discusses the ACP challenge further, including the areas of the state where this lagging enrollment is most acute.

3.2.1.2 Aging individuals

Table 19: Aging Individuals Snapshot

Snapshot: Aging individuals	
% of state population	37.6%
% with internet subscription	85.8% (**-6.3** p.p. gap)
% with high-speed broadband subscription	72.0% (**-8.8** p.p. gap)
% with access to device beyond smartphone	81.3% (**-7.6** p.p. gap)

In New Jersey, there were ~**1,300,000** households with a member over the age of 60 as of the 2021 Census, making up **37.6**% of the state's population. Their rate of broadband subscriptions, **72.0**%, lags the state's average of **80.7**%. Device access (excl. smartphone) lags the state average of **88.9**%.

Internet access is particularly important to New Jersey's aging population. One of the unique benefits of internet access is access to telehealth, critical for aging individuals with mobility issues and healthcare needs. Digital adoption can also help aging individuals with mobility issues meet basic needs, such as scheduling food delivery and arranging rideshare transportation. Moreover, individuals facing social isolation could benefit from leveraging the internet to build connections and interact with loved ones. Access can also support civic engagement, remote learning, and employment opportunities.

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[19] Education Superhighway ACP analysis, Aug 2023

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Barriers for aging individuals

When it comes to digital access, aging individuals face unique challenges.

"An older gentleman recently needed to get a temporary driver's license from the DMV. He was happy to discover that he could complete the process online and save a trip to a DMV Office. His internet navigation skills were not sophisticated, but he had internalized the patterning of clicking on a Continue button to advance to the next step of a workflow. In the case of this DMV application, after getting through the temporary driver's license form and paying his fee by credit card, [After completing the application], he finally arrived at a page that assured him of his successful completion of the application. However, he could not locate the printable temporary license he needed on the visible screen. Luckily, this individual received technical assistance the same day from [a digital navigator in our organization] who tried scrolling down the page and found the printable temporary license below. " - insight on importance of digital navigators from a nonprofit representing aging New Jerseyans

Barrier 1: Internet affordability (especially on fixed-incomes)

The median income of individuals 60+ in New Jersey is ~30% lower than the median household income. OBC heard from community groups about the challenges of affording broadband subscriptions on fixed incomes, raising the importance of affordability as a key priority for the Digital Equity Plan.

Barrier 2: Digital skills

A recent study, citing Census data, ranked New Jersey aging individuals 15th in the country for digital familiarity across five metrics, with an opportunity to improve on device spending levels.[20] In focus groups, OBC heard from senior groups about the challenges of getting online, particularly to access basic public services (e.g., renewing a driver's license or scheduling a health appointment). Seniors shared insight on the challenges of learning how to interact with different types of devices (e.g., computers vs. smartphones) and of trying to comprehend website and software design.

Barrier 3: Mobility

Aging individuals can be less mobile than the general population, and some depend on caregivers, family members, or public and para-transit services to get to connectivity centers like public libraries.[21] Responsive digital equity solutions must look to meet aging populations where they are to bridge this gap.

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[20] Seniorly state-by-state assessment
[21] National Library of Medicine research

Barrier 4: Concerns over Internet safety

A LexisNexis Cybercrime Report found that internet users ages 75+ are second most vulnerable to fraud attacks and most vulnerable for losing money to such fraud attacks.[22] This barrier can discourage aging populations from attempting to access the Internet from the start. OBC heard in multiple stakeholder discussions about the difficulty seniors can experience navigating the internet and uncertainty related to how to use it safely.

3.2.1.3 Incarcerated individuals

Table 20: Incarcerated individuals snapshot

Snapshot: Incarcerated individuals	
% of state population	0.1%
% with internet subscription	Not available in state correctional facilities (discussed below)
% with high-speed broadband subscription	Not available in state correctional facilities (discussed below)
% with access to device beyond smartphone	Inmate Kiosk Systems provide limited access and serve over 90% of incarcerated persons
Source: New Jersey Department of Corrections	

The Digital Equity Act prioritizes incarcerated populations for broadband-related initiatives. As New Jersey does not have jurisdiction over federal prisons and detention centers, this section focuses on (1) the incarcerated population in statewide detention centers and (2) returning citizens.

The New Jersey Department of Corrections (NJDOC) maintains and operates ten (10) major institutions. As of January 3, 2023, **~13,200** people were incarcerated in state facilities.[23]

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[22] LexisNexis 2020 Cyberfraud Report
[23] NJ Department of Corrections data

Barriers for incarcerated individuals

Barrier 1: Infrastructure

Incarcerated individuals do not have broadband access because state correctional facilities lack the network infrastructure to have a secured system for digital educational- and employment-related resources. Without the infrastructure, these facilities cannot provide resources to incarcerated persons to build digital literacy skills, which poses a significant challenge on release.

Correctional facilities do offer incarcerated individuals very limited access to a proprietary Inmate Kiosk System. The Inmate Kiosk System vendor selects the set of available resources, which is currently limited to email, music, and games. A planned replacement of the current Inmate Kiosk System will give the department an opportunity to make available a wider array of resources through the internet, including educational, medical and mental health.

NJDOC continues to explore providing broadband access that would allow incarcerated persons access to education, employment, and healthcare resources.

## 3.2.1.4 Veterans

Table 21: Veterans snapshot

Snapshot: Veterans	
% of state population	5.1%
% with internet subscription	86.8% (**-5.3** p.p. gap)
% with high-speed broadband subscription	73.3% (**-7.5** p.p. gap)
% with access to device beyond smartphone	84.6% (**-4.3** p.p. gap)

Barriers for veterans

Barrier 1: Awareness of internet access benefits

According to the NTIA Internet Use Survey, veterans are significantly more likely to say the reason they are not online is that they "don't need or are not interested" in internet access versus non-veterans (~65% vs. ~55%).[24] While this may be the true preference of some veterans, other veterans simply may not be aware of the potential benefits of internet access for their day-to-day routine activities.

Figure 3: Veteran Households Reporting Disinterest in Home Internet Access Compared to Average
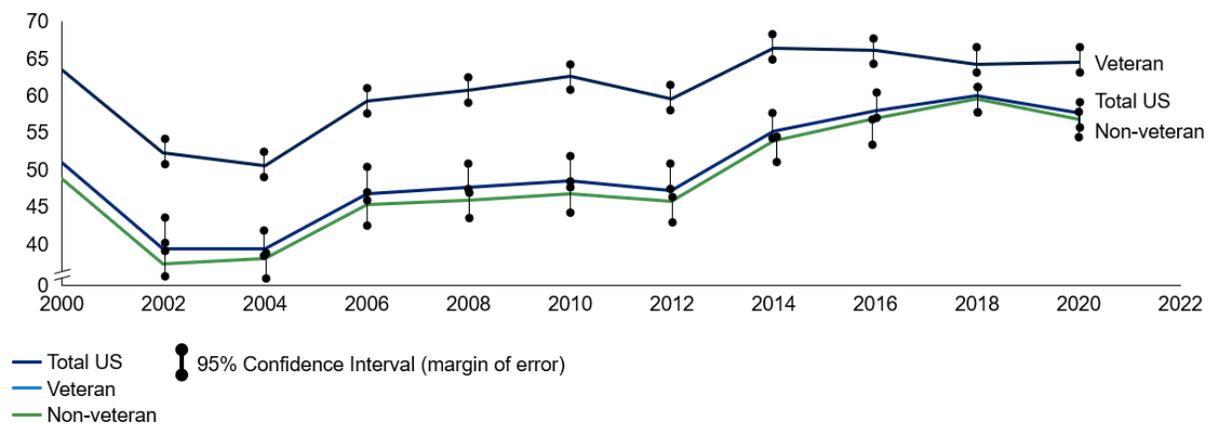
In conversation with veterans, OBC also learned that the lack of assistance available for understanding and enrolling in programs, combined with a lack of confidence, result in higher levels of anxiety when attempting to get connected. For this reason, veterans pointed to the non-intuitive nature of online sign-up systems as a distinct barrier.

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[24] NTIA Internet Use Survey

Barrier 2: Higher likelihood of age 60+, disability status, and rural residence

Veterans may have greater digital access challenges given their overlap with other Covered Populations. According to NTIA, veterans are twice as likely to be disabled as compared to the rest of the population. The average age of veterans is 61, which is considerably older than non-veterans, with an average age of 45. Finally, veterans are also more likely to live in rural areas.[25] Thus, veterans often face barriers that are not just unique to being veterans, but also, that are common to these other Covered Population categories.

> "We need to recognize that technology and internet access is a right, as it is a necessity to the right for freedom of speech and expression and we must ensure that everyone has access regardless of ability, which means providing the support to give everyone an equal footing." - New Jersey resident at a library listening session

3.2.1.5 Individuals with disabilities

Table 22: Individuals with Disabilities Snapshot

Snapshot: Individuals with disabilities	
% of state population	14.1%
% with internet subscription	80.3% (**-11.8** p.p. gap)
% with high-speed broadband subscription	66.0% (**-14.7** p.p. gap)
% with access to device beyond smartphone	81.0% (**-7.9** p.p. gap)

Individuals with disabilities face unique challenges to broadband adoption. In New Jersey, the top three types of disabilities faced by residents are ambulatory (5.8% of the disabled population), independent living (4.8% of the disabled population), and a cognitive disability (3.8% of the disabled population).[26] Individuals with physical disabilities face entirely different challenges in accessing digital services than do those with cognitive disabilities. Thus, the New Jersey digital equity strategy will seek to serve the diversity of this community comprehensively.

Per Figure 4, individuals with disabilities live throughout the state with a slightly higher concentration in south Jersey.

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[25] NTIA Internet Use Survey
[26] Riemer Hess Disability Distribution Analysis

Figure 4: Map of distribution of individuals with a disability by Census tract

Share of New Jersey's population with a disability[27, 28]
by Census Tract (% of census tract non-institutionalized population)
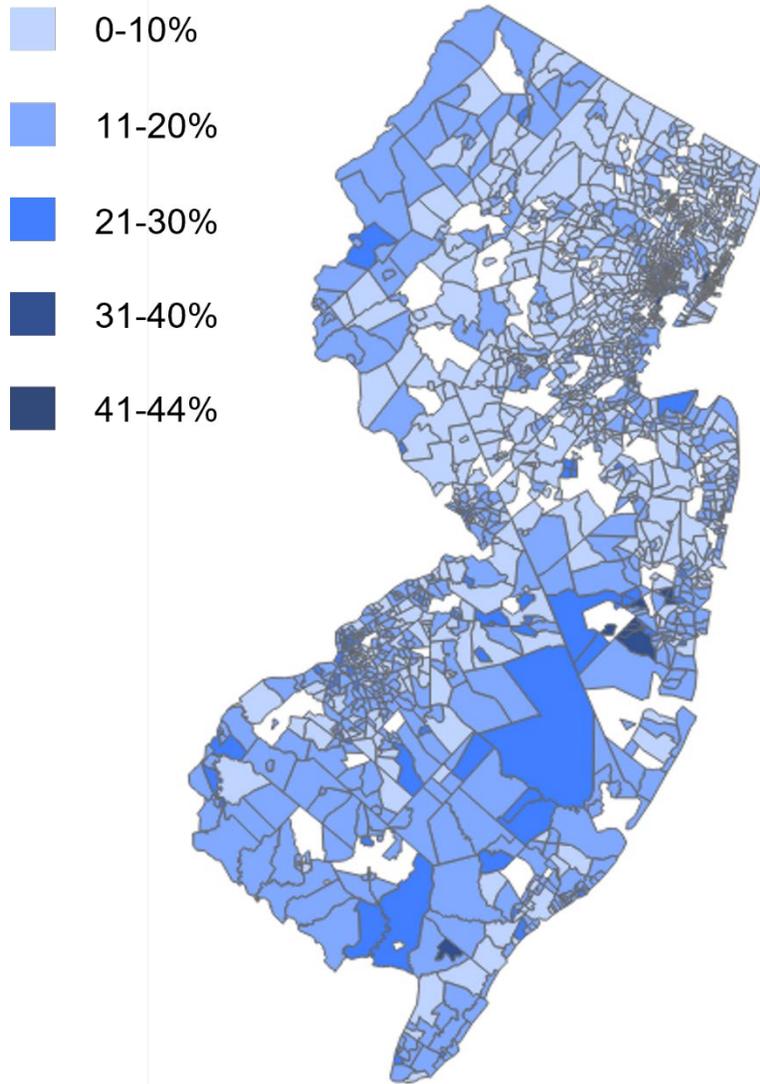
Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates (Table S1810); TIGER Shape Files 2010 Census Tracts; Tableau

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[27] Excludes institutionalized population in New Jersey. Disabilities are defined by the U.S. Census Bureau as a hearing, vision, cognitive, ambulatory, self-care, or independent-living difficulty.
[28] Census Tracts colored white indicate lack of sufficient data.

> "By creating opportunities tailored to the unique strengths and requirements of each individual, we can ensure that everyone can leverage the internet for employment and entrepreneurship. Every person, regardless of their disability, should have an equal opportunity to contribute to and benefit from the digital marketplace." - insight from community organization representing individuals with disabilities

Individuals with disabilities can benefit significantly from internet access through improvements in health and economic opportunity. Internet access can enable individuals to more easily access telehealth services, which can be important for individuals with disabilities, particularly if they are part of ongoing rehabilitation or therapy. Internet access can also reduce social isolation for individuals with mobility-related disabilities. Individuals with disabilities are more likely to be unemployed and seeking work than the general population, which means equipping them with internet tools to be connected to the workforce can make a meaningful difference.

Barriers for individuals with disabilities

Barrier 1: Mobility

Physical disability can create mobility challenges for accessing public Wi-Fi hotspots, such as public libraries or gathering locations, as well as for accessing digital literacy resources, such as public trainings in libraries. A comprehensive digital equity approach must create resources and solutions for New Jerseyans with barriers to physical mobility.

Barrier 2: Accessibility of internet devices, tools, and digital literacy resources

OBC heard in several listening sessions that disabilities can create challenges for interacting with the internet in day-to-day life. For example, according to the Bureau of Internet Accessibility, people with vision impairments may need to use screen readers to access the web – but if websites and digital equity resources don't provide image alternative text, captions, or transcripts, these individuals will have trouble accessing content. Other forms of disability can preclude individuals from using a keyboard or a mouse, or from being able to see color contrast.[29] According to the US Department of Justice, 1 in 10 federal agency websites were not available in accessible formats.[30]

Barrier 3: Income

Individuals with disabilities report lower income levels, and individuals with disabilities are less likely to hold full-time jobs due to education barriers and other drivers.[31] In New Jersey, individuals with disabilities have a median income of $31,000, substantially lower than the state median of $89,000. 38% of New Jerseyans with disabilities fall below the state poverty line, compared to just 16% of able-bodied New Jerseyans. As discussed earlier in this section, individuals with lower incomes face more barriers to broadband access than others.

Barrier 4: Available speed

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[29] Bureau of Internet Accessibility
[30] Section 508 Report by USDOJ and USGSA
[31] Bureau of Internet Accessibility

People who are deaf or hard of hearing require video tools to communicate with sign language or to use closed captioning. The use of video requires reliable and high-speed internet access. Poor latency and/or slower connections can present an insurmountable barrier to the use of telecommunication devices for people who are deaf or hard of hearing.

## 3.2.1.6 English language learners

Table 23: English Language Learners Snapshot

Snapshot: English language learners	
% of state population	5.7%
% with internet subscription	82.3% (**-9.8** p.p. gap)
% with high-speed broadband subscription	62.4% (**-18.4** p.p. gap)
% with access to device beyond smartphone	69.1% (**-19.8** p.p. gap)

Figure 5: Distribution of population of individuals with English-language barriers[32]

Share of New Jersey's population with a potential language barrier[33,34]
by Census Tract (% of census tract population >5 years old)

☐	0-20%
☐	21-40%
☐	41-60%
☐	61-77%
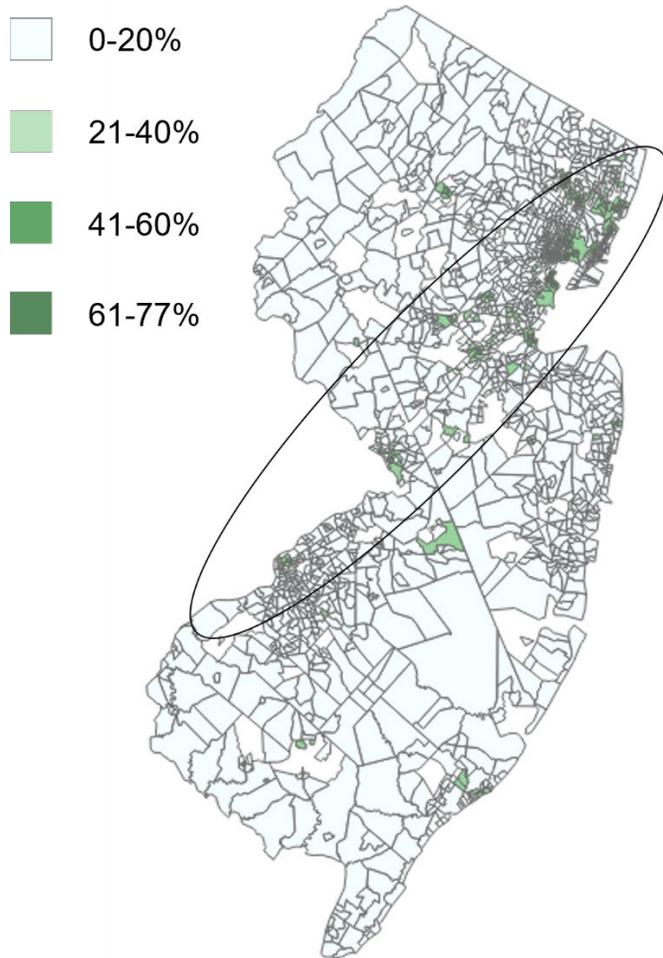
Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates (Table S1601); TIGER Shape Files 2010 Census Tracts; Tableau

In New Jersey, there are ~**200,000** households who are not fluent English speakers, making up ~**6**% of the state's population. Their rate of broadband adoption, **62.4**% lags the state's average of **80.7**%. Device access (excl. smartphones), at **69.1**%, similarly trails the state average of **88.9**%.

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[32] Language barrier is defined as population who self-reports to speak English less than "very well."
[33] Excludes population aged less than 5 years old.
[34] White Census Tracts indicate lack of sufficient data.

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Per Figure 5, individuals with language barriers appear to be concentrated in New Jersey's urban regions. This suggests OBC may better meet the needs of this population by concentrating investments in certain regions.

Barriers for English language-learners

One opportunity for digital equity for non-English speaking populations in New Jersey is the diversity of languages spoken in the state – which means the Digital Equity Plan must create or leverage resources to bridge gaps among speakers of many different languages. According to Census data, 32% of New Jerseyans speak a language other than English. Within this population, Spanish is the most spoken language (17%), followed by Chinese (incl. Mandarin and Cantonese) (1.4%), Portuguese (1.2%), and Hindi (1.0%).

Barrier 1: Accessibility of public resources (including digital equity resources) in non-English language options

The level of accessibility of New Jersey State websites and resources varies – and there is opportunity to develop written and digital materials to be accessible to non-English speakers by using translations.

Barrier 2: Higher likelihood of low-income status

Non-English-speaking populations are also more likely to be low-income. Forty-three percent of New Jerseyans with language barriers make $35,000 or less in annual household income compared to just 18% of New Jerseyans without a language barrier. As discussed earlier in this section, low-income households can face significant affordability challenges with respect to broadband access.

3.2.1.7 Communities of color

Table 24: Communities of color snapshot

Community	% of population	% with internet subscription	% with high-speed broadband subscription	% with access to a device beyond a smartphone
American Indian or Alaskan Native	0.1%	89.5% (**-2.6** p.p. gap)	71.9% (**-8.8%** p.p. gap)	84.9%
Asian	8.9%	97.6% (**+5.5** p.p.)	89.7% (**+9.0** p.p.)	96.1%
Black/African American	12.3%	89.5% (**-2.6** p.p. gap)	75.9% (**-4.8** p.p. gap)	84.8%
Two or more races	93.4%	93.4% (**+1.3** p.p.)	80.4% (**-0.3** p.p. gap)	91.0%
White	57.8%	92.4% (**+0.3** p.p.)	82.5% (**+1.8** p.p.)	90.6%
Hispanic/Latino	89.9%	89.9% (**-2.2** p.p. gap)	73.8% (**-6.9** p.p. gap)	82.5%
Some other race	92.5%	79.2% (**+0.4** p.p.)	79.7% (**-1.1** p.p. gap)	90.8%

In New Jersey, individuals who belong to communities of color make up **37%** of the state's population. New Jersey is home to a wide variety of minority groups, the largest of which are Black (13%) and Asian (10%).[35] Broadband adoption is lowest for **American Indian or Alaskan Natives, Hispanic/Latino**, and **Black/African American**. Device access (excl. smartphone) is lowest for **Hispanic/Latino, Black/African American, and American Indian or Alaskan Native.**

Barriers for communities of color

Barrier 1: Higher likelihood of low-income status

Communities of color also report lower incomes than the state median. For example, Latino Hispanic households report a 2021 median household income of ~$45,000, Native Hawaiian/Pacific Islander households reported ~$52,000, and Native American households

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[35] 2021 Census ACS data

reported ~$52,000 – all substantially less than the state median of ~$89,000. Further, minority households in New Jersey are more likely to fall under the 150% poverty threshold.

Table 25: Share of communities of color in "Covered Households"[36]

Race	Share of households earning <$35k annually
State average	**19.4%**
American Indian or Alaska Native	35%
Black/African American	27%
Some other race	22%
Two or more races	22%
White*	16%
Asian	11%

Further, communities of color are more likely to be non-English speaking and subject to the associated barriers – compounding the broadband access and adoption challenges.

3.2.1.8 Rural residents

Table 26: Rural resident snapshot

Snapshot: Rural residents	
% of state population	11.3%
% with internet subscription	91.9% (**-0.2** p.p. gap)
% with high-speed broadband subscription	79.2% (**-1.5** p.p. gap)
% with access to device beyond smartphone	87.1% (**-1.8** p.p. gap)

In New Jersey, individuals living in rural areas make up **11.3**% of the state's population. Their rate of broadband adoption, **79.2**%, lags the state's average of **80.7**%, while device access similarly trails the state average of **88.9**%.

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[36] Race categories are inclusive of Hispanic/Latino, per Census reporting.

Barriers for individuals in rural areas

Barrier 1: Infrastructure and provider availability

Many rural New Jerseyans simply lack the necessary infrastructure to access broadband. Fiber broadband availability in metro areas runs at 60%, far higher than the rural figure of 23%. Similarly, 4% of rural locations are classified as "unserved" (i.e., having less than 25/3 Mbps speed) compared to 2% of metro locations.[37] Additionally, rural areas may face fewer provider options. OBC has heard from community members that if a provider exists, it will often be the only one, or one of a limited few, available.

Barrier 2: Higher likelihood of being low income and having a disability

Cumberland county, which is rural, has highest percentage of low-income people in the state, at 15.7%. Further, Cape May, Cumberland and Salem counties in south Jersey are the three counties with the highest percentage of people living with a disability. Rural residents in these areas who are also low-income and/or have a disability may face compounded barriers to internet access, as discussed earlier in this section.

3.2.2 Broadband Adoption

Improving digital literacy

The New Jersey State Library has led a significant digital literacy program to-date, and the state Digital Equity Plan will build on this progress. Libraries are uniquely positioned to serve Covered Populations, as existing public library users tend to represent a diverse cross section of Covered Populations with the exception of the incarcerated.

Like many states, New Jersey has not conducted a comprehensive study of digital literacy across the state, nor does any national database aggregate digital literacy data on a state-by-state basis. Recognizing this in 2021, the New Jersey State Library made the NorthStar Digital Literacy Assessment tool available at no cost to all public libraries in New Jersey. One goal of implementing this assessment tool was to capture data on digital literacy across the state, including across many of the Covered Populations that are frequent visitors of public libraries. As of Fall 2023, 91 New Jersey libraries have adopted its use. Of those 75 have an active user base.
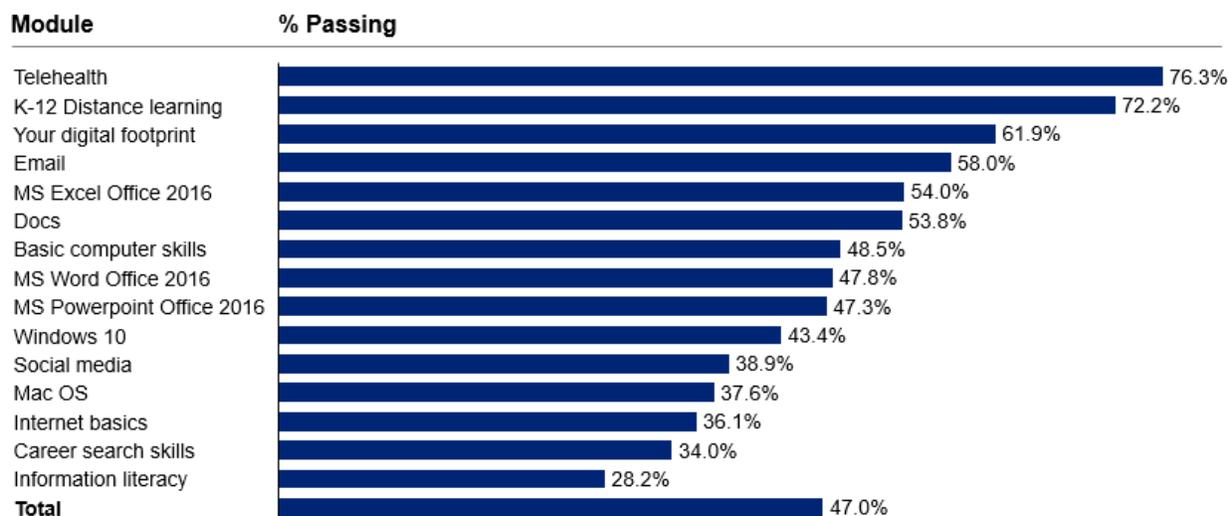
The Northstar assessments, written in English and Spanish at a 6th grade reading level, assess the participant's level of digital skills and literacy, in addition to providing associated curriculum and trainings that are specifically address skill building. Fourteen modules are available, covering topics such as Basic Computer Skills, Basic and Advanced Email, Excel, Information Literacy and more. The assessments are used in several ways: as a prelude to instructional program design so that instructors can tailor teaching to individual needs; to obtain a credential; documenting skills that can be used in job-seeking; or to simply teach a user how to write an email, use a telehealth application, or understand what online education

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[37] New Jersey 2010 Rural Areas (federal definition); data provided by FCC Broadband National Map as of Sep 26, 2023

is. Northstar has been well-received by library patrons and staff alike. It also offers a mechanism for gathering data.

Through New Jersey's public libraries, 1,992 users have been taken 8,346 assessments with an average pass rate of 47.0%. The module with the highest pass rate, at 76.3% is Telehealth. The lowest is Information Literacy, at just 28.2%. As shown in the accompanying chart, the results suggest a need for digital literacy resources and programs among library users.

Figure 6: NJSL NorthStar Digital Learning Assessment

Module	% Passing
Telehealth	76.3%
K-12 Distance learning	72.2%
Your digital footprint	61.9%
Email	58.0%
MS Excel Office 2016	54.0%
Docs	53.8%
Basic computer skills	48.5%
MS Word Office 2016	47.8%
MS Powerpoint Office 2016	47.3%
Windows 10	43.4%
Social media	38.9%
Mac OS	37.6%
Internet basics	36.1%
Career search skills	34.0%
Information literacy	28.2%
Total	47.0%

Source: New Jersey State Library Northstar Digital Literacy Assessment, N=9,994

As discussed in Section 2.3, while New Jersey does not have a baseline for digital literacy among Covered Populations today, the State will explore adopting a tool such as the Northstar assessment to collect this baseline and track progress.

Improving access to subscriptions and devices

See Section 3.1.0 for an overview of needs and barriers related to broadband subscriptions and device access for each Covered Population.

Improving multi-sector strategies to drive broadband adoption

See Section 2.2 for opportunities for New Jersey to leverage multi-sector strategies (tying to education, healthcare, adult education, wand other topics).

3.2.3 Broadband Affordability

Broadband affordability may be the barrier most likely to drive meaningful adoption of high-speed internet service. This is driven both by household income and by plan cost. A baseline analysis of plan affordability by OBC found that fiber-, cable-, or DSL-based internet plans in New Jersey as of October 2023 could cost anywhere between $20/month to $125+/month. Broadband is typically understood to be affordable if the cost does not exceed 2% of a family's monthly income. Illustratively, for a low-income family living on $30,000 a year, with a monthly

income of ~$2,500, any internet plan over $50/month would represent a significant cost-burden.

Supplementing these findings, New Jersey ran a statewide survey[38] in 2022 to better understand why residents are unable to, or do not, access internet. In this survey, OBC found that the second biggest reported driver for why residents were not subscribed to internet plans is affordability, after lack of broadband infrastructure (as Figure 8 shows, 39% of respondents said the main reason they did not have internet was that it was not available at their address). Across price points provided in the survey, only 59% of respondents recorded being able to purchase the speed of internet service that they need, with 15% of those respondents following up to qualify their answers or demonstrate difficulties in paying for their internet services.[39] A majority of respondents were unwilling to pay more for significantly improved service. The survey also found that 32% of survey respondents stated they do not have internet access at all because it is too expensive (Figure 8).

**Figure 7: New Jersey Surveyed Responses to Monthly Internet Cost**
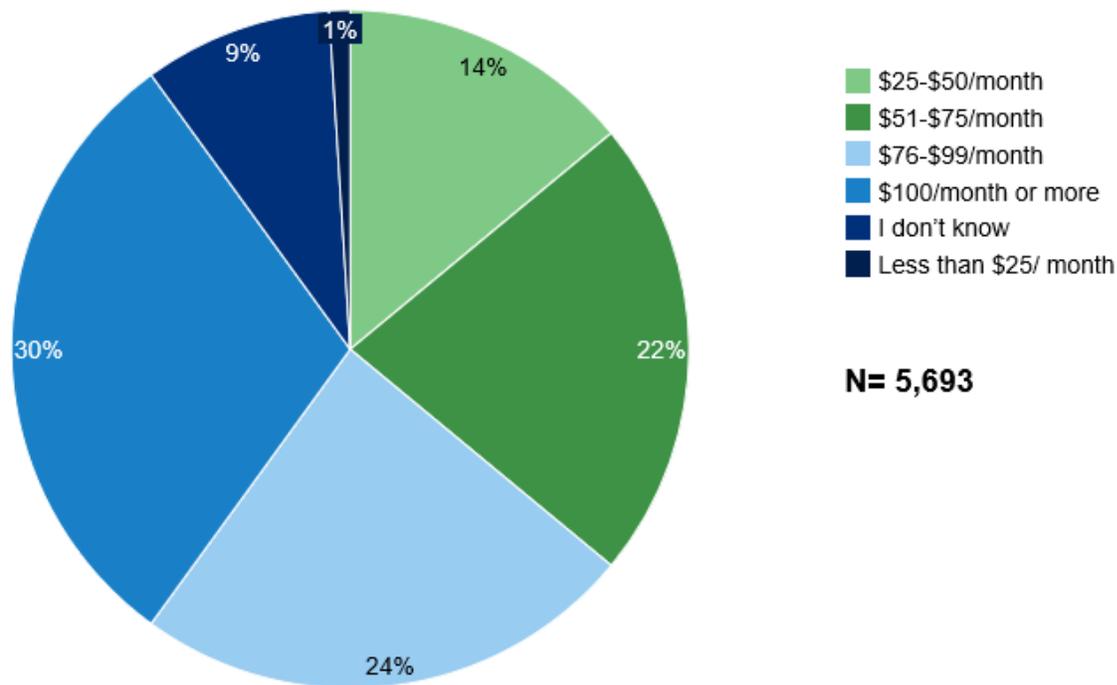
Source: New Jersey state-administered survey (ongoing; results as of August 2023)

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[38] Since 2022, New Jersey has conducted a survey for households and businesses across each of its counties, with a total of 5,963 responses. The survey asks questions on topics of broadband access, usage, and equity, including the affordability of broadband plans in the area.
[39] New Jersey BEAD Five Year Action Plan

Figure 8: New Jersey Surveyed Responses to "What is the main reason you do not have internet access at your address in your community?"
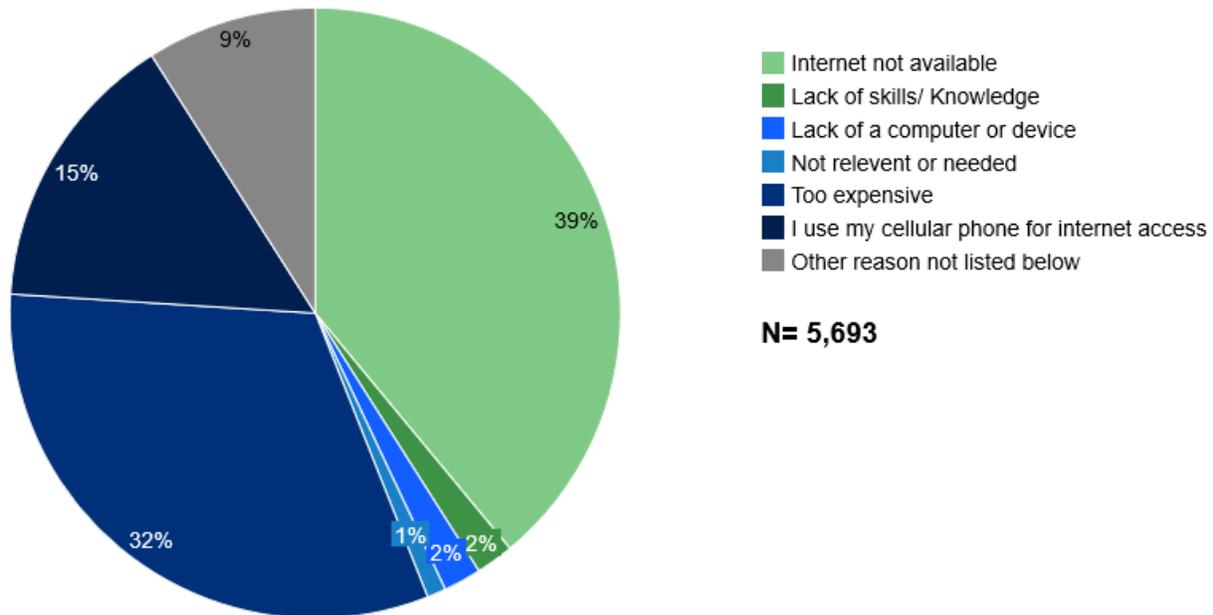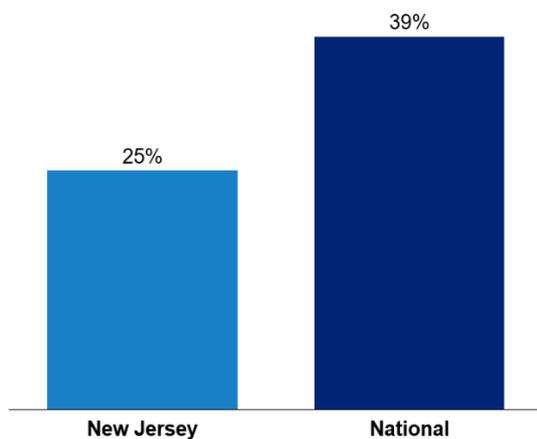

Source: New Jersey state-administered survey (ongoing; results as of August 2023)

To mitigate New Jersey's affordability challenge, improving Affordable Connectivity Program ("ACP") uptake is likely to be critical lever, particularly in the short-term. As discussed in Section 2.2, ACP is a federal program administered by the FCC that provides a discount of up to $30/month toward internet service for eligible households, and up to $75/month for households on qualifying Tribal lands.[40] According to August 2023 data from Education Superhighway, there are ~290,000 New Jersey households enrolled in ACP – or 25% of eligible households. As mentioned in Section 3.2.1.1, New Jersey lags the national standard in ACP enrollment for eligible households (25% vs. 39%).[41]
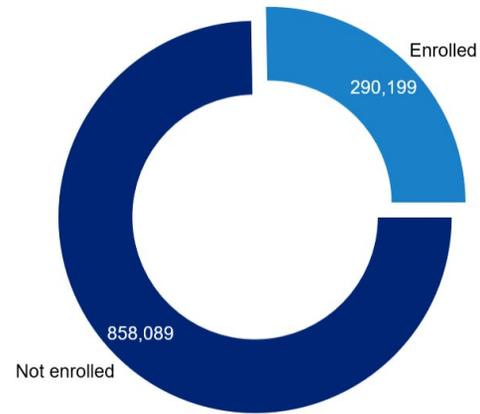
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[40] FCC ACP program
[41] Education Superhighway ACP analysis

Figure 9: New Jersey ACP Enrollment Compared to National Enrollment

*Source: New Jersey state-administered survey (ongoing. Results as of August 2023)*

Figure 10: New Jersey ACP Enrollment as a Share of Eligible Residents

Source: New Jersey state-administered survey (ongoing. Results as of August 2023)

Figure 11 shows ACP eligibility by New Jersey zip code. The highest concentration of eligible households are in South Jersey and in the greater Newark-NYC area.

Figure 11: New Jersey ACP Eligibility by Zip Code
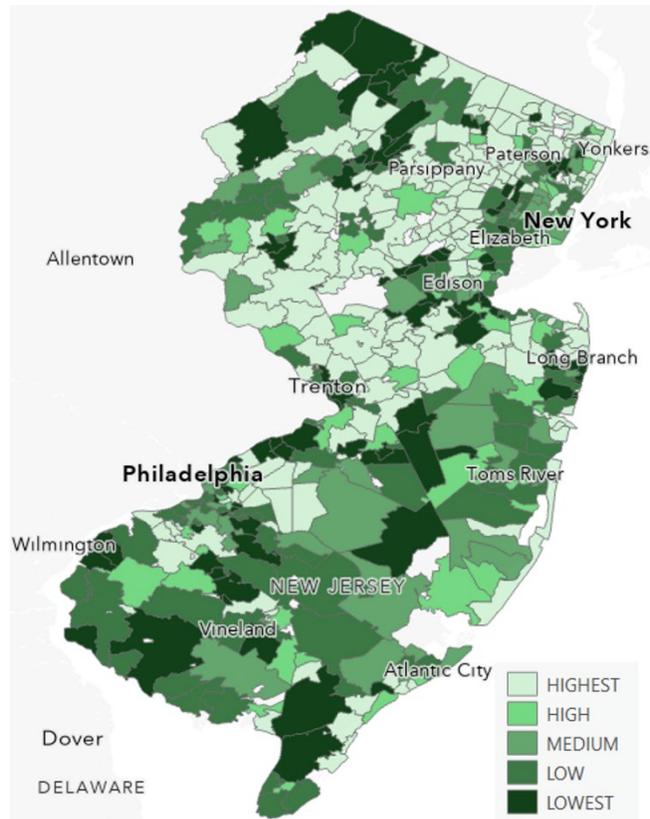
The Benton Institute, using data as of May 2023, provides a more detailed look at the state on a zip-code level, revealing which zip codes lag benchmark or "expected" ACP uptake levels given underlying characteristics. Based on analysis by the Benton Institute, New Jersey areas with the highest opportunity to improve uptake of ACP enrollment could be in South Jersey, Central Jersey, and the Greater Newark-NYC area where "enrollment performance" is rated "Lowest" and "Low" in Figure 12.

Figure 12: New Jersey ACP Enrollment Performance by Zip Code

Legend:
- <= 10%
- 11% - 20%
- 21% - 40%
- 41% - 60%
- >= 61%
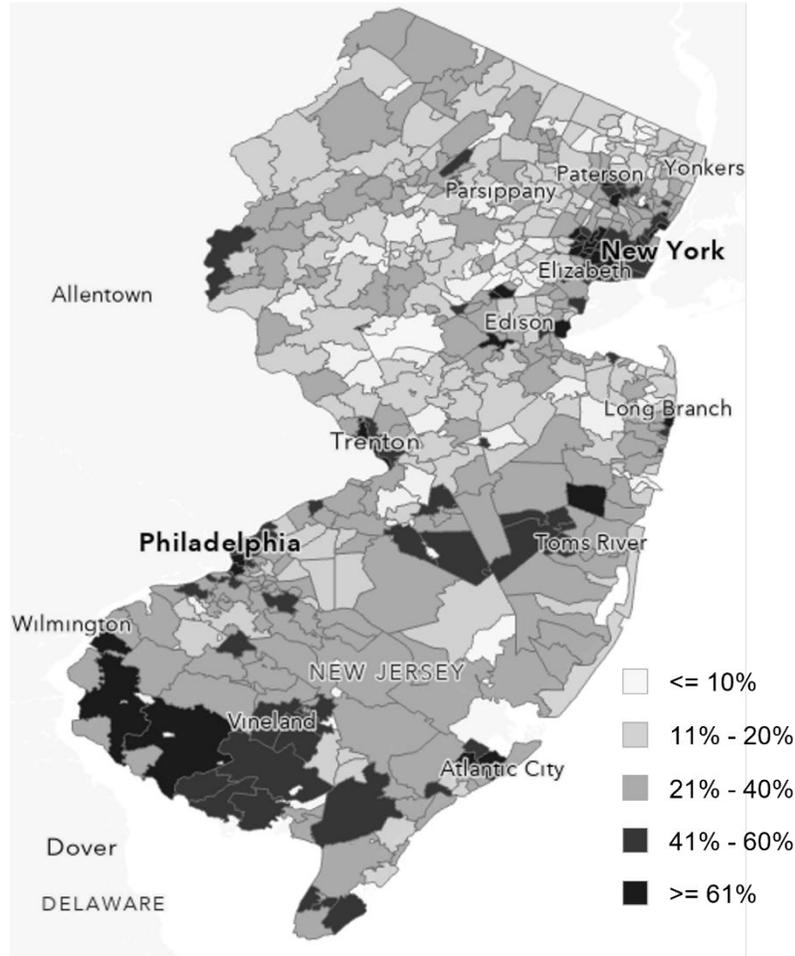
As a result of these findings, improving enrollment in ACP will be a major goal for the Digital Equity Plan. OBC notes that ACP is at risk of non-renewal by the federal government. As of October 27, 2023, there is congressional activity aimed at renewal and ACP extension may be resolved by the time this plan is submitted to NTIA. However, should the program expire, OBC will explore state-level options that reduce the cost of internet plans. (See Section 5.1 for proposed implementation activities to increase enrollment.)

For more detail on enrollment across New Jersey by town, see the Education Superhighway online tracker.

4 Collaboration and Stakeholder Engagement

4.1 Coordination and Outreach Strategy

> "In jury duty, citizens are directed to go to [an online] portal to respond to jury summons. This assumes the citizen has access to a portal, that they know how to navigate the portal and complete the submission process." - feedback from a stakeholder group representing the aging population

To date, OBC has engaged many stakeholders to understand the digital experiences of New Jerseyans, maintain partnerships with community organizations, and spread awareness about broadband programs. OBC has organized: (1) stakeholder meetings, (2) working groups, (3) publications and communications, and (4) public surveys. These stakeholder engagements were critical to, and informed the development of, the Digital Equity Plan. A list of organizations with which OBC collaborated as it developed the plan is included in the required Local Documentation Tracker attachment.

Stakeholder meetings

In December 2022, OBC kicked off a "Connect NJ Listening Tour," which involved 12 public in-person listening sessions and drew over 600 attendees. Each listening session was made possible through local partnerships. Over this period, OBC also conducted 120+ meetings with individuals and stakeholder groups representing all eight Covered Populations.

Figure 13: Connect NJ Listening Tour event at Sovereign Avenue School in Atlantic City

> "A [senior] bus driver was in an accident and needed several encounters with a [digital navigator] to file application for disability because of his lack of familiarity with digital interfaces, the number of agencies/insurance organization involved, and the complexity of his medical issues." -feedback from a stakeholder group representing the aging population

Figure 14 and 15: Connect NJ Listening Tour event at Curries Woods Community Center of Jersey City Housing Authority

Participants shared important insights during the discussions that have informed the Digital Equity Plan. There were several common themes that emerged through the sessions:

- Confidence in using technology is often low in people with barriers to broadband access. Across the board, participants cited the importance of having confidence to mitigate anxiety that can accompany needing to use technology to accomplish daily life activities.
- Residents reported frustration at lack of internet availability where they live, in addition to the high cost of broadband when it is available.
- Covered Populations expressed the need to invest in awareness of resources, including the Affordable Connectivity Program and computer refurbishing services, which would help to make broadband and device access affordable.
- The distribution of resources that support learning and engagement with technology is perceived to be inequitable across the state. People who live in north Jersey, for example, have many more public libraries available than do residents in south Jersey. This, in addition to the distance between libraries in south Jersey, means fewer people may have access the internet and digital literacy opportunities.
- Basic computer skills are needed not just for workforce and education, but also for civic participation and tasks of daily life. For example, the move to online application forms for government and other services creates a hardship for people without broadband access and digital skills. There is perception that online has replaced the more familiar telephone-based registrations to the detriment of some New Jersey residents that depend on telephone-based support.
- The lack of technical support is pronounced. Residents reported that even if they can find an affordable technology option, they can't locate support for repairs or replacements when those are needed.

In addition, OBC heard from focus groups designed around specific Covered Populations. Insights from two Covered Populations, individuals with disabilities and veterans, include:

People with disabilities

- Assistive technology tools could be prohibitively expensive, especially given that many individuals with disabilities lived on fixed incomes
- Broadband speeds are not always fast enough for software that supports users with disabilities (e.g., individuals who are deaf or hearing impaired and use sign language or closed captions, which requires a stronger broadband connection)
- Residents felt there was limited access to digital literacy classes and technical support systems tailored for assistive technology and software users

Veterans

- A group of veterans emphasized that they have different digital literacy needs post-service. Any plan needs to recognize unique needs of individuals and deliver personalized learning options
- Anxiety can pose a tremendous barrier to digital equity and is particularly evident in veterans who have been diagnosed with post-traumatic stress disorder
- The registration or enrollment process for programs like the Affordable Connectivity Program itself can be difficult to navigate for some veterans. This can lead to an overall frustration with the inability to access government services that are specifically for veterans

OBC collected similar insights from members of and organizations representing all Covered Populations, which informed the state's strategy and proposed activities. OBC will continue to solicit stakeholder feedback from Covered Populations through the public comment period and in virtual- and in-person events.

Working groups

OBC convened two working groups in December 2022 to inform the digital equity plan. These working groups included attendees from other state agencies, libraries, municipal government, nonprofit organizations, organizations representing Covered Populations, and community anchor institutions. The first working group focused on digital equity broadly and the other focused on workforce and employment issues and implications for digital equity. These working groups have met on a bi-weekly basis since January to provide insight on potential priorities and help build the state's asset inventory. The attendees of both working groups, many of which represent Covered Populations, is included in Table 27.

Table 27: OBC Working Groups

OBC Digital Equity Working Group	OBC Workforce Development Working Group
Black Churches for Digital Equity	Altice
Digital Inclusion Practitioners of New Jersey	Avatar Tech
Disability Rights NJ	Bandwidth Logic
Latino Action Network	Nettarius
LeadingAge New Jersey and Delaware	New Jersey Department of Labor
Literacy New Jersey	Newark Fiber
Montclair Gateway to Aging in Place	Rutgers University
New Jersey State Library	TeknoGRID
HUD - NJ	Wireless Infrastructure Association
SPAN Parent Advocacy Network	-
United Way of Northern New Jersey	-

Publications and communication

To raise awareness about existing digital equity resources and inform the state's Digital Equity Plan, OBC regularly sends newsletters to distribution lists. Public outreach includes monthly email updates through different state departments' distribution lists and press releases on the Office's website. Finally, OBC has also leveraged the public website to collect data for the Digital Equity Plan, including a survey that facilitated underlying research for the asset inventory provided in Section 3.1. OBC will continue to leverage the mediums to communicate with the broader public as the Digital Equity Plan evolves.

Figure 16: Events Portal on OBC Website

News and Events

Event on September 6, 2023
September 2023 New Jersey Internet for All Public Outreach Meeting

February 1, 2023
Board of Public Utilities | NJBPU President Appoints Director of Broadband Office

December 20, 2022
Biden-Harris Administration Awards More Than $6 Million to New Jersey in 'Internet for All' Planning Grants

December 13, 2022
Broadband Access Study Commission Encourages all Residents to Take Broadband Survey

Surveys

As described in Section 3.2 (Needs Assessment), New Jersey has conducted an ongoing broadband survey. Started in November 2022, the survey has received responses from a total

of 5,963 individuals and local businesses (as of August 2023) on questions about the current state of broadband and device access, affordability and usage, and to learn of potential areas of improvement in broadband access. Looking ahead to the Digital Equity Plan, OBC may continue to leverage surveys to assess the needs of Covered Populations and to identify potential solutions to identified challenges.

Next steps

OBC received significant feedback during the public comment period and has incorporated many suggestions in this version of the document. It plans to continue meeting with stakeholder groups, including:

- Nonprofit and advocacy organizations representing each of the Covered Populations to understand the specific needs of each population and develop responsive strategies
- Community anchor institutions, including libraries, senior centers, and school districts to explore partnership opportunities to accelerate internet access, affordability, and digital literacy
- New Jersey's higher education community, in particular 2- and 4-year institutions
- Internet service providers and device manufacturers to explore partnership opportunities to increase internet access and device affordability
- Leaders of existing digital equity programs and plans to align the State's plan with existing work

When convening stakeholders, OBC's intent will be to strengthen the capacity of existing networks to achieve digital equity by lending expertise and resources where possible. New Jersey has demonstrated a strength in local digital equity work; OBC's next challenge will be to ensure that the organizations working in this space have sufficient resources to share best practices. The proverb "it takes a village to raise a child" rings true for efforts to achieve digital equity in New Jersey. OBC recognizes that it will take the village of organizations working in the field to make sure that all residents have broadband access, appropriate devices and the skills and confidence to effectively use them. Within the state, OBC will coordinate implementation efforts with other agencies. See Section 5.1 for more detail on the interagency approach.

Covered Populations will continue to be engaged through periodic listening sessions to determine if progress is being made. On-the-ground feedback from those who are most impacted by the lack of broadband access will be critical to ensure that New Jersey is aligned to the needs of residents in its work.

Finally, OBC will invest in its community engagement capacity with future hires, including team members to lead on community outreach and engagement and intergovernmental affairs, as well as to support program design, operations and partnerships.

5 Implementation

This section outlines the steps New Jersey will take to bridge the digital divide in the state, outlining key stakeholders it will work with along the way and specific activities OBC proposes to support.

5.1 Implementation Strategy & Key Activities

Implementation strategy

OBC has proposed specific activities against each proposed strategy for the State Digital Equity Plan. This full inventory is in Section 5.2 and segmented into short-term (less than 1.5 years) and long-term (1.5+ years) activities.

The implementation plan is deliberately broad to ensure New Jersey comprehensively supports digital equity activities. However, OBC will also invest more resources where the state's needs are highest. For example, the Needs Assessment shows that low-income households face some of the highest gaps in device access and broadband adoption, driven by affordability challenges. OBC's implementation plan thus includes a significant emphasis on activities that can improve affordability – ranging from investing in improving ACP uptake to exploring new subsidies to make improve affordability, to promoting public-private partnerships to subsidize devices. Similarly, the Needs Assessment also shows there are high gaps for English language learners. Given this, the proposed activities include ensuring programs and outreach is conducted in multiple languages and in communities with a high share of non-English speakers. OBC will continue to monitor progress against these gaps as the Digital Equity Plan is implemented and will shift priorities depending on where needs are most significant.

Monitoring and reporting

In the implementation period, OBC will regularly update and evaluate the strategies, measurable objectives, and KPIs in the Digital Equity Plan. After the public comment period has concluded, OBC will revise the plan to incorporate public insights and stakeholder feedback. After NTIA approves the state's plan (anticipated by Spring '24), OBC will continue to solicit community feedback on potential priorities for investment.

As OBC begins to make grants and investments in digital equity initiatives, OBC will include program monitoring and reporting requirements to ensure that investments are tracking toward the target KPIs for Covered Populations. OBC will also publish an annual progress report card against the proposed goals and KPIs. Finally, OBC will also adhere to other monitoring and reporting requirements of the Digital Equity Act.

Use of Digital Equity Capacity Funds

There is a myriad of opportunity to coordinate the use of DE Capacity funds with BEAD resources to address gaps (noted below) in device access, affordability and digital literacy. With BEAD first addressing equity in access and deployment, its success will pave the way for using DE funds to improve access to devices and meaningful opportunities to foster digital literacy in covered populations. The Asset Inventory provides a start for identifying organizations that have a track record of success in areas of interest and for covered populations that could benefit from DE Capacity funds to extend and improve services while improving digital equity. The state's Capital Projects Fund investments (i.e., $33M to support

community-based access) will also provide an avenue for collaboration that will allow OBC to leverage new assets. DE Capacity funds will extend the reach beyond the CPF funding period. The DE Capacity funds available to New Jersey taken together with related existing programs, will be used effectively to close the digital divide in the state.

Coordination with other sources of funding

The New Jersey Digital Equity Plan will be integrated both with BEAD and other local digital equity plans.

To ensure the coordination of effort with BEAD, **OBC will implement both BEAD and the State Digital Equity Capacity Grant Program.** This will drive both complementarity and coordination, while supporting New Jersey as it seeks to put both funding sources, as well as others it may have access to, to the highest and best purpose. Further, OBC will continue to convene partner agencies, especially the New Jersey State Library and Governor's Office, as well as other invested agencies (e.g., the Department of Labor, Department of Education) on a regular cadence to track progress in implementation across both opportunities and to ensure coordination rather than overlap.

New Jersey expects a significant amount of funding from BEAD to be available for non-deployment activities. The State has proposed initial programs for 2024 that align with BEAD eligible uses. OBC will consider multiple factors in determining allocation of future BEAD funding, including, but not limited to a) how much funding will be available from BEAD after connecting unserved and underserved locations, and CAIs, b) how much funding New Jersey will receive through the State Digital Equity Capacity Grant Program.

Integration with existing plans

OBC will serve as a supporter and convener of digital equity programs and plans that already exist across the state. OBC has documented local plans including the Invest Newark Initiative, Jersey City Housing Authority, Atlantic City and City of Plainsfield broadband plans. (See Section 3.1.3 for more detail on existing plans in the state). OBC has also collaborated with several of these entities to learn from their planning and build on their progress. Moving forward, OBC will continue to engage municipalities and local government with their own digital equity plans to assess how to best serve as a complementary partner (e.g., by helping local partners scale their efforts).

Identifiable Gaps

While New Jersey's many actors in the digital equity sector bring tremendous strengths to the state's goal of achieving digital equity, there are notable gaps. Gaps in connectivity are a result of limited infrastructure in some areas of the state, including rural areas and subsidized housing in large cities. There are gaps in affordability resulting from the high cost of broadband for, especially, low-income residents. There is also both a perception and a reality that limited competition among internet service providers may be a factor in higher prices. Few of New Jersey's organizations provide digital literacy resources and services in languages other than English, which is a tremendous gap given the percent of the covered population for whom English language literacy is limited. Device access and Affordable Connectivity

programs are clustered in the northern part of the state, leaving Central and South Jersey with few resources for addressing the needs of covered populations prevalent in those areas.

Partnerships

OBC expects to partner with many different entities to execute the Digital Equity Plan. A non-exhaustive list of these potential partners can be found in Table 28.

Table 28: Potential partnerships

Organization type	Role in partnering with OBC	Representative organizations
Workforce agencies and organizations (state and local)	- Provide insight on employer needs and in-demand digital skills - Identify opportunities to leverage digital literacy standards to meet workforce requirements - Inform potential digital literacy credentialing systems - Support deployment of digital equity funding to provide trainings for Covered Populations - Participate in communities of practice	- Passaic County One-Stop Career Center - Greater Raritan Workforce Development Board Literacy Committee - NPower New Jersey
Labor and community-based organizations	- Provide insight to OBC on potential activities and areas of investment for the state - Pilot digital equity programs and scale them - Partner with state, other nonprofits, and industry to create new programs for affordability and device access - Participate in communities of practice	- NJ Public Library System - Computers4People - TDI Connect - HOPES Community Action Partnership

Organization type	Role in partnering with OBC	Representative organizations
Industry	(For providers) improve ACP uptake across New Jersey - Partner with state, nonprofits, and other industry leaders to create new programs for affordability and device access - Sponsor digital equity programs (e.g., providing additional capital) - Provide insight on employer needs and in-demand digital skills - Inform potential digital literacy credentialing systems and other digital equity program design	- Internet Service Providers (e.g., Altice, Comcast, AT&T) - ExxonMobil (Tools4Schools)
Higher education and training	- Develop and implement digital literacy programs to address individualized needs of Covered Populations - Offer degree-related or credentialed coursework in internet technology, adult learning, and industry-certifications related to digital technologies and literacy - Provide subject matter expertise in collaboration with CBOs	- Rutgers University (STEP) - Princeton University (STEP) - Raritan Valley Community College (STEP) - NorthStar Online Learning
Local Government (Municipalities and Counties)	- Propose digital equity frameworks specific to local needs - Consider opportunities for municipal broadband programs (e.g., Newark Fiber) - Create or promote opportunities for affordability and access - Promote use of human-centered and universal design in government websites	- City of Newark - Jersey City Housing Authority - Burlington County Connect Initiative

In addition to partnering with external stakeholders, OBC will continue to partner across state agencies. Agencies engaged to-date regarding the Digital Equity Plan include:

Table 29: State agencies engaged in Digital Equity planning

- New Jersey State Library (primary partner in creating the Digital Equity Plan)
- New Jersey Department of Community Affairs (NJ DCA)
- New Jersey Department of Education (NJ DOE)
- New Jersey Economic Development Authority (NJ EDA)
- New Jersey Office of Information Technology (NJ OIT)
- New Jersey Department of Corrections (NJ DOC)
- New Jersey Department of Labor (NJ DOL)
- New Jersey Department of State
- NJ-HUD
- Governor's Office

5.2 Timeline

The section below describes short and long-term activities that will enable New Jersey to execute the strategies articulated in Section 2.3.

Activity term

- **Short-term:** ~0 – 18 months
- **Long-term:** ~18 – 60 months

Table 30: Goal 1 implementation timeline

Goal 1: Everyone has access to affordable highspeed internet in their home and communities.

- Strategy 1.1**:** Build internet infrastructure to ensure New Jerseyans have internet access, focusing on where it is needed most
- Strategy 1.2: Increase broadband subscriptions among New Jersey residents

Measurable objectives (for additional detail, see Section 2.3, Table 5):

- Connect 100% of unserved locations for all Covered Populations (i.e., those with less than 25 Mbps downstream and 3 Mbps upstream today) by 2028

- Upgrade 100% of underserved locations for all Covered Populations (i.e., those with less than 100 Mbps down/ 20 Mbps up today) by 2028

- For all Covered Populations, New Jersey will target reducing the gap from the state average for broadband subscriptions. Short term improvement of 40% with long-term improvement leading to 100% of each Covered Population meeting or exceeding the state average by 2028. Targets to be revised annually as DEA funded programs are implemented.

Strategy	Term	Activities
1.1		Refer to New Jersey's Initial Proposal for more details.
1.2	Short Term	Identify if any geographic or demographic groups are not served by current ACP outreach efforts, leveraging Needs Assessment insights (e.g., significant gaps for low-income households in South Jersey and non-English speaking households in metro areas) Establish partnerships with ISPs, CAIs, and community-based organizations that target Covered Populations, particularly in parts of the state where uptake is lagging, to drive uptake of ACP (e.g., improve ease of sign-up) Partner with other state-based programs with income-eligibility requirements to drive uptake of ACP (including establishing agreements for data sharing and leveraging caseworkers to enroll ACP customers) Partner with utility companies to raise ACP awareness (e.g., via bill inserts) Invest in outreach and enrollment for Affordability Connectivity Program (e.g., statewide marketing campaign, toll-free call number)
	Long Term	Partner with Internet Service Providers to establish low-cost internet access plans for all Covered Populations and beyond the ACP (e.g., a state-sponsored plan), including ensuring plans are available in multiple languages Assess AmeriCorps opportunity to build capacity of nonprofit organizations and government agencies Assess potential for ACP Navigation Team to offer enrollment services at community locations including public housing, public libraries, senior centers among others – especially in communities where adoption gaps are highest Consider direct state investments in affordability leveraging eligible BEAD funds (or other federal, state, or private funds)

Table 31: Goal 2 Implementation Timeline

Goal 2: Ensure that every New Jerseyan has the confidence and competence they need to achieve their goals using computers and the internet.

- Strategy 2.1: Create digital skills standards and partnerships to implement them
- Strategy 2.2: Increase digital skills for key life activities and goals related to education, workforce/economic development, healthcare, civic engagement, cybersecurity, etc

- Strategy 2.3: Strengthen the collaboration between organizations that help build digital skills of New Jersey residents

Measurable objectives (for additional detail, see Section 2.3 – Table 6):

- Improvement from baseline of zero to passing score for Digital Equity Act funded digital literacy assessments (e.g., Northstar assessment), by each Covered Population. Short-term goal of 25% average passing for all Covered populations; long-term goal of 90% by 2028 with goals to be revised annually as DEA funded projects are implemented.

Strategy	Term	Activities

2.1	Short Term	• Using Digital Equity Act funds, convene a Digital Literacy Committee with the mission to recommend or create Digital Literacy standards, assessments, and credentials for all New Jersey residents
		
		  o Identify agency to lead Committee and establish goals and structure
		  o Set meeting cadence, agendas, and membership
		  o Research potential digital literacy credentials and standards and establish draft standards for public feedback
		  o Consider digital literacy approaches for residents with English-language barriers and incorporate into credential plans
		  o Consult with NJ Department of Education and NJ Department of Labor to ensure alignment of standards with state's graduation requirements
		  o Develop a plan to review current literacy assessments from programs already widely used by New Jersey organizations (e.g., NorthStar) as well as standardized approaches to create a uniform credentialing program(s) offered by community organizations in New Jersey

Strategy	Term	Activities
	Long Term	• Establish draft standards for assessment and credentialing • Identify a lead administering agency for the credential • Operate and refine credentialing program(s) • Establish mechanism for addressing emerging technologies in standards (e.g., information literacy related to artificial intelligence tools) • Conduct continuous improvement by ongoing evaluation and assessment of digital skills and credential standards
2.2	Short Term	• Identify, fund, and monitor programs that tailor digital literacy trainings to key applications (e.g., healthcare, economic development, workforce, education, etc.) and evaluate program performance; including the need for sustained training on various topics or for various populations, recognizing that that certain funding sources are one-time and not ongoing.
	Long Term	• Implement digital literacy standards, including the 2023 Senate 588 K-12 Information Literacy Standards • Drive measurement and adoption of standards • Create mechanisms for incorporating emerging digital literacy topics (e.g., information literary around artificial intelligence) on a regular basis • Support K-12 education system in increasing digital skills of students, including developing and piloting information literacy assessment tool

2.3	Short Term	• Launch regular convenings to build a "community of practice" for public and private sector organizations that contribute to building digital skills of New Jersey residents
		    o Identify a lead administering agency to coordinate meetings and agendas
		    o Call for members and convene practitioners on regular cadence

	Long Term	• Designate governance model for community of practice, including appointing leads to manage meetings and cultivate long-term relationships

Table 32: Goal 3 Implementation Timeline

Goal 3: Everyone has meaningful access to computers, software, assistive technologies, training, and technical support that help them to use the internet.

- Strategy 3.1: Increase the affordability of computers, software, assistive technologies, and technical support
- Strategy 3.2: Increase the availability of computers, software, assistive technologies, and technical support

- Strategy 3.3: Increase resources for device technical support to residents
- Strategy 3.4: Strengthen the collaboration between organizations that help build meaningful access to computers, software, assistive technologies, training, and technical support for New Jersey residents.

Measurable objectives (for additional detail, see Section 2.3, Table 7):

- For all Covered Populations, New Jersey will target reducing the gap from the state average for device access. *See Table 9.* Short term improvement of 40% with long-term improvement leading to 100% of each Covered Population meeting or exceeding the state average by 2028. Targets to be revised annually as DEA funded programs are implemented.

Strategy	Term	Activities
3.1	Short Term	• Provide funding (directly or through existing programs) to subsidize the cost of devices for Covered Populations
	Long Term	• Facilitate partnerships between and among public, nonprofit, and private organizations to increase the affordability of these devices (e.g., via donations, match programs, or public-private partnerships) – with emphasis on reach low-income households, non-English speaking households, and individuals with disabilities • Consider state-led device access programs in partnership with CBOs (e.g., state-led computer donation events and/or facilitation of refurbishing partnerships)
3.2	Short Term	• Provide funding for programs that make these resources available to Covered Populations (e.g., library-based device access programs) – with emphasis on reach low-income households, non-English speaking households, and individuals with disabilities • Invest in programs that use or feature digital navigators

Strategy	Term	Activities
	Long Term	• Facilitate partnerships between and among public, nonprofit, and private organizations to increase the availability of these devices (e.g., via donations, match programs, or public-private partnerships)
3.3	Short Term	• Market the availability of cybersecurity guidance and training to residents (either through direct funding or facilitated partnerships), including in multiple languages
	Long Term	• Create partnerships to provide technical support (e.g., community-based helpdesks, written materials to Covered Populations (e.g., partnerships with IT training programs to provide public technical assistance), including in multiple languages and with awareness of disability-related technical support needs
3.4	Short Term	• Launch regular convenings to build a "community of practice" for public and private sector organizations that contribute to increasing meaningful access of New Jersey residents
	Long Term	• Designate governance model for community of practice, including appointing leads to manage meetings and cultivate long-term relationships

Table 33: Goal 4 Implementation Timeline

Goal 4: Everyone has efficient and effective digital experiences with state government to obtain information or services.

- Strategy 4.1: Simplify the "front end" resident experience to access government services online, using principles of human-centered design
- Strategy 4.2: Collaborate with state agencies to improve "back end" data infrastructure, data management policies and practices, and cybersecurity of state websites

Measurable objectives (for additional detail, see Section 2.3, Table 8):

- Share of state agency websites fully implementing WCAG 2.0 Level AA guidelines
- Share of state agency websites that are mobile-responsive
- Share of state program application forms that are fully digitized
- Share of state websites adhering to human-centered design best practices

For all, assume a baseline of zero using Digital Equity Act funds and a goal of 95% of funded projects in this category meeting their objectives.

Strategy	Term	Activities
4.1	Short Term	- Continue to implement WCAG 2.0 Level AA guidelines and regularly assess compliance - Continue to conduct field assessments of user experience with select state websites to assess areas for improvement - Identify internal capability gaps for user experience and technical design and draft a plan to improve it - Conduct ongoing audits of state websites for compliance with WCAG 2.0 Level AA accessibility

Strategy	Term	Activities
	Long Term	- Allocate pilot funding to improve resident experience of select online government services that are used by a disproportionate number of Covered Populations (e.g., income-based qualification programs, business or professional license applications) and - Explore piloting a centralized service hub for selected income-based qualification programs that serve a high proportion of Covered Populations - Support agencies in developing digitized and fully protected online application forms - Set up interagency work group to assess agency compliance with web development guidelines and identify gaps in the use of human-centered design - Work with the Civil Service Commission to establish job classification series for human-centered user experience specialist - Establish community of practice across state agencies to provide training and support for website design and development using best practices - Implement industry standard cybersecurity protocols on all state websites and regularly assess compliance
4.2	Short Term	- Set up interagency task force focused on sharing best practices to manage and protect resident data and streamline digital processes for residents (e.g., leveraging the National Verifier to facilitate ACP sign up, sharing data to identify and pre-qualify residents for services) - Assess data governance processes across data warehousing, infrastructure, applications, and systems management
	Long Term	- Build data infrastructure and tools to increase efficiency in access to government systems for residents - Partner with private sector data providers to stand up internal data management and warehousing capabilities and new applications, including security protections and protocols

6 Conclusion

New Jersey has an opportunity to pursue new digital equity investments that will have important, material consequences for New Jersey residents. Digital equity funds will help residents pursue education, mitigate against social isolation, improve health outcomes, obtain jobs, and grow their businesses – among other important goals.

In close collaboration with BEAD, OBC can simultaneously work to ensure that all residents have an affordable, high-speed broadband connection, meaningful access to appropriate devices, and the skills they need to navigate the internet and digital services according to their goals.

7 Appendices

7.1 Definitions

Accessibility: internet and devices are accessible if users can access and use them without prohibitive barriers

Adoption: the state in which users are able to leverage digital tools to the fullest extent

Affordability: the ability of an individual or household to purchase a broadband subscription or device

Affordable Connectivity Program (ACP): A Federal Communications Commission (FCC) benefit program that helps ensure qualifying households can afford broadband and devices

Broadband: Broadband includes several high-speed transmission technologies, such as fiber, wireless, satellite, digital subscriber line and cable. The Federal Communications Commission (FCC) broadband capability requires consumers to have access to actual download speeds of at least 25 Mbps and actual upload speeds of at least 3 Mbps[42]

Community Anchor Institution (CAI): A public school, a public or multi-family housing authority, a library, a medical or healthcare provider, a community college or other institution of higher education, a state library agency, and any other nonprofit or governmental community support organization

Device access: either ownership or the ability to use Internet-capable electronic equipment, such as a, laptop, tablet, or personal computer. Residents cannot always undertake the same activities on a smartphone as on a laptop (e.g., writing a resume is very difficult), and for this reason, the State is generally focused on ownership of Devices such as laptops, tablets, or personal computers.

Digital literacy: the skills associated with using technology to enable users to find, evaluate, organize, create, and communicate information

Disability: with respect to an individual:

1. A physical or mental impairment that substantially limits one or more major life activities of such individual;
2. A record of such an impairment; or
3. Being regarded as having such an impairment

Digital equity: The condition in which individuals and communities have the information technology capacity that is needed for full participation in society and the economy

Digital inclusion: The activities that are necessary to ensure that all individuals have access to, and the use of, affordable information and communication technologies, such as—

a. Reliable fixed and wireless broadband internet service;

b. Internet-enabled devices that meet the needs of the user; and

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"How Fast is Broadband" from Broadbandusa.gov FAQs

c. Applications and online content designed to enable and encourage self-sufficiency, participation, and collaboration; and

2. Includes—

a. Obtaining access to digital literacy training;

b. The provision of quality technical support; and

c. Obtaining basic awareness of measures to ensure online privacy and cybersecurity

Digital Navigators: Trusted guides who assist community members in internet adoption and the use of computing devices. Digital navigation services include ongoing assistance with affordable internet access, device acquisition, technical skills, and application support

Internet access: refers to whether a geographic area, residence, or organization can access the internet through infrastructure and connectivity

Underserved location: The term "underserved location" means a broadband-serviceable location that is (a) not an unserved location, and (b) that the Broadband DATA Maps show as lacking access to Reliable Broadband Service offered with—(i) a speed of not less than 100 Mbps for downloads; and (ii) a speed of not less than 20 Mbps for uploads; and (iii) latency less than or equal to 100 milliseconds.

Unserved location: The term "unserved location" means a broadband-serviceable location that the Broadband DATA Maps show as

 (a) having no access to broadband service, or
 (b) lacking access to Reliable Broadband Service offered with—
  i. a speed of not less than 25 Mbps for downloads; and
  ii. a speed of not less than 3 Mbps for uploads; and
  iii. latency less than or equal to 100 milliseconds.

Universal design: the process of designing products, services, and environments to be used by people with the widest possible range of abilities, cultural backgrounds, and other characteristics. This is distinct from accessible design, which focuses on making products more useful for people with disabilities.[43]

7.2 Methodology for Needs Assessment

The analysis for the Needs Assessment (Section 3.2) is based on public data available from the US Census (Table S2801) which provides information on overall device access and broadband subscription rates in New Jersey. This draft document uses the 1-year ACS data from 2021 to assess statewide totals. This draft document uses American Community Survey (ACS), 1-year estimates from 2021 to assess statewide totals.

The analysis also leverages 2021 data from IPUMS USA to assess device access and broadband subscription rates by Covered Population. The following variables were used:

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[43] [BOIA blog post "Universal Design an Introduction for Digital Content Creators"](#)

Table 34: Needs assessment methodology

Metric	IPUMS variable(s)	American Community Survey (ACS) 2021 Question	Methodology to estimate metric
Share of Covered Population with access to any device	CILAPTOP CISMRTPHN CITABLET CIOTHCOMP	CILAPTOP At this house, apartment, or mobile home- do you or any member of this household own or use any of the following types of computers? a) Desktop or laptop Yes or No CISMRTPHN At this house, apartment, or mobile home- do you or any member of this household own or use any of the following types of computers? b) Smartphone Yes or No CITABLET At this house, apartment, or mobile home- do you or any member of this household own or use any of the following types of computers? c) Tablet or other portable wireless computer Yes or No CIOTHCOMP 8. At this house, apartment, or mobile home- do you or any member of this household own or use any of the following types of computers? d) Some other type of computer Yes, No, or Specify	Household has access to at least one device of any kind IF: CILAPTOP = 1; OR CISMRTPHN = 1 OR CITABLET = 1; OR CIOTHCOMP = 1. Share of households with at least one device equals number of households that meet above criteria divided by total households in the state NOT including households in group quarters because they are considered "not in the universe" of these variables by the Census Bureau.

Metric	IPUMS variable(s)	American Community Survey (ACS) 2021 Question	Methodology to estimate metric
Share of Covered Population with access to only a smartphone device	CILAPTOP CISMRTPHN CITABLET CIOTHCOMP	**CILAPTOP** At this house, apartment, or mobile home- do you or any member of this household own or use any of the following types of computers? a) Desktop or laptop Yes or No **CISMRTPHN** At this house, apartment, or mobile home- do you or any member of this household own or use any of the following types of computers? b) Smartphone Yes or No **CITABLET** At this house, apartment, or mobile home- do you or any member of this household own or use any of the following types of computers? c) Tablet or other portable wireless computer Yes or No **CIOTHCOMP** 8. At this house, apartment, or mobile home- do you or any member of this household own or use any of the following types of computers? d) Some other type of computer Yes, No, or Specify	Household has access to a smartphone only IF: CISMRTPHN = 1; AND CILAPTOP = 2; AND CITABLET = 2; AND CIOTHCOMP = 2. Share of households with a smartphone only equals number of households that meet above criteria divided by total households in the state NOT including households in group quarters because they are considered "not in the universe" of these variables by the Census Bureau.

Metric	IPUMS variable(s)	American Community Survey (ACS) 2021 Question	Methodology to estimate metric
Share of Covered Population with an internet subscription	CINETHH	At this house, apartment, or mobile home - do you or any member of this household have access to the internet? Yes, by paying a cell phone company or Internet service provider Yes, without paying a cell phone company of Internet service provider -> SKIP to question 11 No access to the Internet at this house, apartment, or mobile home -> SKIP to question 11	Household has an internet subscription IF CINETHH = 1. Share of households with an internet subscription equals number of households that meet above criteria divided by total households in the state NOT including households who are in group quarters because they are considered "not in the universe" of this variable by the Census Bureau.
Share of Covered Population with a high-speed internet subscription (cable, fiber optic, or DSL)	CIHISPEED	Do you or any member of this household have access to the Internet using a - b) broadband (high speed) Internet service such as cable, fiber optic, or DSL service installed in this household? Yes or No	Household has a high-speed internet subscription (cable, fiber optic, or DSL) if CIHISPEED = 1. Share of households with a high-speed internet subscription equals number of households that meet above criteria divided by total households in the state NOT including households who are in group quarters because they are considered "not in the universe" of this variable by the ACS *and* NOT including households who are vacant or that have no paid access to the internet.

Finally, to assess device access rates and broadband subscription rates for rural residents (Covered Population #8), OBC leveraged NJ Department of Health's classifications of rural and non-rural counties, based on a USDA-aligned definition that any county and/or municipality with an average density of fewer than 500 residents per square mile is considered rural. Device access and broadband subscription rate analysis was performed on the county-level.

Table 35: New Jersey county classifications

County	Classification
Atlantic County	Rural
Bergen County	Not Rural
Burlington County	Not Rural
Camden County	Not Rural
Cape May County	Rural
Cumberland County	Rural
Essex County	Not Rural
Gloucester County	Not Rural
Hudson County	Not Rural
Hunterdon County	Rural
Mercer County	Not Rural
Middlesex County	Not Rural
Monmouth County	Not Rural
Morris County	Not Rural
Ocean County	Not Rural
Passaic County	Not Rural
Salem County	Rural
Somerset County	Not Rural

County	Classification
Sussex County	Rural
Union County	Not Rural
Warren County	Rural

This analysis showed ~11% of New Jersey households qualify as rural. 2021 Census ACS 1 year data (Table S2801) was then applied to determine device access and broadband subscription rates.