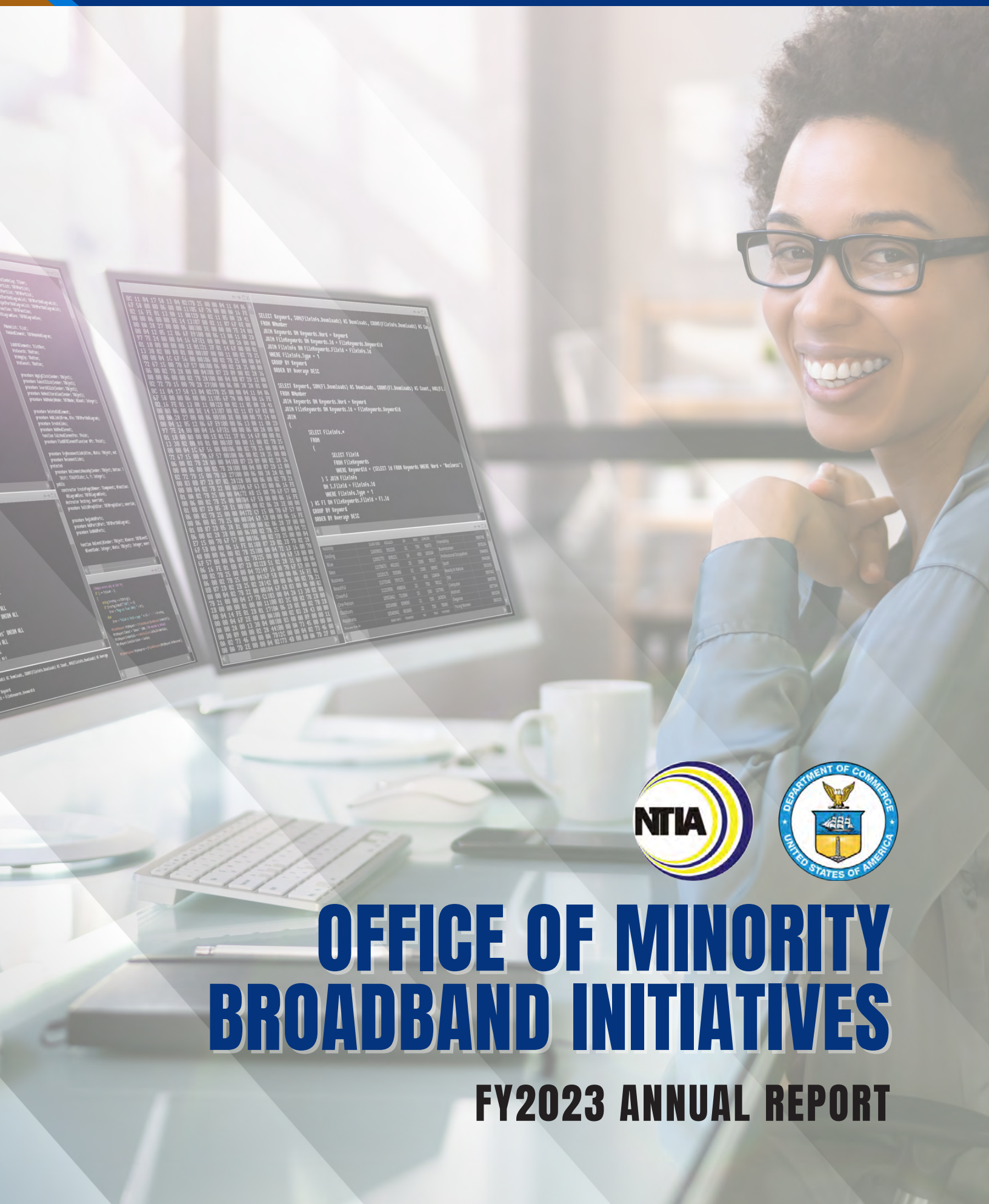

OFFICE OF MINORITY BROADBAND INITIATIVES

FY2023 ANNUAL REPORT

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Executive Summary

The journey towards high-speed Internet service for everyone in America accelerates when a long-standing anchor institution enters the emerging digital economy. Through the Office of Minority Broadband Initiatives (OMBI), National Telecommunications and Information Administration (NTIA) directly addresses the lack of high-speed Internet access, connectivity, adoption, and equity at our nation's Historically Black Colleges and Universities (HBCUs), Tribal Colleges and Universities (TCUs), and Minority Serving Institutions (MSIs). OMBI works through these anchor institutions to impact their surrounding anchor communities. Anchor institutions invest in their communities as a way of helping them join nationwide efforts to make sure no one is left out or left behind in terms of having access to high-speed Internet service. The journey of bridging the digital divide for all communities accelerates when an anchor institution enters the digital economy. In the 21st century across all communities whether rural, urban, or Tribal, high-speed Internet access is not a luxury, it is a necessity. For colleges and universities as anchor institutions, this transformative event resonates like a stone striking the water's surface, causing ripples that impact the lives of students, influencing the local community's prospects, offering opportunities for industry collaborators, and sowing seeds in the national economy.

The anchor institution, whether an HBCU, MSI, or TCU, stands at the heart of this transformation. Its capacity to invest in broadband infrastructure to deliver high-speed Internet service and safeguard these investments through rigorous planning and the acquisition of skilled, technical personnel gives momentum to this change. When an anchor institution designs and deploys training, curriculum, and job placement for their marginalized students, it constructs a pathway to a digital future for both the institution and the surrounding anchor community.

There remain persistent disparities in the readiness and capacity among colleges and universities in terms of Internet access, availability of computer devices and training, and availability of an IT workforce. In spite of this digital divide, anchor institutions are resilient and resourceful; they find ways to work with the public and stakeholders to develop local community solutions to overcome the barriers the anchor institutions face.

Congress has directed NTIA to provide grants through the Connecting Minority Communities (CMC) Pilot Program to HBCUs, TCUs, and MSIs. These grants facilitate educational instruction and learning, including through remote instruction. In addition, these grants support consortia including Minority Business Enterprises (MBEs) and tax-exempt 501(c)(3) organizations.

CMC funds are allocated to:

- Subsidize high-speed Internet access service connections through hotspots, laptops, and other devices.
- Improve infrastructure and IT capacity at the institutions.
- Provide workforce training including credentials in cybersecurity, fiber-optic installation. computer skills training and more.
- Enhance digital literacy skills for students, community members, and anchor institution staff.
- Furnish technology hubs.
- Provide internships and apprenticeships.
- Expand online learning capacity at anchor institutions.

Congress has also directed OMBI to help anchor institutions develop collaborations to expand broadband access, increase digital literacy, and provide devices in anchor communities. To make this happen, OMBI collaborates with federal agencies that carry out Internet access service support programs; state, local and Tribal governments; and stakeholders in the communications, education, business, and technology fields. This symbiotic rapport between anchor institutions and their communities was an intentional and essential element of the Consolidated Appropriations Act, 2021 (CAA 2021), the legislation establishing the National Telecommunications and Information Administration's (NTIA) Office of Minority Broadband Initiatives.

This progress report provides context to OMBI's mission to expand high-speed Internet access for anchor institutions and their underserved, minority communities. It also spotlights OMBI's pivotal role in advocating for and monitoring progress towards this objective. Additionally, and a key achievement in 2023, OMBI successfully launched the Connecting Minority Communities (CMC) Pilot Program.

The report chronicles this important initiative and its achievement: fully obligating $268 million to 93 institutions across 36 states and territories in its debut year.

As part of the mission context, the report details the challenge of the "Triple A" barriers: Availability, Affordability, and Adoption. Although these significant challenges were introduced in the previous year's report, this edition shifts the dialogue from challenges to capabilities. Early grantee achievements in overcoming these barriers through partnerships, planning, and innovation take center stage.

These preliminary vignettes, with their promising but fledgling outcomes, foreshadow greater things ahead. OMBI has paved the way for a more comprehensive progress evaluation by adopting Key Performance Indicators (KPIs) to gauge mission success. The Office also aligns its metrics with NTIA's logic model to appraise the effectiveness of broadband initiatives. This holistic framework not only allows OMBI to showcase measurable advancement towards mission objectives in the 2024 report, but also to unveil best practices and possibilities for enhancement.

Advancements in tackling obstacles to high-speed Internet services, along with the successful practices employed, extend benefits to all anchor institutions. These benefits accrue to CMC grantees or the numerous peer institutions that weren't selected. This new insight shows the potential of OMBI's CMC Pilot Program and takes a critical stride towards achieving access to high-speed Internet services for everyone.

Introduction

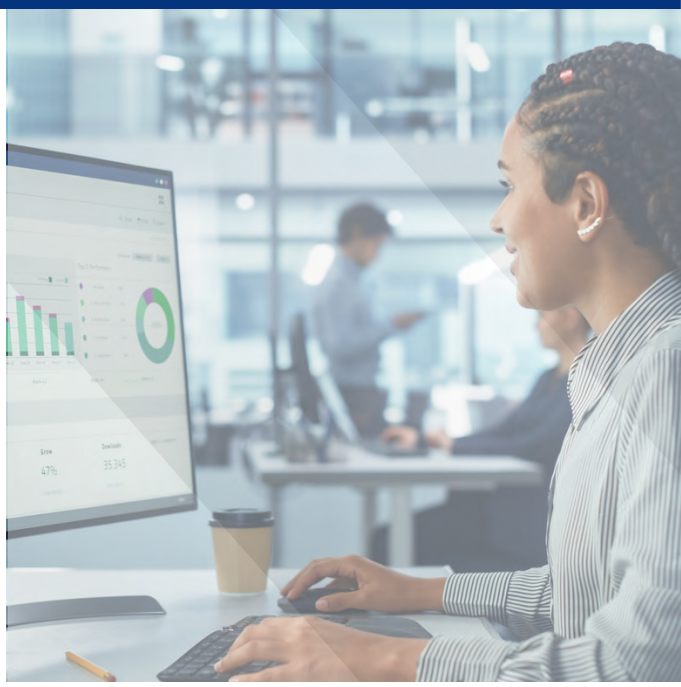
Economic progress in the United States relies on all communities having access to affordable, reliable, high-speed Internet. However, with the advancement of digital technologies, evidence shows a significant digital divide. The divide expands as the public grapples with accessing affordable and dependable Internet services, obtaining devices, and constantly adapting to use the Internet and computers for an array of tasks. This lack of access, use, and digital skills prevents these communities from achieving their social and economic potential.

In a June 26, 2023, White House Briefing, the Biden-Harris Administration announced:

"High-speed Internet is no longer a luxury – it is necessary for Americans to do their jobs, to participate equally in school, access health care, and to stay connected with family and friends. Yet, more than 8.5 million households and small businesses are in areas where there is no high-speed Internet infrastructure, and millions more struggle with limited or unreliable Internet options. Just like Franklin Delano Roosevelt's Rural Electrification Act brought electricity to nearly every home and farm in America, President Biden and Vice President Harris are delivering on their historic commitment to connect everyone in America to reliable, affordable high-speed Internet by the end of the decade."

Strategies to expand access to the Internet require multiple stakeholders to work together to provide Internet services, devices and training and digital navigation. To address these barriers, the Internet for All initiative is investing over $65 billion toward the goal of connecting every American to affordable, reliable, high-speed Internet. Four agencies are delivering programs to achieve this goal: NTIA, the Federal Communications Commission (FCC), the Department of the Treasury, and the Department of Agriculture.

Through the Consolidated Appropriations Act of 2021 (CAA 2021), the Assistant Secretary established within the National Telecommunications and Information Administration the Office of Minority Broadband Initiatives (OMBI) in August 2021 to improve America's economic competitiveness and create the conditions for economic growth and opportunity for all communities.



The CAA 2021 directs the Office to lead NTIA's engagement with stakeholders to expand access to the Internet in certain anchor communities nationwide. The approach centers on the Office to collaborate with stakeholders in federal, state, local, and Tribal governments; HBCUs, TCUs, MSIs; and stakeholders in the communications, education, business, and technology fields. OMBI is part of NTIA's coordinated efforts with the Infrastructure Investments and Jobs Act (IIJA) including the Broadband Equity, Access, and Deployment (BEAD) Program, the Digital Equity Act (DE) Programs, and the Middle Mile Grant Programs, to connect all Americans to high-speed, affordable, and reliable Internet.

The Office's strategy focuses on HBCUs, TCUs, and MSIs as anchor institutions. Recently, with the advent and growth of broadband, the promise of the economic potential of broadband has been connected to anchor institutions in general and higher education anchors in particular. According to William Lehr, in his 2012 article *Anchor Institutions Help Secure Broadband's Promise,* "ensuring access to broadband by anchor institutions is critically important for enabling anchor institutions to achieve their mission goals and will help realize the benefits of broadband for our economy and society and for meeting the public obligation to provide universal access to broadband" (p. 1-2).

Anchor institutions are deeply rooted in their communities and are primed to serve as catalysts for the expansion of broadband access in their local communities. The current and future health of America's 21st Century Economy depends directly on how broadly and deeply Americans reach a new level of literacy — 21st Century Literacy — that includes strong academic skills, thinking, reasoning, teamwork skills, and proficiency in using technology (21st Century Workforce Commission, 2000). Investments in these anchor institutions produce ripple effects that reverberate across their communities, states, and ultimately the nation.

OMBI works to advance digital equity through three pillars to expand Internet access, promote digital literacy skills, and recommend how to leverage investment in infrastructure. These pillars create the conditions for economic growth and opportunity for all communities. The CAA[1] directs OMBI to:

1 Collaborate with Key Stakeholders

OMBI collaborates with: 1) Federal agencies that carry out broadband Internet access service support programs; 2) State, local and Tribal governments; 3) historically Black colleges or universities, Tribal Colleges or Universities, Minority Serving Institutions; and, 4) Stakeholders in the communications, education, business, and technology fields. Through these collaborations, OMBI facilitates knowledge sharing and thought leadership to improve Internet access and adoption among minority communities. OMBI's collaborations promote initiatives relating to broadband Internet access service connectivity and digital opportunities of anchor communities; develop recommendations to promote the rapid, expanded deployment of broadband Internet access service to unserved, HBCUs, TCUs, MSIs, and anchor communities; and, promote activities that would accelerate the adoption of broadband Internet access service including equipment or personnel necessary to access and use the service.

2 Build Capacity of Anchor Institutions and their Communities

OMBI provides technical assistance to empower applicants, grantees, and collaborating entities with the appropriate tools and resources to promote professional development opportunity partnerships. OMBI supports HBCUs, TCUs, and MSIs to leverage investment in broadband Internet infrastructure to expand access for HBCUs, TCUs, and MSIs; to engage minority communities in cultivating the conditions for economic growth and opportunity for all communities; and to support their navigation of federal programs dealing with broadband Internet access.

3 Administer the Connecting Minority Communities (CMC) Pilot Program

OMBI provides funding for Internet access, technology, and personnel in an effort to close the digital divide at HBCU, TCU, and MSI anchor institutions and within their communities. The CMC Pilot Program grants are currently in the post award phase, providing technical assistance and programmatic oversight of the awards. The funding from this grant program was made on a rolling basis, awarding $268 million in grants to 93 anchor institutions including: 43 Historically Black Colleges and Universities, 31 Hispanic Serving Institutions, 21 Minority Serving Institutions, and 5 Tribal Colleges and Universities.

This report discusses OMBI's work over the last year to promote equitable broadband access and adoption, and its efforts to connect HBCUs, TCUs, and MSIs, along with their anchor communities, to high-speed, affordable, reliable Internet and increase the digital skills of individuals within anchor communities.

[1] See page 10 for relevant excerpt of the Consolidated Appropriations Act of 2021.

Indicators of Digital Use

Access to affordable, reliable, high-speed internet

Home internet connection

1 in 5 American households aren't connected to the Internet.

Modern life

20%

20% of Americans are not able to fully participate in modern life.

Internet subscriptions and device usage

Use by income

50%

50% of people with family incomes below $25,000 annually lived in households with both fixed and mobile connections.

80%

80% of people with family incomes greater than $100,000 annually lived in households with both fixed and mobile connections.

At home use by ethnicity

78%
78% Whites

70%
70% Hispanics

71%
71% Blacks

Device type & purpose

PC or tablet

71% White Non-Hispanics	57% Black Americans
52% Native Americans	54% Hispanics

75%

75% of college students enrolled in at least one online course in 2020.

Digital skills

31%

31% of currently employed American workers ages 16-64 have no or limited digital skills.

Sources:
National Telecommunications and Information Administration. (2021). *Internet Use Survey*. NTIA
Institute of Education Sciences, National Center for Education Statistics. (2017). *Highlights of the 2017 U.S. PIAAC Results Web Report (NCES 2020-777)*
U.S. Department of Education
Hecker, I., & Briggs, A. (2021, January). *Overlooked and Underconnected*. Urban Institute.

The OMBI Story

The CAA 2021 legislation requires that "the Assistant Secretary shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives a report that for the year covered by the report that details the work of the Office in expanding access to fixed and mobile broadband Internet access service and identifies barriers to providing access to broadband Internet access service at HBCUs, TCUs, MSIs, and within their anchor communities." This report is the second annual Congressional report of the Office of Minority Broadband Initiatives.

This 2023 OMBI Report is divided into three parts:

1

Part I: Expanding Access to Broadband

Part I of the report describes the efforts and accomplishments of the Office of Minority Broadband Initiatives to expand access to broadband and close the digital divide.

2

Part II: Barriers to Broadband Access

Part II describes the common barriers to increasing broadband access and highlights examples of early wins to address the barriers of availability, affordability, and adoption.

3

Part III: Looking Ahead

Part III highlights the goals and key performance indicators OMBI is using to measure success as well as points to watch for the next annual report.

OMBI Authorizing Legislation

The Consolidated Appropriations Act of 2021 (Section 902(b)(3)) mandates that OMBI:

- Collaborate with Federal agencies that carry out broadband Internet access service support programs to determine how to expand access to broadband Internet access service and other digital opportunities in anchor communities.
- Collaborate with State, local, and Tribal governments, HBCUs, TCUs, MSIs, and stakeholders in the communications, education, business, and technology fields to—
    - Promote initiatives relating to broadband Internet access service connectivity for anchor communities; and digital opportunities for anchor communities;
    - Develop recommendations to promote the rapid, expanded deployment of broadband Internet access service to unserved HBCUs, TCUs, MSIs, and anchor communities, including to students, faculty, and staff; as well as senior citizens and veterans who live in anchor communities;
    - Promote activities that would accelerate the adoption of broadband Internet access service (including any associated equipment or personnel necessary to access and use that service, such as modems, routers, devices that combine a modem and a router, Wi-Fi hotspots, and connected devices) by students, faculty, and staff of HBCUs, TCUs, and MSIs; and within anchor communities;
    - Upon request, provide assistance to HBCUs, TCUs, MSIs, and leaders from anchor communities with respect to navigating Federal programs dealing with broadband Internet access service;
    - Promote digital literacy skills, including by providing opportunities for virtual or in-person digital literacy training and education;
    - Promote professional development opportunity partnerships between industry and HBCUs, TCUs, and MSIs to help ensure that information technology personnel and students have the skills needed to work with new and emerging technologies with respect to broadband Internet access service; and
    - Explore how to leverage investment in infrastructure with respect to broadband access service to:
        - Expand connectivity with respect to that service in anchor communities and by students, faculty, and staff of HBCUs, TCUs, and MSIs;
        - Encourage investment in communities that have been designated as qualified opportunity zones; and
        - Serve as a catalyst for adoption of that service, to promote job growth and economic development and deployment of advanced technologies.

OMBI's authorizing legislation, the CAA, also mandates the establishment of the Connecting Minority Communities (CMC) Pilot Program to promote broadband access in and around HBCUs, TCUs, and MSIs. The purpose of the program is to provide grants to eligible recipients in anchor communities for the purchase of broadband access service or any eligible equipment or to hire and train technology personnel.

Part I: Expanding Access to Broadband

OMBI's authorizing legislation explicitly calls for the Office to **collaborate with anchor institutions and their stakeholders to achieve digital equity within the anchor community**. The CAA 2021 defines an anchor community as "any area that…is not more than 15 miles from a historically Black college or university, a Tribal College or University, or a Minority-serving institution; and has an estimated median annual household income of not more than 250 percent of the poverty line" (Section 902 (a)(1)).

OMBI is increasing capacity in the anchor communities to develop place-based skilled workforce to drive local economies. **Anchor institutions, specifically Institutions of Higher Education (IHEs), are force-multipliers for expanding broadband access, building partnerships, and leading communities toward economic growth and community vitality** (U.S. Department of Housing and Urban Development, 2013). As a stone dropped in a pond produces ripples that reverberate across the water, strategic investments in these anchor institutions lead to wide-spread impact.

Anchor institutions, such as HBCUs, have the scale to drive local and regional economic benefits–generating $14.8 billion annually in economic impact and 134,090 jobs in their local communities (United Negro College Fund, Inc., 2017). These institutions play a significant role in supporting the educational attainment for individuals from historically marginalized communities. HBCUs represent about 3% of two-year and four-year public and private institutions that participate in federal student financial aid programs; they award 17% of all bachelor's degrees earned by Black students (Williams & Davis, 2019). Similarly, HSIs represent 16% of all higher education institutions yet serve 65% of all Hispanic students (Hispanic Association of Colleges and Universities, 2023). The role of HSIs is particularly important as Hispanics are much more likely to be first generation college students than other racial or ethnic groups and are also significantly underrepresented in four-year bachelor's degree programs (Postsecondary National Policy Institute, 2022). In many Tribal communities, TCUs are an essential source of Internet to Americans on rural Tribal lands because 31 of 35 accredited TCUs serve as community libraries (Whissemore, 2020).

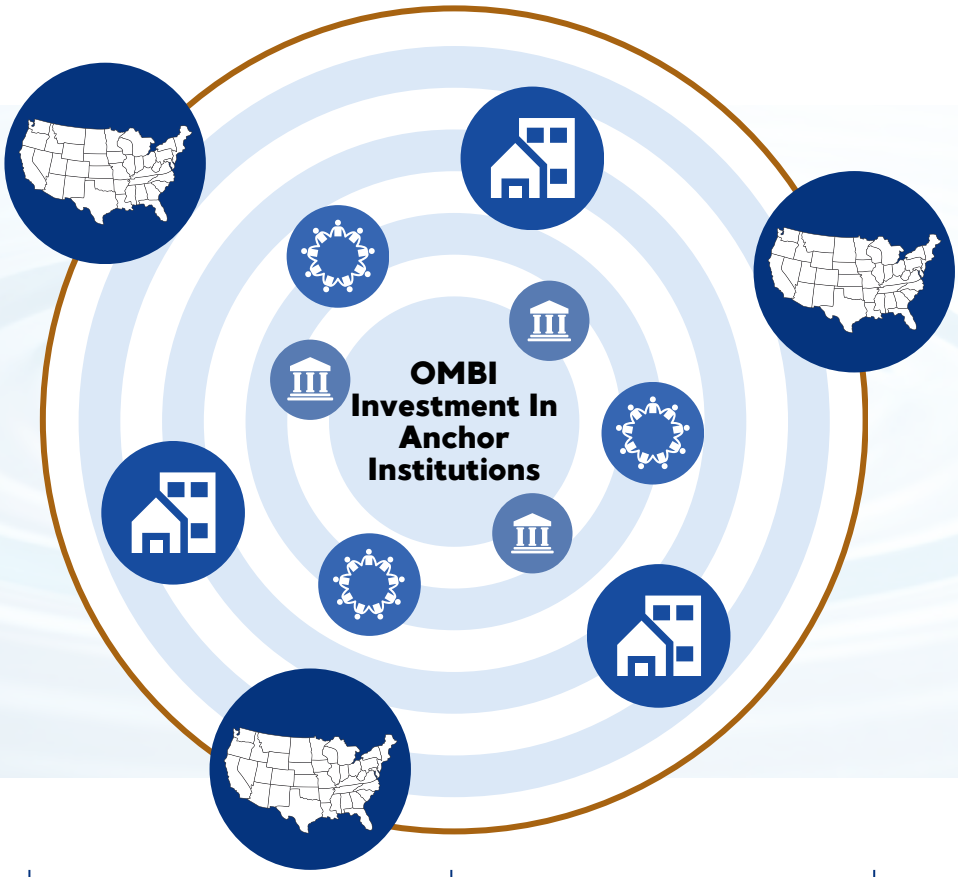
Through OMBI's investments of resources and technical assistance to these anchor institutions, students, faculty, and community members receive the technology and training they need to increase skills in digital literacy, STEM, cybersecurity, coding, and other business skills.

Digital skills are necessary to access economic and workforce opportunities that reverberate across the community. A recent study by the National Skills Coalition and the Federal Reserve Bank of Atlanta found that 92% of job postings require digital skills – including entry level and frontline jobs. The jobs requiring digital skills also paid significantly more.

“Workers that qualify for jobs that require even one digital skill can earn an average of 23 percent more than in a job requiring no digital skills. Moving from a job requiring no digital skills to one requiring at least three can increase pay by an average of 45%” (Bergson-Shilcock & Taylor, 2023).

In addition, access to broadband Internet expands job search capabilities, keeping the unemployed active in the labor market (Beard et al., 2012). Community-wide broadband Internet services also improve access to telehealth services which can increase work time and productivity.

Taken together, these investments in anchor institutions produce ripple effects that drive economic development within anchor communities, across counties, states, and bring more talent to the future of work throughout the United States.



OMBI invests resources and technical assistance to increase institutional capacity and provide equipment to increase broadband Internet access.

Anchor communities are able to access education and training that will lead to a more highly-skilled workforce.

Increased broadband access advances a place-based skilled workforce to respond to economic opportunities.

States see increased economic competitiveness and public services are delivered more efficiently.

With collaboration at its core, the Office's innovative approach to federal grantmaking and program delivery takes into account local needs, context, and relationships. OMBI brings this approach to its three operational pillars:

1 **Collaborate with Federal, State, Tribal, and Anchor Institution Stakeholders**

OMBI works to increase collaboration, knowledge sharing, and thought leadership to improve Internet access and adoption among minority communities.

2 **Build Capacity of Anchor Institutions and their Communities**

Through technical assistance and other support, OMBI empowers applicants, grantees, and collaborating entities with the appropriate tools and resources to effectively implement the CMC Pilot Program or other grants in minority communities.

3 **Administer the Connecting Minority Communities Pilot Program**

The Connecting Minority Communities Pilot Program provides funding for Internet access, technology, and personnel in an effort to close the digital divide at HBCU, TCU, and MSI anchor institutions and within their communities.

1 Collaborate with Federal, State, Tribal, and Anchor Institution Stakeholders

OMBI leads efforts to collaborate with: 1) federal agencies that carry out broadband Internet access service support programs; 2) state, local and Tribal governments; 3) historically Black colleges or universities, Tribal Colleges or Universities, and Minority Serving Institutions; and, 4) stakeholders in the communications, education, business, and technology fields.

Under the **Internet for All** umbrella, an essential purpose of OMBI is to collaborate with federal agencies to determine how to expand access to broadband Internet access services and other digital opportunities to anchor communities. OMBI engaged with a variety of federal partners through speaking opportunities that inform federal agencies of the needs of OMBI stakeholders.

At the time of this report, OMBI staff participated in or led over a dozen federal engagements with diverse departments including the Department of Education, the Department of Housing and Urban Development, and more. OMBI staff serve on the White House Initiative on HBCUs Inter-Agency Working Group and lead the Initiative's Smart HBCUs Cluster.

OMBI works closely with programs funded through the Infrastructure and Investment Jobs Act (IIJA) and focused on increasing broadband access in communities served by OMBI stakeholders to make connections and maximize infrastructure investments.

Collaborating with the BEAD Program

The Broadband Equity, Access, and Deployment (BEAD) Program, provides $42.45 billion to expand high-speed Internet access by funding planning, infrastructure deployment and adoption programs in all 50 states, Washington D.C., Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands. OMBI engages with the BEAD Program to explore how to leverage investment in infrastructure and broadband Internet access service.

Making Connections in the DE Program

The State Digital Equity (DE) Planning Grant Program supports the creation of community-centric solutions. It provides resources to community organizations to help scale digital literacy programs. These programs give people the skills they need to effectively use the Internet.

Supporting the Tribal Broadband Connectivity Program

The Tribal Broadband Connectivity (TBC) Program is a $3 billion program directed to Tribal governments to be used for broadband deployment on Tribal lands, as well as for telehealth, distance learning, broadband affordability, and digital inclusion.

OMBI engages with these federal programs to explore how to leverage investment in infrastructure and broadband Internet access service. OMBI then leverages its relationships with HBCUs, TCUs, and MSIs to share additional funding opportunities under these programs. In January 2023 OMBI hosted a webinar entitled *Internet For All: How Minority Serving Institutions Can Help Shape State Broadband and Digital Equity Plans and Initiatives* to provide an overview of OMBI, the BEAD Program, and the DE Programs for OMBI stakeholders. OMBI Federal Program Officers provide regional representation in Internet for All broadband funding programs and OMBI staff participate in Access Broadband Initiative Federal Funding workstream meetings.

2 Build Capacity of Anchor Institutions and Their Communities

Building a Community of Practice to Advance Digital Equity

To increase the capacity of anchor institutions and their communities and advance digital equity, OMBI is building a community of practice among OMBI stakeholders. As stated in the CAA 2021, OMBI stakeholders include all Minority Serving Institutions (MSIs) and their anchor communities as well as other partners such as nonprofits, industry groups, and minority business enterprises.

OMBI conducts active outreach to inform stakeholders about events and resources related to the Internet for All initiative, including promoting the Federal Broadband Funding Guide, and connecting to Internet for All state broadband and digital equity planning meetings. OMBI provides technical assistance to empower stakeholders to effectively navigate federal programs, including grants and funding opportunities, dealing with broadband Internet and accelerate the adoption of broadband Internet access. OMBI created a Regional Representatives model that plays a key role in leading anchor institution stakeholders, including unfunded applicants to the CMC Pilot Program, toward other funding opportunities such as BEAD, DE and TBC programs.

In an effort to reach the wider community of anchor institutions, their partners, industry, and broadband equity advocates, the OMBI Centers of Excellence webinar series provides an opportunity for stakeholders across the digital equity landscape to gather and learn about important topics. In FY23, OMBI hosted webinars in this series on topics including “Closing the Digital Divide: What Higher Education Leaders Need to Know.” The May 2023 session, “Digital Skills in the Workforce,” explored ways to promote digital literacy skills by highlighting how HBCUs, TCUs, and MSIs are working to help students build in-demand skills and connect to long-term career pathways.

The importance of developing and cultivating partnerships in OMBI’s work cannot be understated. Successful OMBI partnerships improve the chances of achieving the mission of the office more efficiently and effectively. This is especially true as OMBI partners are implementing community-driven innovative approaches to overcome barriers and expand access to broadband. Helping partners establish supportive networks and opportunities to share successes and failures in a safe supportive environment allows everyone to generate new ideas, learn, and grow.

Strengthening Connections with Other Industry and Anchor Institution Partners

OMBI staff engage with industry partners and build relationships with anchor institution stakeholders. Through FY23, OMBI led outreach and engagement with educational associations including the White House Initiative on HBCUs, Hispanic Association of Colleges and Universities (HACU), Asia Pacific Islander American Scholars (APIA Scholars), American Indian Higher Education Consortium (AIHEC), and American Association of Community Colleges (AACC). These partnerships are building an ecosystem of advocates and system leaders working to advance digital equity and expand broadband Internet access.

3 Connecting Minority Communities Pilot Program

Program Goal

OMBI is working to directly address the lack of broadband access, connectivity, adoption, and equity to close the digital divide. Connecting Minority Communities (CMC) Pilot Program is a $268 million grant program authorized through the CAA 2021. Through the CMC Pilot Program, NTIA is directly addressing the lack of broadband access, connectivity, adoption and equity at our nation's HBCUs, TCUs, and MSIs, and in their surrounding anchor communities. Accordingly, Congress has directed NTIA to provide grants to HBCUs, TCUs, and MSIs to facilitate educational instruction and learning, including through remote instruction. These grants also support consortia including MBEs and tax-exempt 501(c)(3) organizations. The CAA 2021 identifies HBCUs, TCUs, and MSIs as defined in the Higher Education Act of 1965.

Types of Eligible Recipient Institutions

Historically Black College and University (HBCU):

A HBCU is "any historically black college or university that was established prior to 1964, whose principal mission was, and is, the education of black Americans, and that is accredited by a nationally recognized accrediting agency or association..."

Tribal College and University (TCU):

A TCU is an institution that either I) qualifies for funding under the Tribally Controlled Colleges and Universities Assistance Act of 1978 or the Navajo Community College Act or II) is cited in section 532 of the Equity in Educational Land-Grant Status Act of 1994.

Minority Servicing Institutions (MSIs) include:

- **Asian American and Native American Pacific Islander Serving Institution (AANAPISI):** An AANAPISI is an institution with an undergraduate enrollment of at least 10% Asian and Pacific Islander American students and with at least 50% of students from low-income backgrounds.
- **Alaska Native and Native Hawaiian Serving Institution (ANNH)**: An ANNH is an institution with either at least 20% Alaska Native students or at least 10% Native Hawaiian students.
- **Hispanic-Serving Institution (HSI)**: A HSI is an "accredited, degree-granting public or private not-for-profit institution of higher education with 25% or more total undergraduate Hispanic full-time equivalent student enrollment."
- **Native American-Serving Nontribal Institution (NASNTI):** A NASNTI is an institution that is not affiliated with American Indian and Native Alaskan tribes but still enroll at least 10% of Native American undergraduate students and receive funding to serve Native American students.
- **Predominantly Black Institution (PBI):** A PBI is an institution that serves at least 1,000 undergraduate students, has at least 50% low-income or first-generation students, and enrolls at least 40% African American students.

More than a broadband program, the CMC Pilot Program aims to tackle one of the toughest economic challenges of our time—bringing people off the sidelines and into the labor market with the skills employers need. The CMC Pilot Program grants aim to serve three purposes to build capacity in eligible institutions, their surrounding communities, and their students:

1. **Provide broadband Internet access service, including the installation or upgrade of broadband facilities on a one-time capital improvement basis to increase or expand broadband capacity and/or connectivity at the eligible institution;**

2. **Purchase or lease eligible equipment and devices for student or patron use, subject to any restrictions and prohibited uses; and**

3. **Hire and train information technology personnel who are a part of the eligible anchor institution, MBE, or tax-exempt 501(c)(3) organization.**

Connecting Minority Communities Pilot Program

CMC Funding Purposes

Purchase high speed Internet service.

Purchase or lease eligible equipment and devices for student or patron use.

Hire and train information technology personnel.

CMC Expected Benefits

Expand educational instruction and remote learning opportunities.

Spur economic development, and entrepreneurship.

Increase institutional capacity.

The funds, used for these three purposes, lead the anchor institutions to expand educational instruction and remote learning opportunities, spur economic development and entrepreneurship, and increase institutional capacity to close the digital divide. In addition, the CMC Pilot Program took a modern approach to the grant program—applicants stated the problem and their proposed solutions within the application. This method allowed for innovative approaches to solve problems in their communities.

While the authorizing legislation describes the goal and the allowable use of funds, each applicant presented the path, consistent with the authorizing legislation, to achieve the goals of the program that would be most effective for their community. Anchor institutions proposed projects that meet the needs of their communities, including local cultural and environmental contexts.

For example, one CMC grant recipient, **New Mexico Highlands University**, a Hispanic Serving Institution serving northern New Mexico, is building a digital skills training curriculum with stackable micro-credentials in an open education resource model grounded in Acequia and Land Grant Education (ALGE) perspectives that infuse the local New Mexico heritage.

Another CMC grant recipient, **Tohono O'odham Community College**, a Tribal College in rural southern Arizona, designed a broadband needs assessment for the O'odham Tribal members and conducted the survey in both English and O'odham, launching the initial survey at the Annual Rodeo.

Program Highlights

In the past year, OMBI fully awarded the federal funding for the CMC Pilot Program. Eligible institutions showed significant interest in the program. In total, OMBI received over 200 applications, requesting over $833 million in funding, which was well above the $268 million allocated by Congress for the CMC Pilot Program.

This strong response and the needs expressed in the applications to the CMC funding opportunity demonstrates the scope, need, and interest by anchor institutions to expand digital access to their surrounding communities. OMBI is maintaining relationships with these applicants to connect them to other funding opportunities and key broadband stakeholders in their states.

Funds Requested in CMC Grantee Applications

$833M

Funds Obligated to CMC Grantees

$268M

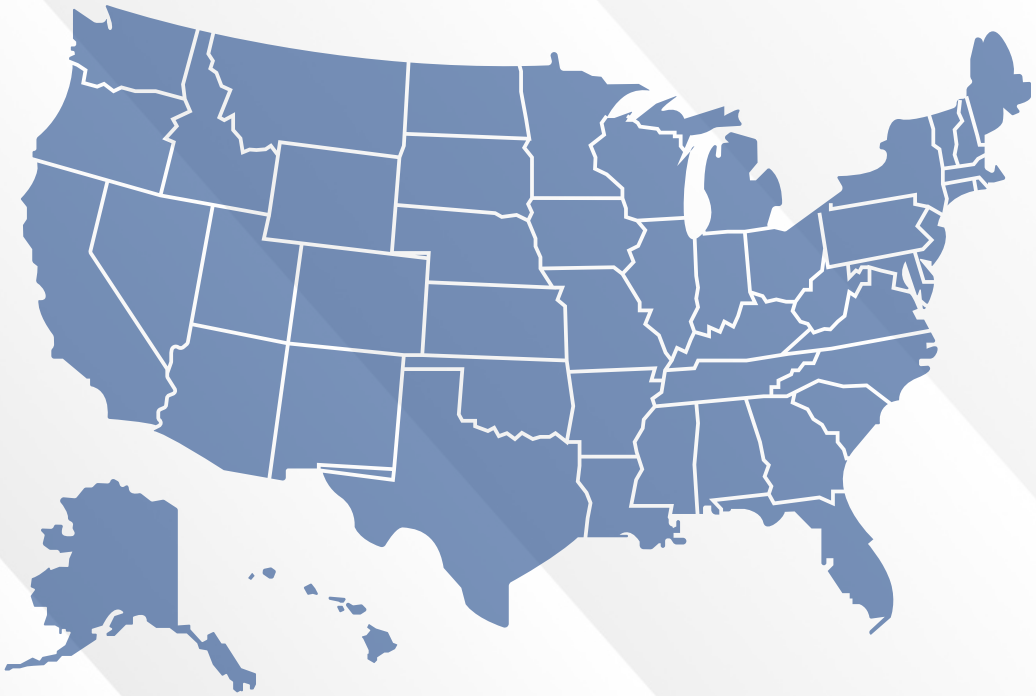
In total, OMBI made 93 awards to eligible HBCUs, TCUs, MSIs, and consortia, obligating the full $268 million in available funds. Grantees represent 36 states and territories including American Samoa, Federated States of Micronesia, Marshall Islands, and Puerto Rico. The grants rolled out in five phases. The first phase of awards began work on August 1, 2022. The final phase started seven months later on March 1, 2023. Phase I included five awards, Phase II included 14 awards, 12 awards were made in Phase III, Phase IV brought 26 awards, and 36 awards were made in Phase V. Applicants were evaluated across five categories: (1) Project Purpose; (2) Project Needs and Benefits; (3) Project Viability and Innovation; (4) Project Budget; and (5) Project Evaluation.[2]

NUMBER OF AWARDS, AWARD AMOUNTS, AWARD RECIPIENTS

93
Awards made to eligible HBCUs, TCUs, MSIs and consortia.

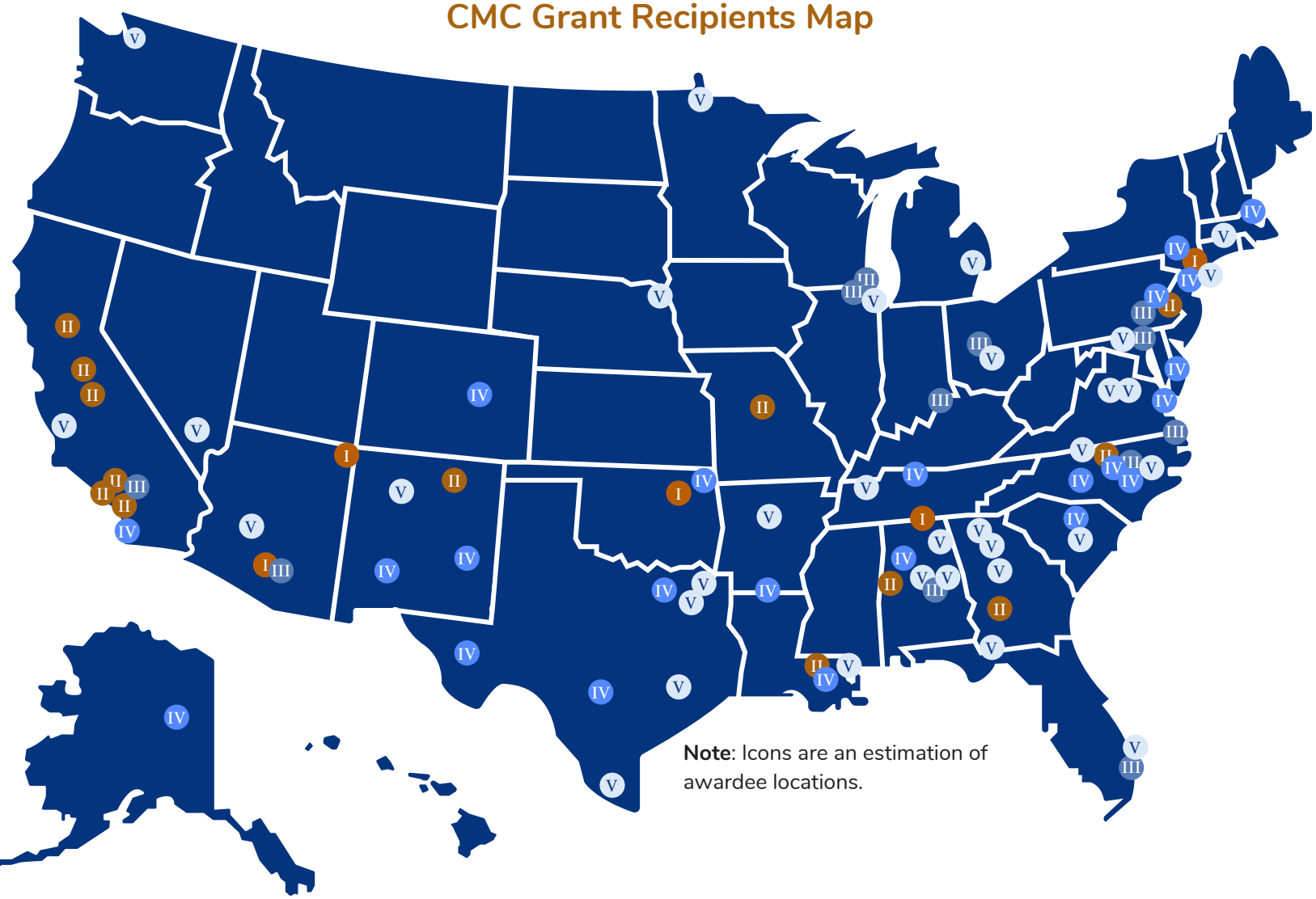
$268M
Obligated in CMC grants.

36
States and territories represented by grant recipients.



[2] Full detail on the evaluation criteria is available in the Connecting Minority Communities Pilot Program Notice of Funding Opportunity (2021).

CMC Grant Recipients Map

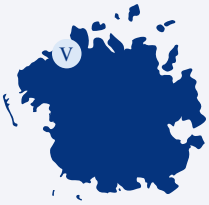


Note: Icons are an estimation of awardee locations.

US Marshall Islands*

American Samoa*

Micronesia*



Puerto Rico*

US Virgin Islands*

*Maps have been enlarged to show detail.

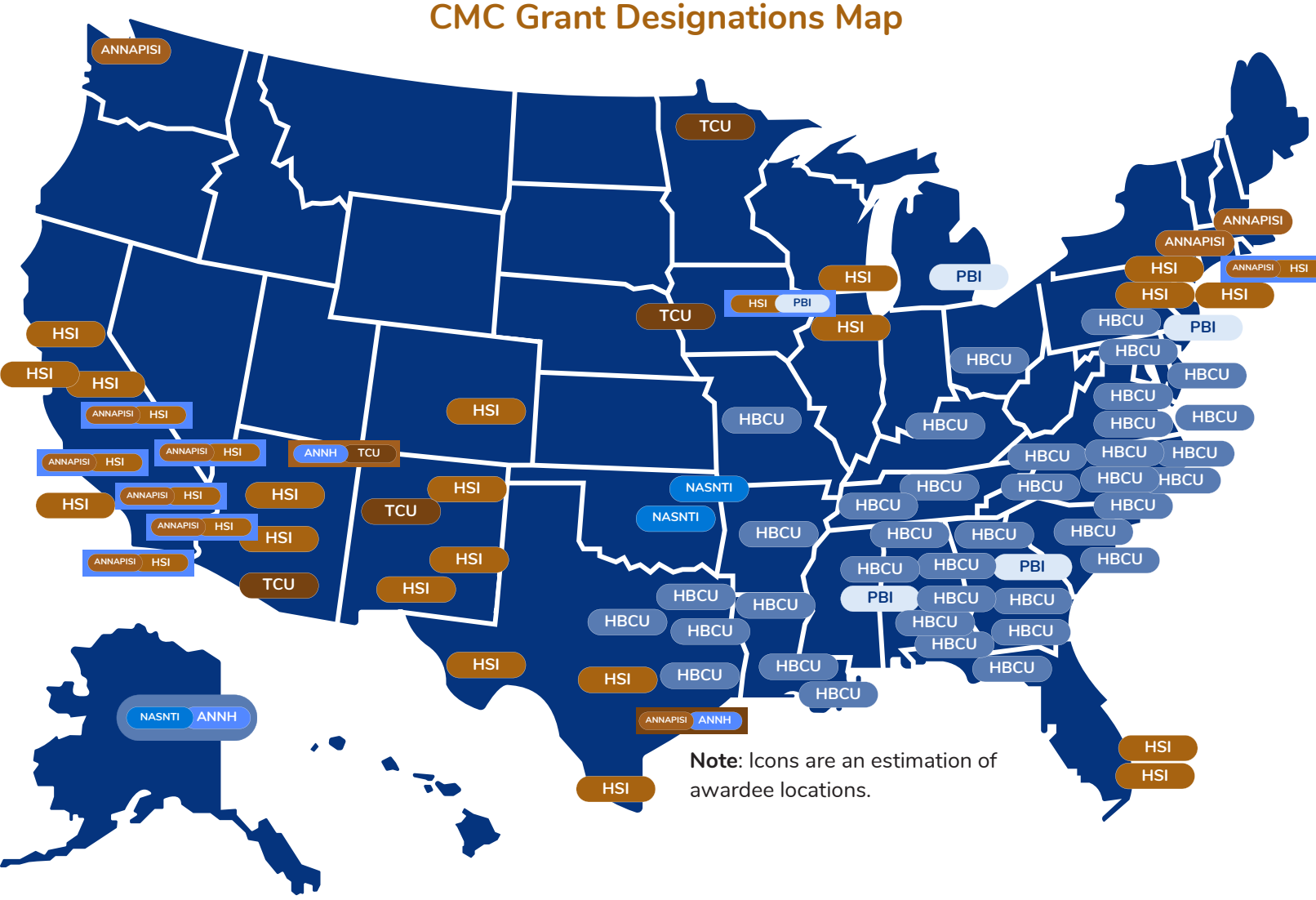
Timeline Key: (August 1, 2022 - March 1, 2023)

I	II	III	IV	V
Phase 1 (5 grantees)	**Phase 2** (14 grantees)	**Phase 3** (12 grantees)	**Phase 4** (26 grantees)	**Phase 5** (36 grantees)

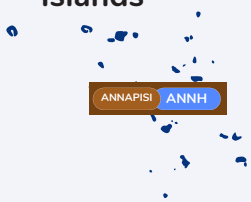
The CAA 2021 stipulated that no less than 40% of the amount of CMC grants be awarded to HBCUs. The CMC program successfully exceeded this benchmark with 46% of awards going to HBCUs. In total, CMC awarded grants to 43 Historically Black Colleges and Universities, 31 Hispanic Serving Institutions, 21 Minority Serving Institutions, and 5 Tribal Colleges or Universities. The full listing of the CMC Pilot Program grantees and their institutional designations are included in the Appendix.

In addition, the CAA 2021 also required that no less than 20% of the amount of the grants be used by eligible recipients to provide broadband Internet access service or eligible equipment to their students. The CMC program successfully exceeded this benchmark with 91% of funds to be used for this purpose.

CMC Grant Designations Map



US Marshall Islands*



American Samoa*

Micronesia*

Puerto Rico*

US Virgin Islands*

*Maps have been enlarged to show detail

Designation Types Key

ANNAPISI	ANNH	HBCU	HSI	NASNTI	PBI	TCU
3	0	43	23	2	4	4

Designation Types (Multiple) Key

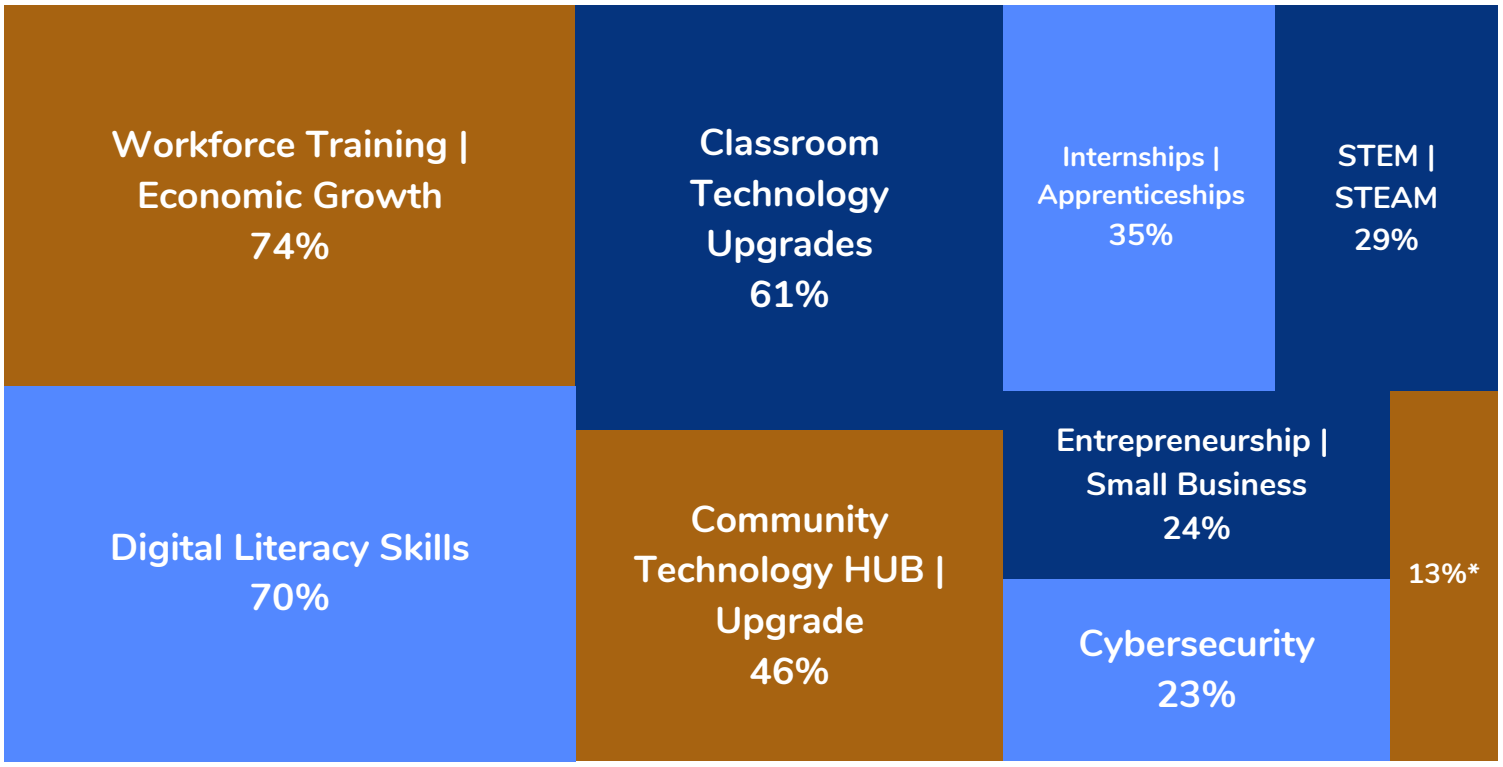
ANNAPISI ANNH	ANNAPISI HSI	ANNH TCU	HSI PBI	NASNTI ANNH
4	7	1	1	1

Community Innovative Approaches to Increasing Internet Access

The diversity of innovative approaches to closing the digital divide and increasing access proposed in the CMC program applications reflects the diverse needs, context, assets, relationships, and partnerships in each anchor community. These community-driven innovative approaches demonstrate that one-size does not fit all.

Increasing Internet access across diverse communities requires local community solutions to overcome the barriers anchor institutions face. CMC funds are allocated to: improve infrastructure and IT capacity at the institutions to subsidize high-speed Internet connections through hotspots, laptops, and other devices; provide workforce training including credentials in cybersecurity, fiber-optic installation, computer skills training and more; enhance digital literacy skills for students, community members, and anchor institution staff; furnish technology hubs; provide internships and apprenticeships; and expand online learning capacity at anchor institutions. The chart below shows the breakdown of the various approaches taken by CMC grantees. Most grantees incorporate a combination of multiple approaches. See Appendix for detail on the approaches used by each grantee.

CMC Community Innovative Approaches to Increasing Internet Access



Note: Grantees can use more than one approach, see chart In the Appendix for a full breakdown.

***13% Telehealth | Telemedicine**

Many anchor institutions designed a combination of approaches to define their programs and meet the needs of their surrounding communities. Three common approaches are workforce development, digital literacy skills, and increasing adoption overall. The following are four innovative stories illustrating how CMC funding is being used within anchor institutions and their surrounding anchor communities to help close the digital divide.

Innovation to Build the Talent Pipeline

The Huntsville-Madison region of northern Alabama is home to a fast growing, highly technical aerospace and defense industry. While the overall area has a record of steady economic growth, the benefits of this growth are not shared equally. Founded in 1961, Drake State Community and Technical College is an Historically Black College serving historically underserved and low-income communities by offering degrees in high-demand technical and vocational fields including computer science information systems and cybersecurity. The **Drake State Project** is working to improve home broadband access and connectivity to students, better the online learning experience, and improve student access to resources and services. At the time of this report, Drake State has procured 425 LTE-enabled laptops and 425 hotspots to loan to students. Drake State's partnership with Western Governors University allows for matriculation to bachelor's degree programs in information technology management. Combined with Drake State's dual enrollment for local high school students, Drake State serves as a powerful conduit for a talent pipeline prepared to tap into the economic opportunities in the region.

Increasing Access to Broadband Overall: A Laptop of One's Own

The 27,000 square miles of Navajo Nation is a historically underserved region. Home to 175,000 registered Tribal members, the median household income is $28,052. Diné College's **Connect Navajo** project aims to improve educational and economic opportunity on the Navajo Nation by improving Internet access, providing more hardware, and investing in IT staff. Founded in 1968 as Navajo Community College, Diné College works to advance quality post-secondary student learning and development to ensure the well-being of the Diné people. Connect Navajo works to increase student access to the Internet through broadband subscriptions and hotspots, provide laptops to students, and enhance staff technical skills. As of this report, Connect Navajo has donated 225 laptops and 100 Wi-Fi hotspots to students. To increase the power and pride of owning one's own laptop and Internet device, Connect Navajo is granting the devices to students.

Digital Literacy Skills: Embedding Digital Literacy and Skills Training in the Community

Esperanza College of Eastern University (ECEU) is a branch campus of Eastern University located in the heart of Latino North Philadelphia and Philadelphia's only Hispanic-Serving Institution (HSI). ECEU serves a student population that is 84% Latino, 97% low income, and 80% the first generation to attend college. Eastern University's **Hope Digital Literacy** project works to educate, equip, and empower the predominantly Latino community to use digital tools to accomplish workforce, education, and health-related goals. The Hope Digital Literacy Project is establishing a digital literacy hub at ECEU to serve as a community drop-in site for one-on-one support and offer

digital skills training for both students and members of the broader community. At the time of this report, the digital literacy hub is coming into shape with the selection of a dedicated Community Digital Resource Project Director, strong community partners, and the launch of a digital needs assessment to shape the hub's programming.

Workforce Development: A Two-Pronged Approach

Founded in 1946 and designated as a Native American-Serving, Nontribal Institution (NASNTI), Oklahoma State University Institute of Technology (OSUIT) is located in Okmulgee, Oklahoma. In this rural community, over 90% of OSUIT students qualify for financial assistance. OSUIT's **Student Success and Increasing Minority Workforce Participation Program** exemplifies an innovative two-pronged approach to increase the skills for a place-based workforce. The program both increases access to broadband by providing hotspots to eligible individuals and increases the talent pipeline for Oklahoma's telecommunications industry through an Advanced Fiber Technician Training program. At the time of this report, OSUIT has distributed 92 hotspots and 30 individuals completed the training program. This innovative approach will both address the lack of availability of broadband services and increase the talent pipeline of cyber professionals and broadband technicians within Oklahoma's broadband industry.

These efforts are making strides toward a significant positive impact on the communities they serve. The CMC Pilot Program grantees are applying their efforts to close the digital divide by improving workforce development, telehealth, broadband adoption, cybersecurity, economic empowerment, digital skills and digital literacy training. The connectivity created through these projects also includes outreach to veterans, seniors, and other vulnerable populations.

Supporting CMC Grantees through the CMC Learning Network

OMBI is applying its technical assistance acumen to build the CMC Learning Network (CMC-LN), a cohort of the 93 CMC primary grant recipients. OMBI's CMC-LN is part of NTIA Office of Internet Connectivity and Growth's (OICG) learning and sharing community focused on developing a trusted and collaborative environment that promotes learning, which is critical to generate new ideas and dialogue that are not traditional, but innovative.

Developing environments where CMC recipients, subrecipients, and project partners can collaborate in a trusted supportive environment, without the fear of failing, allows for creativity and innovation to flourish. Building a collection of partnerships among CMC stakeholders is critical to catalyze innovative community-driven solutions and overcome the barriers to broadband access, while advancing digital equity.

The CMC-LN provides timely information to support CMC program compliance and success as well as creates a platform for peer learning across CMC programs. Through the CMC-LN, OMBI identifies and highlights promising practices; facilitates communications among CMC grant recipients, federal agencies, and partners; and promotes a mutual learning experience.

OMBI hosts regular “Meet & Share” webinars for the CMC-LN. During these sessions, a subset of grantees has the opportunity to give a brief, five-minute lightning talk about their program and any key insights. The sessions include time for Q&A and discussion. These sessions are open only to the CMC grantees to give them the opportunity to honestly reflect on the opportunities, challenges, barriers, and lessons learned through implementing their programs. In addition to these opportunities for peer learning, OMBI leverages the CMC-LN to provide technical assistance to the grantees and their partners on grants administration, oversight and programmatic topics through webinars and office hours.

Part II: Barriers to Broadband Access

The pandemic fundamentally changed the way HBCUs, TCUs, and MSIs understood how the lack of Internet connectivity on a campus, in a community, and at home, could obstruct educational outcomes. The COVID-19 pandemic exposed the technological inequities of these anchor institutions, along with the negative educational impacts, caused by the lack of Internet connections.

Given their experiences, these institutions appreciate the urgent need to eliminate barriers to high-speed Internet access service and to implement innovative solutions. The following reviews how CMC grantees are innovating and implementing these solutions for their student bodies and their broader communities.

Barriers for CMC Communities

OMBI's mission, and its enabling CMC grant program, empower HBCUs, TCUs, MSIs, and their anchor communities to connect to the digital resources and markets of the global digital economy; however, several barriers to high-speed Internet access service hampers the mission's progress. In this section, we explore the key barriers to availability, affordability, and adoption faced by HBCUs, TCUs, MSIs, and their anchor communities. Additionally, we will explore why these barriers represent formidable obstacles to digital inclusion, the digital economy, and digital equity for HBCUs, TCUs, MSIs, and their anchor communities.

Availability

Availability refers to the existence of the infrastructure needed to have a reliable high-speed connection to the Internet.

Affordability

Affordability refers to the ability to afford the costs associated with accessing the Internet, including for service, devices, and fees.

Adoption

Adoption refers to the possession of the necessary digital skills, resources, and support to meaningfully use the Internet.

Availability

"High-quality digital learning experiences are built on the foundational principles of providing equitable, inclusive, accessible learning environments for all students" (Gunder, et al., 2021, p. 3). Unfortunately, antiquated broadband infrastructure in many HBCUs, TCUs, and MSIs is one of the primary barriers for students and faculty to effectively participate in high-quality digital learning environments. While the majority of HBCUs, TCUs, and MSIs have some form of Internet connectivity, these institutions lack the hardware, software, and technology improvements necessary to match the networking capabilities needed by faculty, staff, and students to fully participate in quality digital learning environments. This demand for new hardware, software, and digital technologies are necessary capabilities to offer a first-rate classroom learning and teaching experience that mirrors, and is equitable to, in-person classes. The capabilities deficit is especially stark at HBCUs, TCUs, and MSIs that serve communities with the greatest digital needs.

Affordability

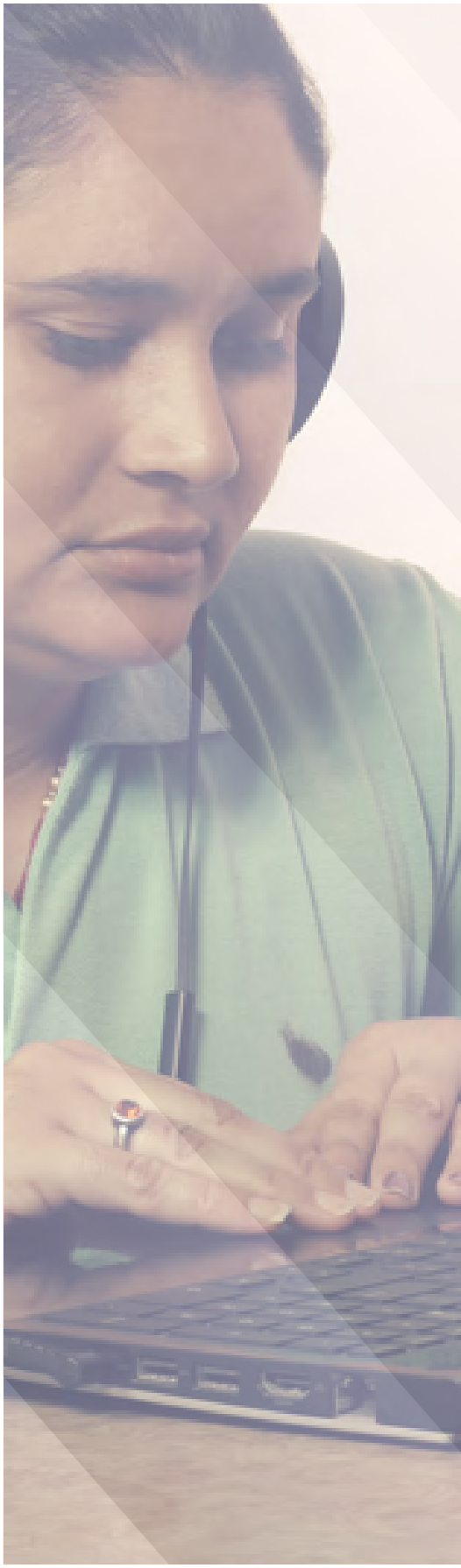
High costs associated with broadband equipment and services present another barrier for HBCUs, TCUs, and MSIs. During the pandemic all universities and colleges across the country had new expenses related to COVID-19 testing, personal protective equipment, and online learning resources to reopen safely for students, faculty, and staff. These new expenses created enormous financial challenges, while at the same time losing financial revenue due to a decrease in enrollment, housing, and other auxiliary services (National Association of Independent Colleges and Universities (NAICU), 2023). At HBCUs, TCUs, and MSIs serving eligible anchor communities, these limited financial resources made it difficult, if not impossible, for anchor institutions to afford robust and reliable broadband connections.

High costs of broadband also affect anchor communities. A study conducted by the Institute for Higher Education Policy (IHEP) titled *Online Isn't Optional: Student Polling on Access to Internet and Devices* found that broadband costs created somewhat or very significant challenges for a majority of Black and Latino students and 62% of students with household incomes less than $50,000 (Institute for Higher Education Policy (IHEP, 2021, p. 5). These constraints also impacted their surrounding communities. According to surveys conducted by the Pew Research Center, adults earning less than $30,000 were only 56% likely to report having home Internet access in 2019, which is half the likelihood of adults earning $75,000 or more (Anderson, 2019). Additionally, the cost of hardware, software, and technology equipment required for connectivity can be a significant burden, constraining access for those with limited budgets.

Adoption

In a digital learning environment, teachers and students need access to devices, Internet connectivity, and digital skills to support optimal teaching and learning. HBCUs, TCUs, and MSIs, which could not afford nor provide quality broadband services, saw adoption as another barrier for their institutions, among students, and in their anchor communities. These anchor institutions faced challenges related to the digital capacity of their faculty and staff to provide quality digital

environments for remote teaching and learning. One study found that many educators reported deficiencies in their digital competence and ability to tap the potential of digital technologies in education (Väätäjä & Ruokamo, 2021, p. 15). This lack of digital and technical skills often impedes the effective use of broadband resources, and ability of these anchor institutions to provide quality and engaging digital learning environments.



The report, *Addressing the Deepening Digital Divide*, stated that lack of digital skills was nearly as great a problem as access to technology, and both teachers and students lacked the digital skills needed to participate in digital learning environments (Oxford University Press, 2021). One CMC grantee noted that students who did not have the digital skills, resources, or support to meaningfully engage in an online learning environment were less motivated, discouraged, and eventually dropped out. This digital deficit might explain why, according to the National Student Clearinghouse Research Center, roughly 679,000 students who started college in fall 2019, did not come back the next year (Krupnick, 2022).

Digital skills, or the digital capacity to meaningfully engage in digital environments, can also stifle adoption in the anchor communities. Much as electricity consumption was driven by electric appliances in the home, increased broadband adoption requires digital skills, resources, and support to help anchor community members understand how broadband can improve their daily lives and career prospects (Mandel et al., 2012). In an economy increasingly driven by digital technologies and the demand for digital skills, knowledge of broadband's linchpin role is essential.

Beyond understanding broadband's utility for advancement, language barriers, lack of diverse content, lack of trust in the broadband industry, concerns about privacy and security, and a limited understanding of how broadband can address community-specific needs can also prevent individuals from engaging with digital resources. Promoting culturally relevant content and fostering community engagement in the design and implementation of broadband initiatives can help overcome these barriers. Institutional and community partnerships with industry can also stimulate the social bonds necessary for strong, broadband ecosystems (Office of Educational Technology, U.S. Department of Education, 2022).

To bridge the digital divide and empower HBCUs, TCUs, and MSIs and their anchor communities, OMBI provides the resources and technical assistance to these anchor institutions and change makers. As these institutions and communities battle their local barriers, OMBI will play a critical role to catalyze more availability, ensure affordability, promote adoption through digital literacy initiatives, advocate for supportive policies, and help identify broadband's relevance to the community challenges. By actively addressing these barriers, OMBI can unlock the potential of HBCUs, TCUs, and MSIs and their anchor communities, enabling them to fully participate in the digital age and leverage broadband connectivity for educational, economic, and social advancement.

In this age of data, HBCUs, TCUs, and MSIs and their anchor communities must overcome these broadband barriers or witness the digital divide broaden into a chasm. The absence of connectivity limits their ability to access information, educational resources, job opportunities, healthcare services, and social connectivity. It also precludes these HBCUs, TCUs, and MSIs and their anchor communities from participating in the emerging economic opportunities related to 5G networking, the Internet of Things (IoT), Artificial Intelligence and machine learning (AI/ML), Augmented and Virtual Reality (AR/VR), Blockchain, as well as edge and quantum computing. Prior to 2020, while these barriers were acknowledged, their challenges were not fully appreciated. The COVID-19 pandemic revealed the enormity of the risk and the need for change.

Despite the numerous challenges faced in expanding broadband access, anchor institutions have demonstrated remarkable innovation and ambition in their efforts to overcome these obstacles. CMC grantees awarded in early phases have not only formulated plans but have also taken tangible actions, measured the impact of their initiatives, and shared their experiences.

These stories highlight their strategic resilience in navigating the broadband landscape. The CMC grantees have embarked on a race, equipped with plans to overcome barriers, but they also recognize the need for agility and partnerships to cross the distance. Beyond their reliance on local partnerships, grantees also have an ally at OMBI. Their partnership with OMBI can be likened to that of a runner and a trainer. While the trainer cannot run the race, the trainer provides essential resources, technical assistance, and support to help the runner cross the finish line successfully.

Battling the Barriers: Early Win Stories from CMC Communities

To connect their institutions to the digital economy, anchor institutions and their partner networks have led the charge in combating barriers to broadband access. Several early implementation stories showcase successful strategies used by anchor institutions in overcoming the three key barriers.

These stories serve as beacons of hope, highlighting the determination and innovation exhibited by anchor institutions as they navigate known barriers and discover new challenges. In the midst of these challenges, OMBI plays an essential role in providing technical assistance to CMC Pilot Program grantees and cultivating a community of practice that can sustain progress beyond the pilot program. These early wins demonstrate that with a strategic focus, disciplined execution, and collaborative effort, it is possible to break down the barriers impeding broadband access.

Availability + Affordability: Albany State University (ASU)

Albany State University, an early CMC grantee located in southwestern Georgia, used a robust implementation campaign and partnerships to make quick progress. Like many of the early grantees, necessity and opportunity served as a catalyst for a thoughtfully designed solution to overcome the dual barriers of **availability** and **affordability**.

ASU, founded in 1903, is one of 26 public institutions of the University System of Georgia. A majority of ASU students are first-generation learners. Approximately 75% of the student body is female, and 97% of students received some form of financial aid. Not surprisingly, the community needs mirror the challenges of the student body. The poverty rate of Albany is almost triple the nation's. A total of 28 census tracts within a 15-mile radius of the university qualify as eligible anchor communities for ASU under the CMC program. These all have median household incomes below 250% of the poverty threshold. Both the institution and community need:

- Access to higher education in remote communities.
- Improved Internet connectivity and digital inclusion.
- Increased institutional capability to deliver asynchronous and synchronous remote learning, including the enabling and vital IT support.

In response, ASU developed a multifaceted program with a total funding of $2,997,777 and an implementation timeline from April 2022 to March 2024. The implementation timeline centers on the fulfillment of **three goals:**

1

Extend ASU's online reach to remote students; expanding access to education while reducing its costs.

2

Expand broadband Internet access, connectivity, and digital inclusion to community members.

3

Build university's capability to deliver synchronous and asynchronous educational instruction for ASU students and the broader community.

While a recent economic impact study citing that every ASU dollar spent generates an additional 47 cents for the surrounding region's economy, ASU developed its own economic impact metrics using a logic model of inputs, activities, short-term outcomes, and long-term economic impact (Humphreys 2020). The inputs and activities leverage the talents of peer HBCUs and SMEs through a knowledge sharing partnership. Similarly, collaborations within the local community play a crucial role in driving change, exemplified by partnerships like the one with the Bill Miller Community Center, where ASU offers digital access and programming, as well as the association with a county school where ASU provides digital dual enrollment opportunities for district students. These partnerships serve as essential vehicles for building momentum. All metrics adopted by ASU include short-term outcomes (e.g., expanded broadband Internet access for the community including ASU remote learners) and long-term economic impact (e.g., raising the percentage of households with broadband Internet subscriptions to a rate consistent with the rest of Georgia or 81% of households.)

As ASU's implementation winds down, the university intends to share its experiences through the auspices of a replication manual for other HBCUs, the HBCU Library Alliance, Minority Serving Institutions, regional colleges, and the Georgia Higher Education System, NTIA, and interested parties. ASU will also propagate its experience and impact through education trade conferences. These grantee "Battle Over Barriers" lessons and best practices will help a broader spectrum of minority institutions and communities bridge the digital divide.

Availability + Affordability + Adoption: Mercy College

Mercy College, located in Dobbs Ferry, New York, is a comprehensive, independent, and federally-designated Hispanic Serving Institution (HSI). With campuses in the Bronx and Manhattan, as well as an online platform, Mercy College caters to a diverse student body of over 7,000 degree-seeking undergraduate and graduate students. Among its many achievements, Mercy College has been designated as a National Center of Academic Excellence in Cyber Defense (CAE-CD) by the National Security Agency (NSA). This anchor institution succeeds as an engine of economic vitality by ensuring that all career education at Mercy is informed by employer needs. Bolstering student and community workforce capacity, and matching these new skill sets with employer needs, has forged a local solution with national implications.

The anchor community surrounding Mercy College is home to many minority groups and contains neighborhoods where median household income ranges from a high of $29,470 (Census Track 36119003600) to a low of $13,097 (Census Track 36005002702). As of 2019, the Bronx, home to many of its students, had the lowest share of households with cable, fiber-optic or DSL (digital subscriber line) broadband (61.3 percent) among the five New York City boroughs. In this context, Mercy College recognizes the urgent need to provide equitable opportunities for education and economic empowerment.

During the COVID-19 pandemic, Mercy College experienced broadband access challenges preventing equal access to education. Challenge sparked innovation. To hurdle the triple barriers of availability, affordability, and adoption, Mercy College launched the **Connected, Credentialed and Ready** (CCAR) initiative. CCAR expands student access to technology, builds digital skills, and expands IT workforce capacity by focusing on **three goals**:

1

Provide broadband education, awareness, training, access, equipment, and support to students.

2

Subsidize broadband access and equipment to qualified low-income/in need students and communities.

3

Build digital skills and IT workforce capacity with an academic focus on STEM/STEAM, coding, cybersecurity, technician, and work-based learning programs.

To achieve these goals, CCAR relies on two key activities. The first activity involves providing equipment and devices, such as laptops and hotspots, to support remote education for low-income students. The second activity centers on implementing an asynchronous digital skills credentialing program. This program enhances digital skills and IT workforce capacity for students and the surrounding community. It does so by addressing workforce needs in areas such as STEM/STEAM, coding, cybersecurity, web design, and other work-based learning programs.

CCAR has already made significant strides towards its objectives. The project team has been established. Partnerships with Coursera (for licensed course content) and four community organizations (to amplify available workforce training opportunities) have been formed. These initial efforts have launched four courses on project management, digital marketing, data analytics/cyber security, and IT support. A Laptop and Hotspot Event Series has successfully provided devices to 78 eligible students with an additional 400 laptops and 100 hotspots on order. By combining their commitment to student success, understanding of community needs, and collaboration with local employers, Mercy College's CCAR initiative aims to connect its students and the surrounding community to a prosperous digital future.

Part III: Looking Ahead

In 2023, OMBI is focused on raising awareness of broadband barriers, forming interagency partnerships, and the crucial implementation of the CMC grant program. In the next period, OMBI will shift this focus from implementation to the first full year of CMC results.

In several ways the current report sets the stage for future reports. These foundational elements include a metrics framework, a logic model for understanding potential economic impact, and the lessons learned in this early phase of implementation. These early lessons will inform how anchor institutions battle broadband barriers and navigate around implementation obstacles.

Measuring Success

To measure OMBI's work and CMC grantee progress, OMBI has developed nine key metrics tied to specific program goals. Federal Program Officers (FPOs) track these metrics in their scheduled reporting milestones with partners which serve as a barometer for implementation progress and the pilot program's success. Each key goal has specific Key Performance Indicators (KPIs) that serve as vital statistics for programmatic health.

GOAL 1
Collaborate with federal agencies to expand access to broadband service in anchor communities.

GOAL 2
Expand broadband Internet capacity and connectivity at HBCUs, TCUs and MSIs.

GOAL 3
Increase accessibility to devices for students and patrons to improve remote learning outcomes.

GOAL 4
Provide community members with the workforce and digital skills training to attain certification and jobs.

GOAL 1
Collaborate with federal agencies to expand access to broadband service in anchor communities.

KPI 1: Number of partnerships with federal agencies that carry out broadband Internet access service support programs.

This metric measures the number of partnerships and collaborations with federal agencies that carry out broadband Internet access service support programs. These partnerships and collaborations help determine how to expand access to broadband Internet access service, and other digital opportunities, in anchor communities. This coordination creates efficiencies and optimizes the use of federal resources to achieve this objective.

KPI 2: Number of digital technical trainings, webinars, and digital opportunities for anchor communities.

This metric measures the number of technical training, webinar, and digital opportunities for anchor communities to promote digital literacy skills. These learning modalities include opportunities for virtual or in-person digital literacy training and education. This measure will also capture the number of professional development opportunity partnerships between industry and HBCUs, TCUs, and MSIs to help ensure that information technology personnel and students of HBCUs, TCUs, and MSIs have the skills needed to work with new and emerging technologies associated with broadband Internet.

GOAL 2
Expand broadband Internet capacity and connectivity at HBCUs, TCUs and MSIs.

KPI 3: Number of new broadband subscriptions.

This metric measures the increase in the number of individuals or institutions within these communities who have acquired new broadband connections. By tracking the number of new subscriptions, institutions can assess the demand for broadband services among their students, faculty, and staff. An increasing number of subscriptions indicates a growing awareness and adoption of broadband technology, reflecting improved connectivity and access to online resources. It also demonstrates the successful efforts to address affordability and availability barriers, as well as the effectiveness of initiatives aimed at promoting broadband adoption.

KPI 4: Number of HBCU, TCU, and MSI campuses receiving broadband network upgrades.

This metric measures the progress made in enhancing the infrastructure and connectivity within these educational institutions. An increase in the number of campuses receiving broadband network upgrades indicates a commitment to improving the quality and speed of Internet connections. Upgrades can include higher bandwidth, fiber-optic installations, improved Wi-Fi infrastructure, and other technological enhancements. These upgrades result in faster and more reliable Internet access for students, faculty, and staff, thereby promoting a conducive learning and research environment.

GOAL 3
Increase accessibility to devices for students and patrons to improve remote learning outcomes.

KPI 5: Number of devices distributed to students and patrons previously without devices.

Tracking the number of devices distributed allows institutions to quantify the impact of their initiatives. It reflects the reach of their programs and the extent to which they have been successful in ensuring that students and community stakeholders have the necessary tools to engage in remote learning. An increase in the number of devices distributed also indicates improved access to educational resources and online learning platforms, ultimately contributing to better learning outcomes and economic opportunity.

KPI 6: Faculty and staff that received professional development training to improve remote learning.

This metric captures the investment in training programs designed to empower educators with the skills and knowledge required to use digital tools and platforms in remote learning environments. By tracking the number of faculty and staff who have received professional development training, institutions can assess the readiness of their educators to adapt to remote learning methodologies. It reflects the commitment to supporting faculty and staff in developing the necessary technological competencies to deliver high-quality remote instruction. Increased training numbers may indicate a growing emphasis on professional development and highlight the institution's dedication to improving remote learning outcomes.

GOAL 4
Provide community members with the workforce and digital skills training to attain certification and jobs.

KPI 7: Number of community members trained in workforce development and digital skills.

This metric measures the reach and impact of training programs aimed at equipping community members with the skills required to enter the workforce or advance their careers in the digital age. Tracking the number of individuals trained showcases the grantee's commitment to enhancing the employability and economic prospects of anchor community members. It reflects the effectiveness of workforce development initiatives and the accessibility of digital skills training. Increasing numbers indicate a broader reach of these programs and demonstrate the institution's efforts in addressing the skills gap within the community.

KPI 8: Number of individuals awarded new certification upon training completion.

This metric reflects the effectiveness of training programs in equipping community members with recognized qualifications, validating their proficiency in targeted areas. Tracking the number of certifications awarded indicates the grantee's ability to deliver training that meets industry standards and prepares individuals for employment opportunities. Increasing certification numbers demonstrate the institution's commitment to quality training, the potential for improved job prospects for community members, and the growing capacity for the institution to safeguard its broadband investments.

KPI 9: Number of jobs filled from community-based programs implemented.

This metric reflects the institution's success in facilitating job placements and connecting community members with employment opportunities through their training programs. Tracking the number of jobs filled showcases the grantee's ability to bridge the gap between training and employment. It highlights the effectiveness of community-based programs in addressing local workforce needs and fostering economic growth within the anchor community. Increasing job placement numbers also indicate the institution's impact in creating pathways to employment for trained individuals.

Ultimately, these metrics feed into a logic model as inputs. These inputs represent leading indicators of economic impact that should manifest the multiplier effect of the CMC pilot program in these anchor institutions and communities.

Initial Lessons Learned

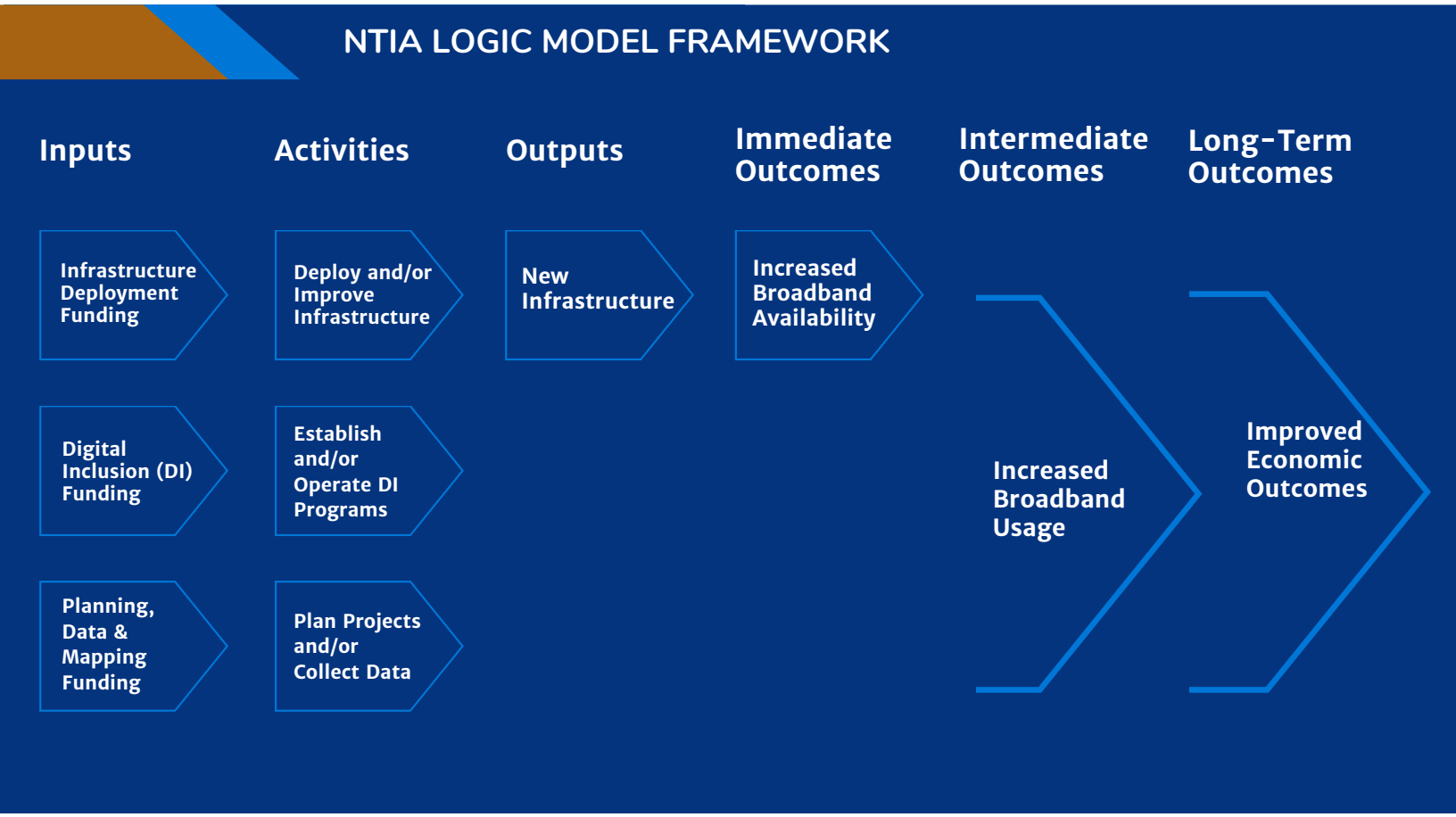
The 2022 Office of Minority Broadband Initiatives Report, in the agency's role as an advocate for broadband equity, reports on stakeholder initiatives and local programmatic solutions that bring down barriers to digital inclusion. In this year's report, there are **three key findings** to highlight:

1. **Alignment to NTIA's Logic Model**
2. **Critical and Foundational Importance of Partnerships**
3. **Anchor Institution Implementation Cycle Can Be Long**

1 Alignment to NTIA's Logic Model Framework

NTIA's Logic Model Framework, first introduced in the 2022 Federal Broadband Funding Report: Investing in Internet for All, can be used as a tool to assess the effectiveness of broadband initiatives. The model breaks down an initiative into six components: Inputs, Activities, Outputs, Immediate Outcomes, Intermediate Outcomes, and Long-Term Outcomes. Inputs are the resources that are used to implement the initiative, such as funding, staff, equipment, and curriculums. Outputs are the products or services that are produced by the initiative, such as broadband access, digital literacy training, or economic development opportunities. Outcomes are the changes that occur as a result of the initiative, such as increased broadband adoption, improved digital literacy, or increased economic activity. Long-term outcomes are the benefits that result from the initiative, such as improved educational outcomes, increased job opportunities, or improved health outcomes.

OMBI's work aligns to the NTIA Logic Model Framework to deliver strategic performance and coordination throughout the agency. This alignment is a positive development, as the model can help to ensure that initiatives are effective and that their impact can be measured using a common yardstick.



2 Critical and Foundational Importance of Partnerships

Early reports from anchor institutions identify partnerships as critical to the success of broadband initiatives. Partnerships can help to bring together different stakeholders, such as government agencies, the broadband industry, other peer institutions, and community organizations. These partnerships enable anchor institutions to jumpstart their initiatives through the resources, expertise, and social networks of their partners. Partnerships also help ensure that initiatives are designed and implemented in a way that meets the needs of the community.

It's also important to note that OMBI through its FPOs also serves as an important partner for the anchor institutions. The FPOs provide support, feedback, and guidance to their anchor institutions throughout the implementation process. FPOs reinforce anchor institution progress through frequent calls, site visits for corrective action and best practice capture, and community cultivation.

3 Anchor Institution Implementation Cycle Can Be Long

As noted earlier in this report, the implementation of these novel broadband solutions, and the battle to remove barriers, will take time. Although the staggered award timeline has allowed some grantees to serve as an implementation vanguard, they must still contend with a solution process that requires plan refinement, talent acquisition, procurement, communications, and program adjustments.

Even with the best planning and execution, anchor institutions must make adjustments to reflect context changes. These changes from a more competitive labor market—noted by the Oklahoma State University Technical Institute—to difficulty luring IT professionals into rural communities—Albany State University's predicament, all require agile adjustments. These adjustments delay progress, but they also make for more sustainable and resilient solutions. Given the staggered award timeline, this programmatic agility also helps later phase CMC grantees avoid pitfalls and ensures their journeys benefit from the detour signs posted by the CMC vanguard.

What To Expect In 2024

As CMC grantee programs proceed along their maturation cycle, the third report in 2024 will have the opportunity to explore more data and more detail. The data, derived from the grantee reporting cycle, will shed light on how specific approaches best counter the barriers to broadband connectivity. Data will also reveal how, when, and why partnership frameworks proved crucial to the planning, implementation, and impact at the institutional and anchor community levels.

In turn, qualitative feedback from anchor institutions and community partners will provide lessons from the field. This insight will explain how grantee solutions outflanked the local, structural, and contextual barriers to digital inclusion. These accounts and experiences will also provide more understanding of the operational and logistical challenges. This earned wisdom from peers will prove essential to expedite program success beyond pilot program communities. These lessons, both strategic and tactical, will prove instrumental to advancing the OMBI mission and the anchor institution's ability to pivot toward successful outcomes.

Final Thoughts

The words and data that make up these reports don't tell the full story. The true narrative, and OMBI's essential mission, is a story about changing lives. OMBI will strive to build a bridge for anchor institutions that remain outside of the burgeoning digital economy. This effort will ensure their students, and American citizens in their surrounding communities, will contribute towards America's economic future.

OMBI's mission, and the CMC Pilot Program embedded within it, tackles broadband barriers with the goal of unfettered human potential. Overcoming the barriers associated with availability, affordability, and adoption means that a minority student can engage in remote learning, gain access to online course materials, collaborate with peers, and benefit from innovative educational platforms. When this student´s anchor institution invests in needed broadband infrastructure and develops a digital curriculum, the potential ripples out into the surrounding community. Its impact on anchor community lives is equally profound. It connects each community member to a digital world with rich potential. It's a bridge to new skills, new job opportunities, and catalyst for personal and professional growth.

In its second year, this narrative has just begun. Its outcome will have important consequences in student lives, digital equity, and the economic vitality of the nation.

CMC Grant Recipients List

Grant Recipient	Designation Type(s)	Award Amount
Alabama State University	HBCU	$2,999,695.37
Albany State University	HBCU	$2,997,777.00
American Baptist Theological Seminary	HBCU	$2,992,248.23
American Samoa Community College	ANNAPISI; ANNH	$2,994,869.00
Atlanta Technical College	PBI	$2,997,232.00
Benedict College	HBCU	$2,893,457.00
Bennett College	HBCU	$699,950.00
Broward College	HSI	$2,999,996.77
Cabrillo College	HSI	$2,998,851.00
California State University, Dominguez Hills	HSI	$5,302,668.00
California State University, Fresno	ANNAPISI; HSI	$2,406,276.00
California State University, Sacramento State	HSI	$2,997,092.00
Central State University	HBCU	$3,000,000.00
Chicago State University	HSI;PBI	$3,232,255.84
Claflin University	HBCU	$2,999,440.00
College of Micronesia -FSM	ANNAPISI; ANNH	$1,195,260.00
College of Southern Nevada	ANNAPISI; HSI	$2,488,048.00
College of the Marshall Islands	ANNAPISI; ANNH	$ 1,794,628.00
Colorado State University Pueblo	HSI	$ 2,999,023.00
Community College of Philadelphia	PBI	$ 2,948,610.00
Coppin State University	HBCU	$ 3,990,880.00
Dine College	ANNH; TCU	$ 2,925,627.00
Dominican University	HSI	$ 2,582,917.00
Dominican University New York	HSI	$ 1,979,985.00
Drake State Community and Technical College	HBCU	$ 2,413,182.20
Eastern New Mexico University Roswell	HSI	$ 1,945,329.00
Eastern University	HSI	$ 2,011,405.13
Elizabeth City State University	HBCU	$ 2,131,383.00
Fayetteville State University	HBCU	$ 4,933,021.00
Felician University	HSI	$ 2,301,890.00
Florida A&M University	HBCU	$ 5,395,671.00

CMC Grant Recipients List

Grant Recipient	Designation Type(s)	Award Amount
Fort Valley State University	HBCU	$ 2,997,558.00
Grambling State University	HBCU	$ 2,218,696.00
H. Councill Trenholm State Community College	HBCU	$ 2,066,454.00
Jarvis Christian College	HBCU	$ 1,183,089.00
Johnson C. Smith University	HBCU	$ 5,720,896.00
Lane College	HBCU	$ 472,005.48
Lincoln University	HBCU	$ 2,998,303.86
Lincoln University of Missouri	HBCU	$ 2,980,070.84
Loma Linda University	ANNAPISI; HSI	$ 3,323,214.00
Long Beach City College	ANNAPISI; HSI	$ 2,999,978.00
Merced College	HSI	$ 2,634,914.00
Mercy College	HSI	$ 2,620,940.00
Miami Dade College	HSI	$ 2,414,000.00
Morehouse School of Medicine	HBCU	$ 4,231,058.00
Morgan State University	HBCU	$ 4,115,616.00
Mount Saint Mary's University	ANNAPISI; HSI	$ 747,019.00
Nebraska Indian Community College	TCU	$ 2,938,816.00
New Mexico Highlands University	HSI	$ 2,901,403.08
New Mexico State University	HSI	$ 1,686,620.00
Norfolk State University	HBCU	$ 3,898,789.00
North Carolina Agricultural and Technical State University	HBCU	$ 3,686,697.00
North Carolina Central University	HBCU	$ 2,919,534.00
Northeastern State University	NASNTI	$ 2,950,598.00
Oklahoma State University Institute of Technology	NASNTI	$ 754,970.22
Our Lady of the Lake University	HSI	$ 2,246,173.00
Paul Quinn College	HBCU	$ 2,999,677.18
Philander Smith College	HBCU	$ 2,999,903.00
Phoenix College	HSI	$ 4,256,738.52
Prairie View A&M University	HBCU	$ 3,000,000.00
Red Lake Nation College	TCU	$ 1,924,280.00
Rutgers, The State University of New Jersey, Newark	ANNAPISI; HSI	$ 2,777,052.00

CMC Grant Recipients List

Grant Recipient	Designation Type(s)	Award Amount
Saint Augustine's University	HBCU	$ 1,943,715.00
Shaw University	HBCU	$ 5,072,045.00
Simmons College of Kentucky, Inc.	HBCU	$ 2,762,100.00
South Texas College	HSI	$ 2,850,148.35
Southern University and A&M College	HBCU	$ 6,227,200.00
Southern University at New Orleans	HBCU	$ 3,000,000.00
Southern University Law Center	HBCU	$ 3,029,484.79
Southwestern College	ANNAPISI; HSI	$ 3,000,000.00
Southwestern Indian Polytechnic Institute	TCU	$ 1,645,133.56
St. Augustine College	HSI	$ 2,682,359.00
Stillman College	HBCU	$ 2,774,257.37
Sul Ross State University	HSI	$ 2,770,417.00
Talladega College	HBCU	$ 2,967,121.60
Texas College	HBCU	$ 2,152,778.26
Tohono O'odham Community College	TCU	$ 1,912,357.60
Tuskegee University	HBCU	$ 3,569,618.00
Universidad Ana G. Mendez, Recinto de Carolina	HSI	$ 1,510,941.00
Universidad del Sagrado Corazón	HSI	$ 2,978,187.00
University of Alaska Fairbanks	ANNH; NASNTI	$ 2,976,837.00
University of Arizona	HSI	$ 3,051,875.00
University of Connecticut	ANNAPISI	$ 2,864,285.00
University of Houston - Downtown	ANNAPISI; ANNH	$ 2,470,225.00
University of Maryland Eastern Shore	HBCU	$ 2,999,999.89
University of Massachusetts Boston	ANNAPISI	$ 2,970,106.00
University of the Virgin Islands	HBCU	$ 2,990,594.00
University of Washington	ANNAPISI	$ 2,963,813.00
University of West Alabama	PBI	$ 1,649,440.00
Virginia State University	HBCU	$ 2,799,180.00
Virginia Union University	HBCU	$ 2,987,765.00
Wayne County Community College District	PBI	$ 2,999,591.00
Wilberforce University	HBCU	$ 2,066,822.22

CMC Recipients: Innovative Anchor Community Approaches

Grant Recipient	Classroom Technology Upgrades	Community Technology Hub Upgrade	Cybersecurity	Digital Literacy Skills	Entrepreneurship Small Business	Internships Apprenticeships	STEM STEAM	Telehealth Telemedicine	Workforce Training Economic Growth
Alabama State University		×		×		×			
Albany State University	×			×		×			×
American Baptist Theological Seminary	×	×	×	×					×
American Samoa Community College			×				×		×
Atlanta Technical College				×					
Benedict College	×	×		×					
Bennett College			×				×		×
Broward College	×			×		×	×		×
Cabrillo College	×			×			×		
California State University, Dominguez Hills				×					×
California State University, Fresno			×				×		
California State University, Sacramento State				×		×			×
Central State University	×	×			×				
Chicago State University		×		×	×	×			×

CMC Recipients: Innovative Anchor Community Approaches

Grant Recipient	Classroom Technology Upgrades	Community Technology Hub Upgrade	Cybersecurity	Digital Literacy Skills	Entrepreneurship Small Business	Internships Apprenticeships	STEM STEAM	Telehealth Telemedicine	Workforce Training Economic Growth
Claflin University				×	×				×
College of Micronesia -FSM		×		×			×	×	×
College of Southern Nevada	×	×		×				×	×
College of the Marshall Islands	×	×		×		×			×
Colorado State University Pueblo	×	×		×					×
Community College of Philadelphia				×				×	×
Coppin State University		×	×	×		×		×	×
Dine College	×	×		×		×			×
Dominican University	×					×	×		×
Dominican University New York	×		×				×		
Drake State Community and Technical College	×	×		×		×			×
Eastern New Mexico University Roswell	×			×					×
Eastern University		×		×		×			×
Elizabeth City State University		×		×		×	×		

CMC Recipients: Innovative Anchor Community Approaches

Grant Recipient	Classroom Technology Upgrades	Community Technology Hub Upgrade	Cybersecurity	Digital Literacy Skills	Entrepreneurship Small Business	Internships Apprenticeships	STEM STEAM	Telehealth Telemedicine	Workforce Training Economic Growth
Fayetteville State University		×	×		×	×			×
Felician University	×			×	×	×	×	×	×
Florida A&M University	×	×		×			×		×
Fort Valley State University		×	×	×		×			×
Grambling State University			×					×	×
H. Councill Trenholm State Community College	×			×					×
Jarvis Christian College	×	×		×	×	×			×
Johnson C. Smith University	×	×		×	×		×		×
Lane College	×	×		×				×	×
Lincoln University									
Lincoln University of Missouri				×					
Loma Linda University	×					×	×	×	×
Long Beach City College		×		×	×				×
Merced College		×		×					

CMC Recipients: Innovative Anchor Community Approaches

Grant Recipient	Classroom Technology Upgrades	Community Technology Hub Upgrade	Cybersecurity	Digital Literacy Skills	Entrepreneurship Small Business	Internships Apprenticeships	STEM STEAM	Telehealth Telemedicine	Workforce Training Economic Growth
Mercy College	X	X	X			X			X
Miami Dade College	X			X					X
Morehouse School of Medicine		X		X		X	X	X	X
Morgan State University			X	X		X	X		X
Mount Saint Mary's University	X			X		X			X
Nebraska Indian Community College	X				X				X
New Mexico Highlands University		X		X	X				X
New Mexico State University		X		X					
Norfolk State University	X	X			X				
North Carolina Agricultural and Technical State University	X		X						X
North Carolina Central University	X		X	X	X				X
Northeastern State University	X	X				X			
Oklahoma State University Institute of Technology									X
Our Lady of the Lake University	X			X			X		

CMC Recipients: Innovative Anchor Community Approaches

Grant Recipient	Classroom Technology Upgrades	Community Technology Hub Upgrade	Cybersecurity	Digital Literacy Skills	Entrepreneurship Small Business	Internships Apprenticeships	STEM STEAM	Telehealth Telemedicine	Workforce Training Economic Growth
Paul Quinn College	X	X		X	X	X	X		X
Philander Smith College	X								X
Phoenix College	X						X		X
Prairie View A&M University	X	X		X					X
Red Lake Nation College	X		X			X			X
Rutgers, The State University of New Jersey, Newark	X			X				X	X
Saint Augustine's University	X	X	X	X		X			
Shaw University	X	X	X	X					
Simmons College of Kentucky, Inc.	X			X		X	X		X
South Texas College	X	X							X
Southern University and A&M College	X			X		X	X		X
Southern University at New Orleans	X			X					X
Southern University Law Center	X	X	X	X		X	X		
Southwestern College	X	X							

CMC Recipients: Innovative Anchor Community Approaches

Grant Recipient	Classroom Technology Upgrades	Community Technology Hub Upgrade	Cybersecurity	Digital Literacy Skills	Entrepreneurship Small Business	Internships Apprenticeships	STEM STEAM	Telehealth Telemedicine	Workforce Training Economic Growth
Southwestern Indian Polytechnic Institute	×			×					
St. Augustine College				×	×				×
Stillman College	×	×			×			×	
Sul Ross State University	×			×					×
Talladega College	×			×					×
Texas College	×	×		×					×
Tohono O'odham Community College		×		×					×
Tuskegee University			×				×		×
Universidad Ana G. Mendez, Recinto de Carolina	×	×		×					
Universidad del Sagrado Corazón					×		×		×
University of Alaska Fairbanks		×				×			×
University of Arizona		×		×	×	×	×		×
University of Connecticut	×			×					
University of Houston - Downtown	×			×					×

CMC Recipients: Innovative Anchor Community Approaches

Grant Recipient	Classroom Technology Upgrades	Community Technology Hub Upgrade	Cybersecurity	Digital Literacy Skills	Entrepreneurship Small Business	Internships Apprenticeships	STEM STEAM	Telehealth Telemedicine	Workforce Training Economic Growth
University of Maryland Eastern Shore			×				×		×
University of Massachusetts Boston				×	×				×
University of the Virgin Islands	×				×				×
University of Washington				×	×	×			×
University of West Alabama	×	×		×		×		×	×
Virginia State University				×		×	×		
Virginia Union University	×	×	×	×					×
Wayne County Community College District	×		×	×	×		×		×
Wilberforce University	×								

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