

Massachusetts BEAD Initial Proposal Volume I and II

FOR PUBLIC COMMENT

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Massachusetts Broadband Institute

MBI
MASSACHUSETTS
BROADBAND INSTITUTE



at the MassTech
Collaborative

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1. Executive Summary

Digital Equity in Massachusetts: A Transformational Opportunity

Massachusetts is at a pivotal moment with a unique opportunity to drive transformative change in digital equity.

The Massachusetts Broadband Institute (MBI) is the central broadband office for the Commonwealth of Massachusetts. MBI is one of five primary divisions of the Massachusetts Technology Collaborative (MassTech), a quasi-public economic development agency that works closely with the state Executive Office of Economic Development.

MBI has made significant investments to expand internet access across the State. MBI has funded last mile projects, established a middle mile network, and facilitated public-private partnerships to extend high-speed internet access to underserved and remote areas. These efforts have included grants, technical assistance, and collaborations between public entities and private service providers, all aimed at bridging the digital divide and ensuring better connectivity. With these investments, Massachusetts has achieved an availability rate that exceeds 98%, measured by the number of locations with high-speed internet infrastructure. This leaves a limited number of locations lacking high speed connections. Through a once-in-a generation federal funding investment, Massachusetts has an unprecedented opportunity to achieve its strategic goals and unlock meaningful economic potential for all residents.

Vision for Digital Equity

The vision for broadband and digital equity in the Commonwealth is that:

Every resident in Massachusetts has high-speed, high-quality internet availability and can confidently adopt and use the internet regardless of who they are or where they live. This universal connectivity will ensure that everyone has the support they need to enjoy full personal, civic, and economic digital participation throughout their lives with safety and security.

Availability	Adoption	Quality of Service
Every location has high-speed internet available .	Every resident can utilize and afford the internet.	Every location has reliable service.

Shaping the BEAD and DEA Planning Processes

MBI’s planning process for Broadband Equity Access and Deployment (BEAD) and Digital Equity Act (DEA) prioritized alignment. While the BEAD and DEA plans seek unique goals - with BEAD investing in statewide infrastructure, and DEA focusing on digital equity investments - MBI aligned the efforts to ensure coordinated stakeholder engagement and visioning activities. This allowed MBI to develop a shared strategy to bridge the digital divide across the Commonwealth.

MBI’s historic investments in middle mile and last mile infrastructure has set the stage for the Commonwealth to achieve universal broadband availability in the coming years. The sequencing of MBI’s infrastructure grant funds will begin with the Broadband Infrastructure Gap Networks Grant Program¹ which aims to fill the remaining gaps in Massachusetts broadband coverage. Any remaining coverage gaps that remain after the Gap Networks Program or that are identified through the BEAD Challenge Process will be addressed with BEAD Deployment funds.

Following the guidance provided by the National Telecommunications and Information Administration (NTIA), we conducted a large-scale engagement process to understand the state of digital equity in

Massachusetts and where gaps exist. MBI established a Broadband & Digital Equity Working Group to bring together practitioners across the Commonwealth to inform every step of this work; conducted stakeholder interviews; hosted statewide listening sessions and focus groups; distributed a statewide Digital Equity survey in nine languages; and conducted data analysis involving publicly available data.

This Plan is made possible by our robust network of partners, including existing MBI grantees advancing local, regional, and municipal digital equity planning efforts across the Commonwealth. Throughout the planning process, we deliberately created opportunities to invite these partners to inform both the BEAD and DEA Plans and ensure these Plans reflected their expertise and understanding of digital equity. This exercise helped to strengthen the community of digital equity practitioners across the Commonwealth and positions Massachusetts well to effectively allocate and execute on the Plan with BEAD funds and Digital Equity Capacity grants when available.

Our Approach for BEAD

The BEAD program in Massachusetts aims to provide universal broadband access and support digital equity initiatives. The Commonwealth is in a unique situation for BEAD broadband deployment projects as the Broadband Infrastructure Gap Networks Grant Program (Gap Networks Program), funded through the ARPA Capital Projects Fund, may have the capacity to serve most of the unserved and underserved locations in the Commonwealth prior to BEAD funding becoming available. MBI expects that, due to the CPF-funded Gap Networks Program, few or no mass market Broadband Serviceable Locations (BSLs) may remain by the time the BEAD subgrantee selection process begins. However, there is a possibility that higher-than-expected costs, lower-than-expected participation, and/or coverage gaps identified through the BEAD challenge process, will result in a situation where the BEAD program in Massachusetts has remaining coverage gaps to address. The BEAD deployment program will have up to three possible rounds of funding based on the number of locations remaining to be served. All three rounds may not be required if there are not a significant number of locations to be served following the Gap Network Program. The rounds of competitive grant applications will be followed by negotiations to ensure that no gaps remain. The goal is that by the end of these rounds, the BEAD deployment program will achieve its 100% availability goal.

Given MBI's rich history of supporting broadband access and digital equity initiatives for every Massachusetts resident, MBI intends to use non-deployment BEAD funds to support deeper investment into already existing digital equity programs while also developing new, complementary programs that support the Commonwealth's vision for adoption and quality of service. This approach will make the most efficient use of federal funds while advancing progress toward the Commonwealth realizing MBI's unified vision.

Main Findings

Based upon learnings from this process, MBI established digital equity gaps, sourced from the State's major digital equity needs. From these gaps, MBI generated correlating actions, linked to future programs to implement throughout Massachusetts. Gaps were categorized by the NTIA's Measurable Objectives, and are connected to forward-looking strategies established in the Statewide Digital Equity Plan. High-level findings from each Measurable Objective area include:

Broadband Affordability & Availability

- High internet subscription costs are the largest identified barrier that prevent Massachusetts residents from having broadband at home.
- Many residents with internet subscriptions experience poor internet quality.

Accessibility of Devices and Device Support

- Residents identify a need for low-cost devices.
- Residents need devices that are easy to use.
- Residents need sustainable devices.

Digital Literacy

- Residents need greater digital literacy support, especially support that is linguistically and culturally accessible across different demographic groups.
- Residents need support using the internet to conduct essential day-to-day activities, including accessing job opportunities and healthcare.
- Institutions offering digital literacy programs, including libraries, need operating support.

Privacy & Cybersecurity

- Residents are concerned about internet safety, especially with regard to protecting themselves from having their data stolen, from online scams, and from digital surveillance.
- Individuals with disabilities are particularly concerned about medical data breaches.
- Residents are concerned about youth safety online.

Accessibility & Inclusivity of Public Resources

- Residents, particularly those with language and accessibility barriers, identify difficulty accessing public resources online.
- Residents need more information about how to access online public resources and desire support programs tailored to their needs.

MBI's assessment of needs found that greater affordability, higher quality of service, and increased internet safety are top priorities for residents across Covered and Underrepresented Populations and regions of the state. These consistent themes underlie the diverse needs across different regions and demographic groups. As a result, MBI is committed to being responsive to the diversity of resident needs, recognizing the unique differences in needs across regions and demographic groups and avoiding a one-size-fits-all approach. MBI used this understanding of needs to recommend programs to improve digital equity in the Commonwealth.

Implementation Plan

MBI developed an implementation strategy to organize our efforts to achieve digital equity in Massachusetts. We designed the framework to rely on extensive collaboration with our local and statewide partners and to make the Plan effective and sustainable over the long term. MBI's implementation strategy is structured to achieve the vision through 3 sets of activities: build on existing programs, develop new programs, and create foundations for success. The list of recommended programs below provides examples that MBI may want to prioritize from the full list of programs.

Build on Existing Programs

Digital Equity Partnerships Program. MBI will scale its existing Partnerships program with a focus on 3 objectives: expand geographical coverage to regions with gaps in support, expand coverage by target populations regardless of geographic location, and expand initiatives supported through past grants where these have proven to be successful.

Municipal Digital Equity Planning Program: Building on the 70 municipalities that have participated in this program to date, MBI's future investments will focus on two initiatives: provide participating municipalities with easily accessible funding to implement priority initiatives based on their plans and create meaningful funding options to implement larger, longer-term projects.

Develop New Programs

State-Supported Technical Assistance. MBI will develop a Front Door program to support quality of service through a consumer-facing web portal dedicated to addressing quality-of-service concerns for the residents through education, troubleshooting tools, and escalation options.

Statewide Digital Navigator Corps. MBI will support organizations throughout Massachusetts to hire, train, and staff digital navigators who can provide local support with technology troubleshooting, education, program access, and more. We will prioritize increasing the number of navigators in regions and among populations where this resource is currently unavailable.

Create Foundations for Success

Foster Regional and Topic-Specific Digital Equity Coalitions: MBI will facilitate the creation of coalitions that promote digital equity across Massachusetts. MBI envisions that coalitions could be structured by region, Covered Population or other socioeconomic or demographic characteristics, priority outcome areas (economic and workforce development, education, healthcare, housing, and infrastructure), or other dimensions.

Establish Best Practices Catalogue: MBI will strengthen the ability of all organizations to support digital equity objectives by educating practitioners and developing a catalogue of best practices. This support will be available both to organizations that focus on digital equity and to those that do not.

MBI will track the outputs and outcomes of its programs in multiple ways. Existing MBI programs already have in place methods to track KPIs and overall progress. Building on these structures and KPIs, MBI will set program evaluation measures with its partners for all programs—based on the Measurable Objectives and key performance indicators—that allow it to assess whether programs are producing results and, if not, where they should improve. MBI will also establish mechanisms for lessons learned to be shared statewide so that successful programs can be expanded more broadly.

The Way Forward

Completing the Massachusetts Internet for All Broadband and Digital Equity Plans is the first step. As we move towards putting the Plans into action, we understand the need to ensure Plans remain as “living documents” that will continue to reflect the realities of diverse communities in the Commonwealth and can guide investments and partnerships where it meets the need and the moment. To do so, MBI will continue ongoing connections with stakeholders and communities across the Commonwealth to have an up-to-date understanding of needs and barriers.

This will be an all-hands-on-deck effort over the coming years, and we look forward to joining hands with major stakeholders in and outside of government—including Commonwealth and local government agencies, nonprofit leaders, and private industry partners—to meet this pivotal moment and ensure universal connectivity and its benefits for all.

2. Introduction for Volume I

The Massachusetts Broadband Institute is pleased to present our submission in response to the National Telecommunications and Information Administration (NTIA) BEAD Initial Proposal Volume I. As part of our submission, we have addressed and met the following four requirements, as outlined in the BEAD NOFO:¹

1. **Existing Broadband Funding (Requirement 3):** Identified existing efforts funded by the federal government to deploy broadband and close the digital divide, including in Tribal Lands.
2. **Unserved and Underserved Locations (Requirement 5):** Identified each unserved and underserved locations within our jurisdiction, including Tribal Lands, using the latest National Broadband Map submission.
3. **Community Anchor Institutions (“CAIs”) (Requirement 6):** Described how the statutory definition of the term "community anchor institution" was applied, identified all eligible CAIs in our jurisdiction and Tribal Lands, and determined the types of CAIs MBI intends to serve.
4. **Challenge Process (Requirement 7):** Outlines how MBI will conduct a challenge process.

MBI has chosen to adopt the BEAD Model Challenge Process, including four of the optional modules for digital subscriber line (DSL) Technology, Speed Tests, Multi Dwelling Units (MDUs) and Area Challenges. MBI also intends to utilize the BEAD Eligible Entity Planning Toolkit to identify existing federal enforceable commitments.

In addition to Volume I, this submission includes Volume II of the Initial Proposal, which comprehensively covers the remaining sixteen requirements in the BEAD Initial Proposal. Upon posting drafts of both Volumes I and II, a public comment period will follow.

2.1 Existing Broadband Funding (Requirement 3)

MBI has compiled the existing efforts funded by both the federal and state government within Massachusetts to deploy broadband and close the digital divide, including on Tribal Lands, as documented in the Five-Year Action Plan. MBI has provided a comprehensive list of the current broadband funding sources in the table below, and in the required attachment, "[BEAD Initial Proposal Volume I Existing Broadband Funding Sources Template.xlsx](#)". The table below and the attachment provide a brief description of the broadband deployment and other broadband-related activities, the total funding, the funding amount expended, and the remaining funding amount available.

Table 1: Existing broadband funding

Source	Purpose	Total	Expended*	Available
U.S. Economic Development Administration (“EDA”)	The purpose of this federal grant is to conduct a statewide broadband coverage and service quality gaps project.	\$1 million	\$1 million	\$0
American Rescue Plan Act (“ARPA”) Capital Projects Fund	1) The Gap Networks Grant Program focuses on “connecting the unconnected” and households that do not have access to wireline internet service offering at least 100 Mbps download speed/20 Mbps upload speeds, prioritizing the lowest reported speeds.	\$152.8 million	\$516,307	\$152.4 million

¹ See BEAD NOFO at 31, Section IV.B.5.b

	2) The Residential Retrofit Grant Program will focus on identification and remediation of issues negatively impacting the quality of residential internet service for eligible residents.	\$22.5 million	\$0	\$22.5 million
<u>Broadband Equity, Access, and Deployment Program (“BEAD”)</u>	Build networks that connect unserved and underserved locations, provide high speed internet to community anchor institutions, and help MA achieve digital equity	\$147.4 million	\$524,149	\$146.9 million
<u>Broadband Innovation Fund</u>	1) The Digital Equity Partnerships Program is focused on the implementation of digital equity projects and to address statewide digital equity gaps. 2) The Municipal Digital Equity Planning Program enables municipalities, or other local bodies of government, to engage in planning activities related to digital equity and bridging the digital divide.	\$75 million	\$4.1 million	\$70.9 million
<u>NTIA Tribal Broadband Connectivity Program</u>	Provide grants to support broadband deployment and adoption in tribal communities.	\$9.1 million	N/A	N/A
<u>FCC Rural Digital Opportunity Fund (“RDOF”)</u>	RDOF supports broadband networks in rural communities across the country. RDOF Phase I began in 2020 and targeted over six million homes and businesses in census blocks that are entirely unserved by voice and broadband with speeds of at least 25/3 Mbps. Phase II will cover locations in census blocks that are partially served, as well as locations not funded in Phase I.	\$3.4 million	N/A	N/A
<u>FCC Connect America Fund – Phase II Auction</u>	The federal universal service high-cost program (also known as the Connect America Fund) is designed to ensure that consumers in rural, insular, and high-cost areas have access to modern communications networks capable of providing voice and broadband service, both fixed and mobile, at rates that are reasonably comparable to those in urban areas. The program fulfills this universal service goal by allowing eligible carriers who serve these areas to recover some of their costs from the federal Universal Service Fund.	\$11.1 million	N/A	N/A
<u>Connecting Minority Communities Pilot Program</u>	The Connecting Minority Communities Pilot Program supports Historically Black Colleges and Universities (HBCUs), Tribal Colleges and Universities (TCUs), and Minority-Serving Institutions (MSIs). Its goal is to help these	\$2.9 million	N/A	N/A

	organizations buy Internet service and equipment. It also provides funding to hire and train information technology personnel.			
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*includes amounts expended through June 30, 2023

N/A Indicates that the Commonwealth of Massachusetts does not administer the grant program.

2.2 Unserved and Underserved Locations (Requirement 5)

To identify all the unserved and underserved locations in the Commonwealth, MBI is submitting two CSV files which contain the location IDs of these locations. This includes all unserved and underserved locations in applicable Tribal Lands. These files can be accessed through the links below:

Unserved Locations: [MA Unserved Locations](#)

Underserved Locations: [MA Underserved Locations](#)

The unserved and underserved location data were identified from v2 of the BSL Fabric released on December 31, 2022, and Broadband Data Collection (BDC) filings, updated on October 24, 2023. While current BSLs and status are provided as part of this draft version for public comment, MBI encourages the use of the challenge process to provide feedback on the status of locations as served, underserved, or unserved.

2.3 Community Anchor Institutions (Requirement 6)

Based on the statutory definition of “community anchor institution” as defined in 47 USC 1702 (a)(2)(E), MBI has applied the definition of “community anchor institution” to mean a school, library, health clinic, health center, hospital or other medical provider, public safety entity, institution of higher education, public housing organization (including any public housing agency, HUD-assisted housing organization, or Tribal housing organization), or community support organization that facilitates greater use of broadband service by vulnerable populations, including low-income individuals, unemployed individuals, children, the incarcerated, and aged individuals.

In addition to the definition above, MBI defines local, state, federal or tribal government buildings/facilities, job training centers and career centers, food banks and homeless shelters, veterans centers, affordable housing, small business technical assistance centers and collaborative working spaces, community behavioral health centers and clubhouses, community media centers, and faith-based institutions as community anchor institutions. These locations serve as hubs for digital access in their communities and often have specialized technology needs and require affordable, high-speed, reliable broadband connections to provide their services effectively.

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

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

With this in mind, CAIs which may be considered to receive access to gigabit symmetrical service will be assessed based on the programs or services they provide that support broadband access, digital inclusion and digital equity and the number of vulnerable populations served by the CAI. The categories of CAIs identified herein represent the universe of community organizations that would be eligible for broadband infrastructure investments of BEAD funding. The extent and magnitude of MBI’s eventual investments in CAI connectivity will be based on the factors identified above as well as MBI’s unified BEAD and Digital Equity Act strategy, goals and objectives.

The following definitions and sources were used to identify the types of community anchor institutions:

Table 2: Definitions and sources used to identify the types of community anchor institutions

Schools	Schools appearing in this data set are those attended by students in pre-kindergarten through high school, based on the Massachusetts Department of Elementary and Secondary Education (DESE) school profiles database. This
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	<p>includes public elementary, public secondary, public vocational/technical/agricultural regional, private, charter, and special education schools.</p> <p>Data was acquired from MassGIS (Bureau of Geographic Information).</p>
Libraries	<p>This dataset contains points which represent locations of all public and some special libraries currently registered with the Massachusetts Board of Library Commissioners (MBLC).</p> <p>Data was acquired from MassGIS (Bureau of Geographic Information).</p>
Health clinic, health center, hospital, or other medical providers	<p>Data for hospitals, community health centers, and nursing facilities was acquired from MassGIS (Bureau of Geographic Information). Data for community behavioral health centers and clubhouses, categorized under community health center was gathered from Mass.gov and Massachusetts Clubhouse Coalition. Data for clinics was acquired from Massachusetts eHealth Institute (MeHi's) tracking of ambulatory medical practices for the Executive Office of Health and Human Services (EOHHS). Clinics included small to large ambulatory practices, those from 1-9 Medical Doctors (MDs), Doctor of Osteopathic Medicine (DOs), Nurse Practitioners (NPs), and Physicians Assistants (PAs) to at least 20 MDs, DOs, NPs, and PAs.</p> <p>Acute and Non-Acute care hospitals are those licensed under Massachusetts General Law Chapter 111, Section 51 and defined using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria as well as a listing on the state's Bureau of Hospitals website.</p>
Public safety entity	<p>Fire houses were sourced through the Department of Fire Services and acquired via MassGIS (Bureau of Geographic Information).</p> <p>Police Stations were provided by the Massachusetts Emergency Management Agency (MEMA) GIS Program in cooperation with the Regional Planning Agencies and participating communities. Data was acquired via MassGIS (Bureau of Geographic Information).</p> <p>Prison/Correctional Facilities were acquired via MassGIS (Bureau of Geographic Information) who verified locations from the websites of the Massachusetts Department of Correction (MADOC), Massachusetts Sheriffs' Association (MSA), Federal Bureau of Prisons (BOP) and individual facilities, and verbal communication with many of the facilities. This data was acquired from MassGIS (Bureau of Geographic Information).</p>
Institutions of higher education	<p>Institutions of higher education include private and public universities and community colleges. Additionally, MBI has chosen to include minority serving institutions, trade schools, adult education programs, job training centers and career as part of this category.</p> <p>This data is primarily based on all Massachusetts colleges listed in the National Center for Education Statistics with additional schools added from lists of professional occupational/vocational institutions compiled by the Massachusetts Office of Consumer Affairs and Business Regulation Division of Professional Licensure. Data was acquired from NASA, MassGIS, and MassHire.</p>
Public housing organizations	<p>Public housing organizations were identified from the National Housing Preservation Database (NHPD) and include State-assisted Housing Organization and HUD-assisted Housing Organization.</p> <p>MBI has chosen to also include Affordable Housing as part of public housing and gather this location information from CoStar.</p>
Community support organizations	<p>MBI included senior centers and community centers in this category. The data for senior centers was acquired from the Massachusetts Office of Elder Affairs.</p>

	<p>Data for community centers was available only for Boston and acquired from Boston's Open Data Portal.</p> <p>MBI is also incorporating food banks, homeless shelters, community media centers, and veteran's centers, in this category.</p> <p>Food bank data was sourced from the Food Bank of Western Massachusetts; homeless shelter data was sourced from the Mass Dept of Health & Social Services; community media center data was provided by MassAccess, the umbrella organization for community access TV in Massachusetts; and veteran's centers were sourced from Veterans Affairs.</p>
Local, state, federal or tribal government buildings / Facilities	<p>MBI elected to include the following government buildings, city and town halls, and courthouses.</p> <p>Courthouse locations were sourced through the Massachusetts Office of Court Management and data for each of these government buildings was acquired via MassGIS (Bureau of Geographic Information).</p>
Faith based institutions	<p>Faith based institutions include churches, mosques, synagogues, temples and other places of worship. Data for these locations has been acquired from MassGIS (Bureau of Geographic Information).</p>
Other	<p>Other CAIs that MBI has decided to incorporate include small business technical assistance and collaborative workspaces.</p> <p>Data was acquired from MassGCC and MassDevelopment.</p>

2.3.1 CAI Additional Categories

MBI has chosen to include the following CAIs based on the unique needs of the population in Massachusetts and the value they provide to facilitate greater use of broadband service to vulnerable populations.

Job Training Centers and Career Centers

Job training centers and career centers are essential in connecting workers and employers. Many job centers in Massachusetts provide free training and resources to the public—resources that are critical to underrepresented and vulnerable populations. An essential component of these centers are the resources it provides for individuals to effectively conduct a job search which includes computers, software, and access to internet. Many job listings are posted online, sometimes exclusively, and job interviews are often conducted virtually, creating significant barriers for populations who do not have access or reliable access to internet. Expanding high-speed internet access to career centers can also enable a greater frequency of digital skills workshops for individuals to upskill their current abilities and expand their digital resource capacity.

Food Banks and Homeless Shelters

Food banks and homeless shelters serve two of Massachusetts' most vulnerable populations: those who are facing food insecurity and those who do not have stable housing. These populations could likely benefit from other social services, such as the Supplemental Nutrition Assistance Program or affordable housing programs, many of which require an online application or process. Providing high-speed internet at these locations grants vulnerable populations reliable access to internet at locations they already frequent. Additionally, many families, often with school-aged children, reside in homeless shelters, creating a need for internet service to allow students to complete educational requirements while staying at these facilities

Veterans Centers

Veterans centers are a critical resource hub for individuals and their families who have served our country and may be disabled, low-income, experiencing housing insecurity, or simply seeking resources. Veterans centers provide support in obtaining benefits related to housing, education, and healthcare, such as counseling services and referrals to mental and physical health services. These benefits often require online applications to be submitted. Moreover, many veteran centers provide telehealth services to its veterans, a service that requires access to reliable and high-speed internet.

Affordable Housing

Affordable housing in Massachusetts is an integral resource for low-income individuals, aging individuals, and disabled individuals. Residents in affordable housing are often families and may be part of multiple vulnerable populations. Implementing reliable, high-speed internet within affordable housing removes barriers, such as transportation, cost of service, and limited hours of operation, and empowers residents to have access to resources in the comfort of their own home. Having high-speed internet within their living arrangement allows individuals to apply for social services or jobs, access telehealth services, and complete education requirements and assignments in their own timeframe. Providing long-term, reliable, high-speed internet could improve the health and economic well-being and outcomes of vulnerable households in Massachusetts.

Small Business Technical Assistance Centers and Collaborative Working Spaces

Small Business Technical Assistance Centers, operated through the state's Community Development Corporations, assist small businesses by implementing technology solutions to improve operations, grow their business, and thrive in the competitive marketplace. This may range from buying computers and creating websites to automating functions and optimizing production cycles. Implementing high-speed internet at these locations could provide greater opportunities to host digital literacy and training workshops directed toward small businesses. Similarly, collaborative working spaces are designed to encourage new business formation, job creation, and entrepreneurial activity in communities, of which high-speed broadband access is vital. Small Business Technical Assistance Centers and Collaborative Working Spaces could serve to empower vulnerable populations, particularly in areas of economic distress or low-income, to launch businesses and entrepreneurial activity with the help of high-speed internet and shared resources.

Community Behavioral Health Centers and Clubhouses

Community behavioral health centers provide mental health and substance abuse services and treatment through three service offerings: mobile crisis intervention, community crisis stabilization, and routine outpatient services. Routine outpatient services are offered in-person and in a telehealth setting, requiring access to reliable and high-speed internet. A key function of successful outpatient services includes obtaining all the necessary supportive services, such as housing and food assistance or care coordination, resources that typically rely on online applications. Similarly, clubhouses assist adults with major mental illnesses live full, productive, and meaningful lives in the community at varied levels of independence by providing resources such as employment opportunities, technology, and housing. Clubhouses serve vulnerable populations and having access to reliable, high-speed internet could expand the capability to provide technical assistance, coordinate services, and provide virtual resources.

Community Media Centers

Community media centers provide media resources, such as studios and production facilities, to produce cable, public, educational, and governmental channels on a free or leased basis. Community media centers often provide public access TV, a form of noncommercial mass media targeted to local channels. Publicly available media is available at no cost to consumers, providing a critical avenue to disseminate information, resources, and local news to the immediate community. Community media centers having access to reliable, high-speed internet will ensure modern technologies and equipment can be utilized and allow for the reliable reporting of information.

Local, State, Federal or Tribal Government Buildings/Facilities

Local, state, and federal or tribal government buildings and facilities are often frequented by all members of the public, including vulnerable populations. Government facilities and buildings serve as places where the public can seek information regarding crucial resources for social services. Applications to receive resources are often conducted via online application. Moreover, many applications and software used by government staff require connection to the internet. Providing high-speed internet access at government facilities could streamline operations and improve access to resources by serving as a location where reliable internet can be accessed.

Faith Based Institutions

Faith-based institutions serve as key community anchors and gathering places in many communities. Faith based institutions serve individuals of all backgrounds, including vulnerable populations. Many faith-based institutions provide services that target vulnerable populations, including meals, childcare, workshops, and food pantries. Expanding reliable, high-speed internet to faith-based institutions could provide internet service to locations where many vulnerable populations already frequent and expand the capabilities and services offered.

2.3.2 Determining Connectivity of CAIs

MBI conducted a detailed textual and spatial analysis to determine high-speed fiber availability to CAIs. The FCC National Broadband Map (Fabric) data was matched to the CAI address list using a variety of spatio-textual processes to obtain Location IDs. This then allowed for joining of the CAI data to the BDC data to obtain service level information. Additionally, fiber availability was determined using field-collected fiber facility location data and third-party fiber location data. CAIs that are within 500 feet of a fiber facility or a fiber to the premises network were considered to have 1 gigabit symmetrical fiber service available to that location. This analysis allowed MBI to update the CAI list with the broadband availability information.

2.3.3 List of CAIs in Massachusetts

Based on the MBI definition of CAI, a .csv file has been provided which lists locations using the template provided by NTIA. A copy of these files can be found here: [MA CAI List.csv](#).

2.4 Challenge Process (Requirement 7)

2.4.1 NTIA BEAD Model Challenge Process Adoption

MBI intends to adopt the NTIA BEAD Model Challenge Process:

- Yes
 No

2.4.2 Modifications to Reflect Data Not Present in the National Broadband Map

MBI will include the following modifications to reflect data not present in the National Broadband Map:

Modification 1: DSL Modification: MBI will treat locations that the National Broadband Map shows to have available qualifying broadband service (i.e., a location that is “served”) delivered via DSL as “underserved.” This modification will better reflect the locations eligible for BEAD funding because it will facilitate the phase-out of legacy copper facilities and ensure the delivery of “future-proof” broadband service. This designation cannot be challenged or rebutted by the provider.

Modification 2: Speed Test Modifications: MBI will treat as “underserved” locations that the National Broadband Map shows to be “served” if rigorous speed test methodologies (i.e., methodologies aligned to the BEAD Model Challenge Process Speed Test Module) demonstrate that the “served” locations actually receive service that is materially below 100 Mbps downstream and 20 Mbps upstream. This modification will better reflect the locations eligible for BEAD funding because it will consider the actual speeds of locations. As described below, such speed tests can be rebutted by the provider during the rebuttal period.

Modification 3: MDU Modification: MBI recognizes that the current National Broadband Map counts multi-family housing developments (MDUs) as single BSLs even if they contain numerous individual units or households. To address this, MBI will consider each of these structures as a collection of individual units or households eligible for BEAD funding. This modification will better reflect the locations eligible for BEAD funding because it will ensure that unserved or underserved units within MDUs are properly accounted for within the list of unserved and underserved units.

Modification 4: Area Modification: MBI recognizes that the NTIA specifies the area challenge to be conducted at the level of a census block group. MBI understands the importance of considering other geographies to ensure that all unserved and underserved locations are addressed. MBI will use its own judgment and expertise to select the most appropriate geographic area for each challenge. This may include areas that extend beyond a single census block group (for example multiple census blocks or a municipality) and will consider various factors such as broadband service availability, population density, and other relevant considerations. By using a more comprehensive approach to identify unserved and underserved areas, MBI will provide a more accurate assessment of the availability and quality of broadband service and ensure that all eligible locations are accounted for.

2.4.3 Deduplication of Funding

MBI intends to use the BEAD Eligible Entity Planning Toolkit to identify existing federal enforceable commitments.

Yes

No

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

1. The Broadband Funding Map published by the FCC pursuant to IIA § 60105.²
2. Data sets from state broadband deployment programs that rely on funds from the Capital Projects Fund and the State and Local Fiscal Recovery Funds administered by the U.S. Treasury.
3. State and local data collections of existing enforceable commitments.
4. Locations funded through MBI's Gap Networks Program. Any locations that are awarded under the Gap Networks Program, but go under contract after MBI publishes the list of eligible locations will not be eligible for BEAD funding and challenges to any of these locations will not be evaluated by MBI.

MBI will make a best effort to create a list of BSLs subject to enforceable commitments based on state/territory or local grants or loans. If necessary, MBI will translate polygons or other geographic designations (e.g., a county or utility district) describing the area to a list of Fabric locations. MBI will submit this list, in the format specified by the FCC Broadband Funding Map, to NTIA.³

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

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

2.4.3.1 List the federal, state, or territorial, and local programs that will be analyzed to remove enforceable commitments from the set of locations eligible for BEAD funding.

MBI has listed state or territorial and local programs that will be used to identify existing enforceable commitments in the following attachment: [BEAD Initial Proposal Volume I Deduplication of Funding Programs.xlsx](#).

2.4.4 Challenge Process Design

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

Permissible Challenges

MBI will only allow challenges on the following grounds:

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

Eligibility status refers to the locations service status and if it is eligible to receive BEAD funding i.e. if the location is unserved, underserved, or in the case of a CAI if the location currently has access to a gigabit symmetrical service.

Permissible Challengers

² The broadband funding map published by FCC pursuant to IIA § 60105 is referred to as the "FCC Broadband Funding Map."

³ Guidance on the required format for the locations funded by state or territorial and local programs will be specified at a later date, in coordination with FCC.

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

Challenge Process Overview

The challenge process conducted by MBI will include four phases, spanning over 120 calendar days⁴:

1. **Publication of Eligible Locations:** Prior to beginning the Challenge Phase, MBI will publish the set of locations eligible for BEAD funding, which consists of the locations resulting from the activities outlined in Sections 5 and 6 of the NTIA BEAD Challenge Process Policy Notice (e.g., administering the deduplication of funding process). MBI is also considering engaging with licensed fixed wireless providers prior to the beginning of the Challenge Phase to gauge their willingness to self-identify locations served solely by fixed wireless networks that are not able to meet the BEAD service requirements. MBI will also publish locations considered served, as they may be challenged. [\[Estimated to be 06/15/2024\]](#).
2. **Challenge Phase:** During the Challenge Phase, the challenger will submit the challenge through the MBI challenge portal. This challenge will be visible to the service provider whose service availability and performance is being contested. The portal will notify the provider of the challenge through an automated email, which will include related information about timing for the provider's response. After this stage, the location will enter the "challenged" state.
 - a. **Minimum Level of Evidence Sufficient to Establish a Challenge:** The challenge portal will verify that the address provided can be found in the Fabric and is a BSL. The challenge portal will confirm that the challenged service is listed in the National Broadband Map and meets the definition of reliable broadband service. The challenge will confirm that the email address is reachable by sending a confirmation message to the listed contact email. For scanned images, the challenge portal will determine whether the quality is sufficient to enable optical character recognition (OCR). For availability challenges, MBI will manually verify that the evidence submitted falls within the categories stated in the NTIA BEAD Challenge Process Policy Notice and the document is unredacted and dated.
 - b. **Timeline:** Challengers will have 30 calendar days to submit a challenge from the time the initial list of unserved and underserved locations, community anchor institutions, and existing enforceable commitments are posted. [\[Estimated to be 06/15/2024 to 07/15/2024\]](#)
 - c. **Rebuttal Phase:** Only the challenged service provider may rebut the reclassification of a location or area with evidence, causing the location or locations to enter the "disputed" state. If a challenge that meets the minimum level of evidence is not rebutted, the challenge is sustained. A provider may also agree with the challenge and thus transition the location to the "sustained" state. Providers must regularly check the challenge portal notification method (e.g., email) for notifications of submitted challenges.
 - d. **Timeline:** Providers will have 30 calendar days from notification of a challenge to provide rebuttal information to MBI. The rebuttal period begins once the provider is notified of the challenge, and thus may occur concurrently with the challenge phase. [\[Estimated to be 07/15/2024 to 08/14/2024\]](#)
3. **Final Determination Phase:** During the Final Determination phase, MBI will make the final determination of the classification of the location, either declaring the challenge "sustained" or "rejected."
 - a. **Timeline:** Following intake of challenge rebuttals, MBI will make a final challenge determination within up to 60 calendar days of the challenge rebuttal. Reviews will occur on a rolling basis, as challenges and rebuttals are received. [\[Estimated to be 08/14/2024 to 010/13/2024\]](#)

Evidence & Review Approach

To ensure that each challenge is reviewed and adjudicated based on fairness for all participants and relevant stakeholders, MBI will review all applicable challenge and rebuttal information in detail without bias, before deciding to sustain or reject a challenge. MBI will document the standards of review to be applied in a Standard Operating Procedure and will require reviewers to document their justification for each determination. MBI plans to ensure reviewers have sufficient training to apply the standards of review uniformly to all challenges submitted. MBI will also

⁴ The NTIA BEAD Challenge Process Policy Notice allows *up to* 120 calendar days. Broadband offices may modify the model challenge process to span up to 120 days, as long as the timeframes for each phase meet the requirements outlined in the NTIA BEAD Challenge Process Policy Notice.

require that all reviewers submit affidavits to ensure that there is no conflict of interest in making challenge determinations. Unless otherwise noted, “days” refers to calendar days.

Table 3: Types of permissible challenges

Code	Challenge Type	Description	Specific Examples	Permissible Rebuttals
A	Availability	The broadband service identified is not offered at the location, including a unit of a multiple dwelling unit (MDU).	<p>Screenshot of provider webpage.</p> <p>A service request was refused within the last 180 days (e.g., an email or letter from provider).</p> <p>Lack of suitable infrastructure (e.g., no fiber on pole).</p> <p>A letter or email dated within the last 365 days that a provider failed to schedule a service installation or offer an installation date within 10 business days of a request.⁵</p> <p>A letter or email dated within the last 365 days indicating that a provider requested more than the standard installation fee to connect this location or that a Provider quoted an amount in excess of the provider’s standard installation charge in order to connect service at the location.</p>	<p>Provider shows that the location subscribes or has subscribed within the last 12 months, e.g., with a copy of a customer bill.</p> <p>If the evidence was a screenshot and believed to be in error, a screenshot that shows service availability.</p> <p>The provider submits evidence that service is now available as a standard installation, e.g., via a copy of an offer sent to the location.</p>
S	Speed	The actual speed of the service tier falls below the unserved or underserved thresholds. ⁶	Speed test by subscriber, showing the insufficient speed and meeting the requirements for speed tests.	Provider has countervailing speed test evidence showing sufficient speed, e.g., from their own network management system. ⁷
L	Latency	The round-trip latency of the broadband service exceeds 100 ms ⁸ .	Speed test by subscriber, showing the excessive latency.	Provider has countervailing speed test evidence showing latency at or below 100 ms, e.g., from their own network management system

⁵ A standard broadband installation is defined in the Broadband DATA Act (47 U.S.C. § 641(14)) as “[t]he initiation by a provider of fixed broadband internet access service [within 10 business days of a request] in an area in which the provider has not previously offered that service, with no charges or delays attributable to the extension of the network of the provider.”

⁶ The challenge portal has to gather information on the subscription tier of the household submitting the challenge. Only locations with a subscribed-to service of 100/20 Mbps or above can challenge locations as underserved, while only locations with a service of 25/3 Mbps or above can challenge locations as unserved. Speed challenges that do not change the status of a location do not need to be considered. For example, a challenge that shows that a location only receives 250 Mbps download speed even though the household has subscribed to gigabit service can be disregarded since it will not change the status of the location to unserved or underserved.

⁷ As described in the NOFO, a provider’s countervailing speed test should show that 80 percent of a provider’s download and upload measurements are at or above 80 percent of the required speed. See *Performance Measures Order*, 33 FCC Rcd at 6528, para. 51. See BEAD NOFO at 65, n. 80, Section IV.C.2.a.

⁸ *Performance Measures Order*, including provisions for providers in non-contiguous areas (§21).

Code	Challenge Type	Description	Specific Examples	Permissible Rebuttals
				or the CAF performance measurements. ⁹
D	Data cap	The only service plans marketed to consumers impose an unreasonable capacity allowance (“data cap”) on the consumer. ¹⁰	Screenshot of provider webpage. Service description provided to consumer.	Provider has terms of service showing that it does not impose an unreasonable data cap or offers another plan at the location without an unreasonable cap.
T	Technology	The technology indicated for this location is incorrect.	Manufacturer and model number of residential gateway (CPE) that demonstrates the service is delivered via a specific technology.	Provider has countervailing evidence from their network management system showing an appropriate residential gateway that matches the provided service.
B	Business service only	The location is residential, but the service offered is marketed or available only to businesses.	Screenshot of provider webpage.	Provider documentation that the service listed in the BDC is available at the location and is marketed to consumers.
E	Enforceable Commitment	The challenger has knowledge that broadband will be deployed at this location by the date established in the deployment obligation.	Enforceable commitment by service provider (e.g., authorization letter). In the case of Tribal Lands, the challenger must submit the requisite legally binding agreement between the relevant Tribal Government and the service provider for the location(s) at issue (see Section 6.2 above).	Documentation that the provider has defaulted on the commitment or is otherwise unable to meet the commitment (e.g., is no longer a going concern).
P	Planned service	The challenger has knowledge that broadband will be deployed at this location by June 30, 2024, without an	Construction contracts or similar evidence of on-going deployment, along with evidence that all necessary permits have been applied for or obtained. Contracts or a similar binding	Documentation showing that the provider is no longer able to meet the commitment (e.g., is no longer a going concern) or that the

⁹ *Ibid.*

¹⁰ An unreasonable capacity allowance is defined as a data cap that falls below the monthly capacity allowance of 600 GB listed in the FCC 2023 Urban Rate Survey (FCC Public Notice DA 22-1338, December 16, 2022). Alternative plans without unreasonable data caps cannot be business-oriented plans not commonly sold to residential locations. A successful challenge may not change the status of the location to unserved or underserved if the same provider offers a service plan without an unreasonable capacity allowance or if another provider offers reliable broadband service at that location.

Code	Challenge Type	Description	Specific Examples	Permissible Rebuttals
		enforceable commitment or a provider is building out broadband offering performance beyond the requirements of an enforceable commitment.	agreement between the Eligible Entity and the provider committing that planned service will meet the BEAD definition and requirements of reliable and qualifying broadband even if not required by its funding source (<i>i.e.</i> , a separate federal grant program), including the expected date deployment will be completed, which must be on or before June 30, 2024.	planned deployment does not meet the required technology or performance requirements.
N	Not part of enforceable commitment.	This location is in an area that is subject to an enforceable commitment to less than 100% of locations and the location is not covered by that commitment. (See BEAD NOFO at 36, n. 52.)	Declaration by service provider subject to the enforceable commitment.	
C	Location is a CAI	The location should be classified as a CAI.	Evidence that the location falls within the definitions of CAIs set by the Eligible Entity. ¹¹	Evidence that the location does not fall within the definitions of CAIs set by the Eligible Entity or is no longer in operation.
R	Location is not a CAI	The location is currently labeled as a CAI but is a residence, a non-CAI business, or is no longer in operation.	Evidence that the location does not fall within the definitions of CAIs set by the Eligible Entity or is no longer in operation.	Evidence that the location falls within the definitions of CAIs set by the Eligible Entity or is still operational.

Area and MDU Challenge

MBI will administer area and MDU challenges for challenge types A, S, L, D, and T. An area challenge reverses the burden of proof for availability, speed, latency, data caps and technology if a defined number of challenges for a particular category, across all challengers, have been submitted for a provider. Thus, the provider receiving an area challenge or MDU must demonstrate that they are indeed meeting the availability, speed, latency, data cap and technology requirement, respectively, for all (served) locations within the area or all units within an MDU. The provider can use any of the permissible rebuttals listed above.

An area challenge is triggered if six (6) or more broadband serviceable locations using a particular technology and a single provider within a census block group are challenged.

¹¹ For example, eligibility for FCC e-Rate or Rural Health Care program funding or registration with an appropriate regulatory agency may constitute such evidence, but the Eligible Entity may rely on other reliable evidence that is verifiable by a third party.

An MDU challenge requires challenges by at least three (3) units or 10% of the unit count listed in the Fabric within the same broadband serviceable location, whichever is larger.

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

Area challenges for availability need to be rebutted with evidence that service is available for all BSLs within the census block group, e.g., by network diagrams that show fiber or Hybrid fiber-coaxial (HFC) infrastructure or customer subscribers. For fixed wireless service, the challenge system will offer representative random, sample of the area in contention, but no fewer than 10, where the provider has to demonstrate service availability and speed (e.g., with a mobile test unit).¹²

Speed Test Requirements

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

Speed tests can take four forms:

1. A reading of the physical line speed provided by the residential gateway, (i.e., DSL modem, cable modem (for HFC),
2. Optic Network Terminal (for fiber to the home), or fixed wireless subscriber module.
3. A reading of the speed test available from within the residential gateway web interface.
4. A reading of the speed test found on the service provider's web page.
5. A speed test performed on a laptop or desktop computer within immediate proximity of the residential gateway, using a commonly used speed test application.

Each speed test measurement must include:

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

Each group of three speed tests must include:

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

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

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

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

Subscribers submitting a speed test must indicate the speed tier they are subscribing to. Since speed tests can only be used to change the status of locations from "served" to "underserved", only speed tests of subscribers that subscribe to tiers at 100/20 Mbps and above are considered. If the household subscribes to a speed tier of 100/20 Mbps or higher and the speed test yields a speed below 100/20 Mbps, this service offering will not count towards the location being considered served. However, even if a particular service offering is not meeting the speed threshold, the eligibility status

¹² A mobile test unit is a testing apparatus that can be easily moved, which simulates the equipment and installation (antenna, antenna mast, subscriber equipment, etc.) that would be used in a typical deployment of fixed wireless access service by the provider.

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

A service provider may rebut an area speed test challenge by providing speed tests, in the manner described above, for at least 10% of the customers in the challenged area. The customers must be randomly selected. Providers must apply the 80/80 rule¹³, i.e., 80% of these locations must experience a speed that equals or exceeds 80% of the speed threshold. For example, 80% of these locations must have a download speed of at least 20 Mbps (that is, 80% of 25 Mbps) and an upload speed of at least 2.4 Mbps to meet the 25/3 Mbps threshold and must have a download speed of at least 80 Mbps and an upload speed of 16 Mbps to be meet the 100/20 Mbps speed tier. Only speed tests conducted by the provider between the hours of 7 pm and 11 pm local time will be considered as evidence for a challenge rebuttal.

Transparency Plan

To ensure that the challenge process is transparent and open to public and stakeholder scrutiny, MBI will, upon approval from NTIA, publicly post an overview of the challenge process phases, challenge timelines, and instructions on how to submit and rebut a challenge. This documentation will be posted publicly for at least a week prior to opening the challenge submission window. MBI also plans to actively inform all units of local government of its challenge process and set up regular touchpoints to address any comments, questions, or concerns from local governments, nonprofit organizations, and Internet service providers ("ISPs"). Relevant stakeholders can sign up on the MBI website, **Contact MassTech | MassTech**, for challenge process updates and newsletters. They can engage with MBI by a designated email address (broadband@masstech.org). Providers will receive challenge notifications through email.

MBI also plans to provide technical assistance to municipalities to support their submission of challenges.

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

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

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

MBI will treat information submitted by an existing broadband service provider designated as proprietary and confidential consistent with applicable federal law. If any of these responses do contain information or data that the submitter deems to be confidential commercial information that should be exempt from disclosure under state open records laws or is protected under applicable state privacy laws, that information should be identified as privileged or confidential. Otherwise, the responses will be made publicly available.

MBI will comply with all state and federal laws regarding the protection of PII including, but not limited to:

- Standards for the Protection of Personal Information of Residents of the Commonwealth: [201 CMR 17.00](#)
- Regulations to Safeguard Personal Information of Commonwealth Residents; Duty to Report Known Security Breach or Unauthorized Use of Personal Information and Breaches of Security Including Social Security Numbers: [MA Gen L ch 93h \(2022\)](#)
- Standards for disposal of records containing personal information: [MA Gen L ch 931 § 2 \(2016\)](#)

2.4.5 NTIA BEAD Model Challenge Process Answer

If the Eligible Entity is not using the NTIA BEAD Model Challenge Process, outline the proposed sources and requirements that will be considered acceptable evidence.

¹³ The 80/80 threshold is drawn from the requirements in the CAF-II and RDOF measurements. See BEAD NOFO at 65, n. 80, Section IV.C.2.a.

NTIA BEAD Model Challenge Process Answer:

N/A

2.5 Volume 1 Public Comment

Following the public comment period, this section will contain a description of the public comment period, an overview of the comments received during the Volume I public comment period, how they were addressed and, in some cases, how they were incorporated in the final Initial Proposal.

3. Introduction for Volume II

MBI is pleased to present our Initial Proposal Volume II submission in response to the NTIA BEAD Program. As part of our submission, we have addressed and fulfilled the following sixteen requirements, as detailed in the BEAD NOFO:

1. **Objectives (Requirement 1)** Outlined the long-term objectives for deploying broadband and closing the digital divide.
2. **Local, Tribal, and Regional Broadband Planning Coordination (Requirement 2):** Identified and outlined steps to support local, Tribal, and regional broadband planning processes or ongoing efforts.
3. **Local Coordination (Requirement 4):** Described the coordination conducted, summarized the impact on the content of the Initial Proposal, and detailed ongoing coordination efforts.
4. **Deployment Subgrantee Selection (Requirement 8):** Provided a detailed plan to competitively award subgrants for deployment projects.
5. **Non-deployment Subgrantee Selection (Requirement 9)** - Described a fair, open, and competitive subgrantee selection process for eligible non-deployment activities.
6. **Eligible Entity Implementation Activities (Requirement 10):** Described any initiatives MBI proposes to implement as the recipient without making a subgrant, and why it proposed that approach.
7. **Labor Standards and Protections (Requirement 11):** Described the specific information that prospective subgrantees will be required to provide in their applications and how that information will be weighed as part of the competitive subgrantee selection process.
8. **Workforce Readiness (Requirement 12)** - Described how MBI and their subgrantees will advance equitable workforce development and job quality objectives to develop a skilled, diverse workforce.
9. **Minority Business Enterprises (MBEs)/ Women's Business Enterprises (WBEs)/ Labor Surplus Firms Inclusion (Requirement 13):** Described the process, strategy, and the data tracking method(s) to ensure that MBEs, WBEs, and labor surplus area firms are recruited, used, and retained, when possible.
10. **Cost and Barrier Reduction (Requirement 14):** Identified steps that will be taken to reduce costs and barriers to deployment.
11. **Climate Assessment (Requirement 15):** Described the assessment of climate threats and proposed mitigation methods.
12. **Low-Cost Broadband Service Option (Requirement 16):** Described the low-cost broadband service option(s) that must be offered by subgrantees.
13. **Middle Class Affordability (Requirement 20):** Described a middle-class affordability plan that details how high-quality broadband services will be made available to all middle-class families in the BEAD-funded network's service area at reasonable prices.
14. **Use of 20 Percent of Funding (Requirement 17):** MBI requested 100 percent of funding allocation during the Initial Proposal round and detailed the amount of funding requested for use upon approval of the Initial Proposal.
15. **Eligible Entity Regulatory Approach (Requirement 18)** - Disclosed whether MBI will waive all laws concerning broadband, utility services, or similar subjects.
16. **Certification of Compliance with BEAD Requirements (Requirement 19)** - Certified MBI's intent to comply with all applicable requirements of the BEAD Program, including the reporting requirements.

This submission also includes Volume I of the Initial Proposal, which outlined the additional four requirements in the BEAD Initial Proposal. Upon concurrent submission of Volumes I and II, a public comment period will follow. The public comment period will be open from November 13th, 2023 to December 15th and will help refine the proposal prior to final submission to NTIA in December 2023.

4. Objectives (Requirement 1)

2.1.1 Outline the long-term objectives for deploying broadband; closing the digital divide; addressing access, affordability, equity, and adoption issues; and enhancing economic growth and job creation. Eligible Entities may directly copy objectives included in their Five-Year Action Plans.

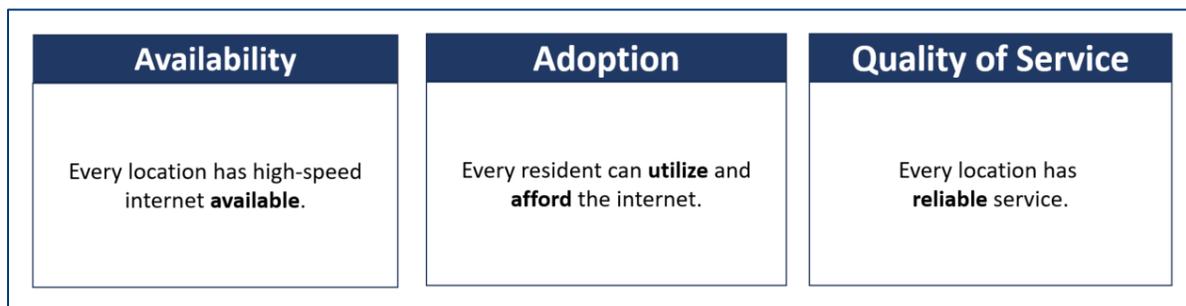
Example:

An Eligible Entity that has already completed its Five-Year Action Plan may directly copy Objectives from its Five-Year Action Plan into the Initial Proposal to satisfy this requirement. An Eligible Entity that is still drafting its Five-Year Action Plan should ensure that its responses to this requirement in its Initial Proposal and its Five-Year Action Plan are substantively the same.

Acknowledging that broadband and digital equity challenges have been amplified by COVID-19, MBI is pursuing a proactive approach in ensuring broadband access and opportunities for those who need them the most. In Massachusetts, over 98% of BSLs have broadband available, ranking the Commonwealth as the 5th highest state in the U.S. Given this high availability rate, MBI intends to translate its strategic pillars of availability, adoption, and quality of service into direct impact on all facets of civil life by focusing on five specific outcome areas, including economic and workforce development, education, healthcare, housing, and infrastructure.

MBI led a robust stakeholder engagement process to hear directly from communities and coordinate closely with the Commonwealth of Massachusetts’ administration, state legislature, municipalities, ISPs, community-based organizations, residents and other key stakeholders to understand needs and address any remaining gaps. From this process, MBI has identified the strategic outcome areas stemming from the three strategic pillars that it will be focusing on through the implementation of the BEAD program. The below figure provides a snapshot of MBI’s vision and goals.

Figure 1: Massachusetts vision for broadband and digital equity



MBI’s approach is the product of an iterative process, informed by feedback received during the stakeholder engagement process, as outlined in Requirements 2 and 4. The approach will continue to evolve through ongoing stakeholder engagement, which will persist throughout the development and execution of the BEAD Initial and Final Proposals, refining the overall program goals and objectives.

5. Local, Tribal, and Regional Broadband Planning Coordination (Requirement 2)

2.1.1 Identify and outline steps that the Eligible Entity will take to support local, Tribal, and regional broadband planning processes or ongoing efforts to deploy broadband or close the digital divide. In the description, include how the Eligible Entity will coordinate its own planning efforts with the broadband planning processes of local and Tribal Governments, and other local, Tribal, and regional entities. Eligible Entities may directly copy descriptions in their Five-Year Action Plans.

Example:

The Eligible Entity must describe existing local and regional planning or deployment efforts, including those in Tribal areas. The Eligible Entity must describe how it has coordinated with local and, if applicable, Tribal Governments in developing statewide strategies, and how the Eligible Entity will continue this engagement moving forward. The Eligible Entity may provide an inventory of existing broadband planning efforts across the Eligible Entity or describe how it is conducting and/or plans to conduct outreach activities to facilitate coordination with local and Tribal Governments, and other local, Tribal, and regional entities.

An Eligible Entity that has already completed its Five-Year Action Plan may directly copy its Stakeholder Engagement Process (Requirement 7 in the Five-Year Action Plan) into the Initial Proposal to satisfy this requirement. An Eligible Entity that is still drafting its Five-Year Action Plan must ensure that the response to this requirement in its Initial Proposal and its Five-Year Action Plans are substantively the same.

Based on the guidance provided in the Initial Proposal, the following section has been mostly replicated from the Commonwealth's Five-Year Action Plan. In this section, the process of recognizing and involving appropriate stakeholders during the preparation of BEAD and Digital Equity Plans is explained. Additionally, the Local Coordination section below illustrates the results of such interactions and the strategies for continued involvement in the future.

In the pursuit of digital equity and broadband access, Massachusetts has adopted a robust and inclusive stakeholder engagement process. Recognizing the importance of collaboration and community involvement, the state has organized various events and initiatives to ensure that the strategies implemented are locally informed, equitable, and beneficial to all segments of the population. Leveraging extensive external engagement and building upon prior work, Massachusetts is taking proactive steps to bridge the digital divide and create a connected future for its residents.

MBI centered the following outreach and engagement principles throughout its stakeholder engagement process:

1. Lead with a human-centered approach in outreach, communication, and operations.
2. Develop an intentional and comprehensive strategy to maximize reach.
3. Leverage trusted partners.
4. Build on existing programs and offerings where possible.

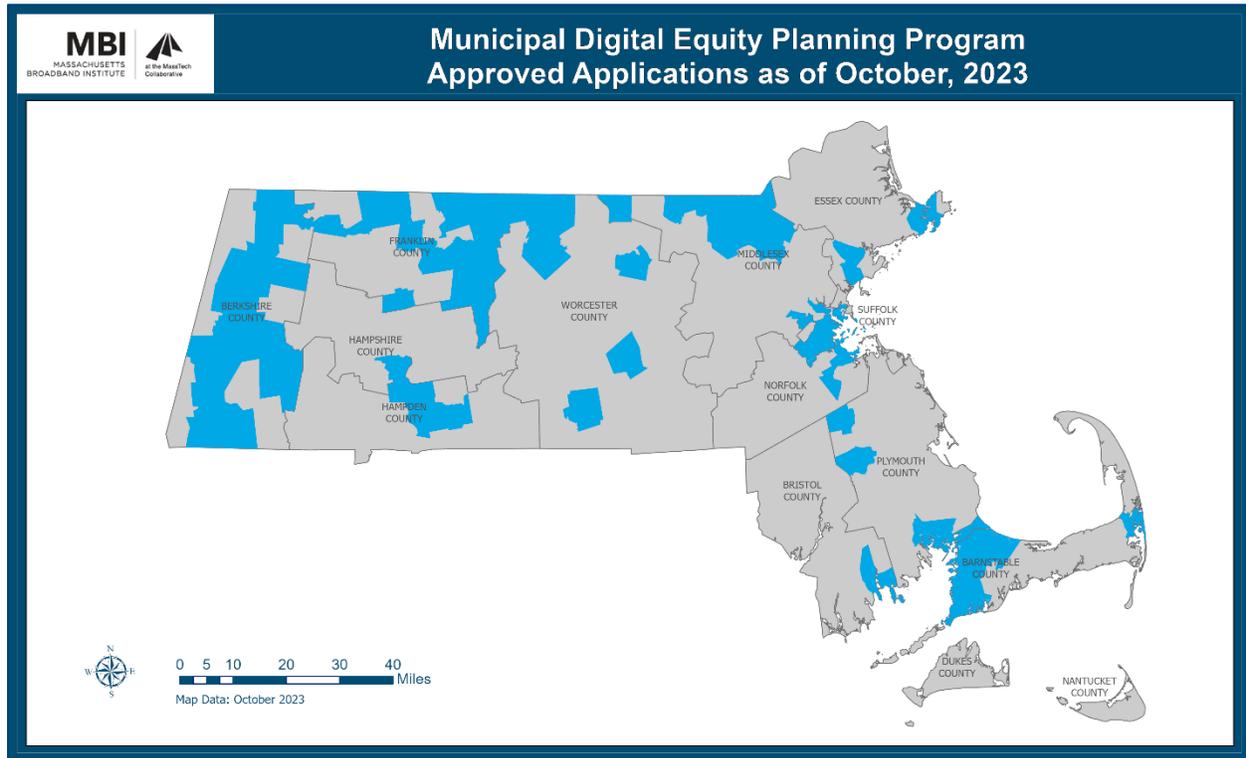
MBI plans to apply these principles consistently in each of its outreach activities, which were designed to achieve inclusive engagement across all of Massachusetts' regions, underrepresented communities, and other populations of interest.

Engagement Programs:

As part of the Commonwealth's Broadband investment strategy, MBI will continue to ensure broad stakeholder engagement and public participation through its Internet Access and Digital Equity Programs and Partnerships listed below:

- **Municipal Digital Equity Planning Program:** MBI launched the Municipal Digital Equity Planning Program to enable municipalities, or other local bodies of government, to engage in planning activities related to digital equity and bridging the digital divide. These local plans will be appended to the Statewide Digital Equity Plan on an ongoing basis.

Figure 2: Municipal Digital Equity Planning Program Approved Applications as of October 2023



- **Digital Equity Practitioners Group:** MBI convenes a group of digital equity practitioners working on the ground throughout the Commonwealth that meet to discuss notes from the field, programmatic updates, and pose questions regarding best practices.
- **Digital Equity Partnership Program:** Partners provide insights into the regions and populations that they serve and help to promote the statewide digital equity survey and asset mapping tool.
- **Community Based Organization Service Awards:** To ensure a wider participation in its stakeholder outreach, MBI requested services from qualified community-based organizations to plan and facilitate activities that support a human-centered engagement process for the Massachusetts Statewide Digital Equity Plan “SDEP” and BEAD statewide planning efforts, as well as future implementation activities under these programs. Activities included focus groups, live survey facilitation, and broad promotion of the survey and regional listening sessions.

Engagement Tactics:

The above programs and partnerships will be leveraged to carry out a comprehensive stakeholder engagement process that will consist, in addition to the above, of the following workstreams: Statewide Digital Equity Survey, Broadband and Digital Equity Working Group, Interagency Collaboration, Partnership Inventory, Participatory Planning and Underrepresented Populations Touchpoints, Individual meetings, listening sessions and focus groups, and Tribal Engagement as described in *Error! Reference source not found.* below.

Table 4: MBI Stakeholder Engagement Tactics

Workstream	Overview	Outcome
Statewide Digital Equity Survey	MBI published a survey that is open to all residents of the Commonwealth.	The survey will provide direct resident feedback on barriers to internet availability, affordability, and adoption.
Broadband and Digital Equity Working Group	These touchpoints are meant to inform the development of the BEAD and	Set a unified vision required by the SDEP and BEAD plans, aligning

Workstream	Overview	Outcome
	Digital Equity Plans and set long-term pathways for implementation success.	stakeholder engagement, input, and feedback into the vision.
Interagency Collaboration	MBI is convening a group of representatives from each of the executive branch secretariats to support collaboration around broadband and digital equity planning and implementation activities.	Leverage resources and expertise in executive branch secretariats and departments to support planning and implementation of federally funded programs.
Partnership Inventory	The Partnership Inventory is a relational, Airtable database that tracks engagement activities by organizations involved in the planning process. The inventory includes municipal planning consultants, community-based organizations, regional planning partners, and state agencies.	Track engagement events per underrepresented population, hosts of focus groups, and listening sessions. Ability to analyze and align partner capacity with implementation plan by geography, objective, and underrepresented population.
Listening Sessions and Focus Groups	MBI is convening regional listening sessions and smaller, targeted focus groups for underrepresented populations and underrepresented communities.	Collect feedback through these sessions to identify gaps and needs within communities and populations.
Tribal Engagement	MBI is engaging with the two federally recognized tribes within Massachusetts: the Wampanoag Tribe of Gay Head (Aquinnah) and the Mashpee Wampanoag Tribes.	Identify any Tribal-specific gaps and needs related to broadband that can be addressed through BEAD and Digital Equity finding.

EOED and MBI are responsible for the oversight and integration of all broadband and digital equity initiatives throughout the Commonwealth. To guide and advise these planning efforts, a Broadband and Digital Equity Working Group was formed in March of 2023.

The Working Group is composed of leaders from across Massachusetts to offer specific topic area expertise, such as higher education, organized labor groups, and economic bureaus, and represent underrepresented populations as defined by federal funding guidelines and MBI's programs, such as Women's groups, Tribal Councils, and Senior organizations.

Figure 3: Working Group meetings



Since then, MBI hosted a successful Broadband and Digital Equity Summit & stakeholder engagement initiative that included the following:

- **June 13 Summit in Worcester:** On June 13, Massachusetts held a transformative summit in Worcester, bringing together over 250 stakeholders from government, industry and the non-profit sector. This event marked one of the largest gatherings of its kind for broadband in the state, providing a platform for attendees to share their insights, experiences, and challenges related to digital equity and broadband access. The summit served as a rallying point, fostering enthusiasm and commitment among participants to address the digital divide collaboratively.

Figure 4: Summit in Worcester, June 2023



- **Listening Sessions:** To ensure locally informed solutions, Massachusetts held Listening Sessions in seven regions. These sessions will be hosted in municipalities enrolled in the Digital Equity Planning program, where community engagement plays a pivotal role. By actively involving local stakeholders, including counties, municipalities, Tribes, community organizations, colleges, technical schools, ISPs, and other providers, MBI aims to understand the unique challenges faced by each community. This approach empowers local residents to participate in shaping broadband deployment strategies that cater to their specific needs.

Figure 5: Statewide Listening Tour Events



- Focus Group Sessions:** To reach and represent underrepresented populations and underrepresented communities, Massachusetts is conducting 27 focus group sessions in partnership with Community Based Organizations. These organizations are instrumental in bridging the gap between the Commonwealth and underserved communities, including those living at or below 150% of the federal poverty level, aging individuals, incarcerated individuals, veterans, individuals with disabilities, individuals with a language barrier, individuals who are members of a racial or ethnic minority group, rural residents, and new Americans. Through these sessions, the Commonwealth gained crucial insights into the challenges faced by these populations, enabling the development of targeted and effective policies.
- Survey:** MBI has taken proactive measures in developing a statewide survey to gather information about needs, barriers, and opportunities from as large and representative sample as possible of Massachusetts residents. In undertaking this effort, MBI has been careful to identify those issues that intersect between BEAD and SDEP. This approach ensures that MBI is able to facilitate a comprehensive and well-rounded engagement process. The survey is primarily focused on addressing the needs of the populations that are covered by the Commonwealth's broadband services. Respondents are asked about their specific broadband requirements, the potential barriers they may face in adopting more advanced services, and how the Commonwealth can assist in enhancing their digital literacy skills. Through this process, MBI has shown a willingness to work collaboratively with local and regional entities to facilitate both an inclusive and effective dialogue with these stakeholders.

By elevating the engagement of stakeholders across all of its broadband programs, MBI has the unique opportunity to not just comply with the federal requirements but to use its federal funding to create a comprehensive, integrated approach to stakeholder engagement and local capacity building.

Building upon the principles of extensive and inclusive external engagement, Massachusetts is committed to maintaining strong relationships with a diverse array of stakeholders throughout the Commonwealth. The state recognizes the vital role played by municipalities, Tribes, community organizations, colleges, technical schools, ISPs, and other providers, each of whom works closely with their respective communities. These stakeholders possess valuable knowledge of the challenges and unique solutions required to achieve internet for all.

6. Local Coordination (Requirement 4)

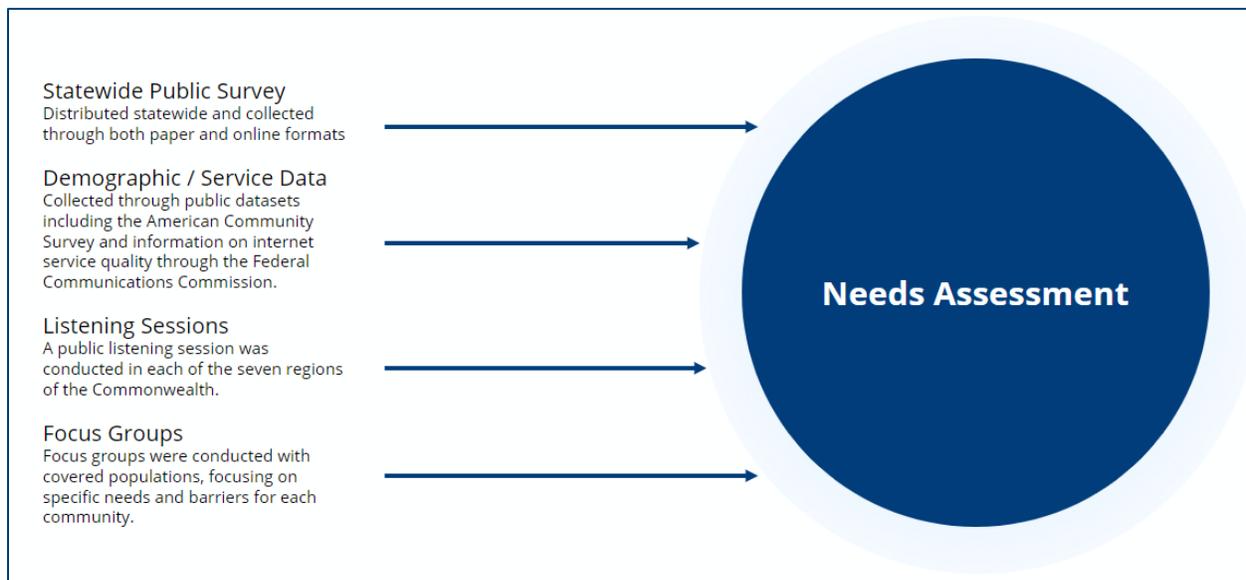
2.3.1 Describe the coordination conducted, summarize the impact such impact has on the content of the Initial Proposal, and detail ongoing coordination efforts. Set forth the plan for how the Eligible Entity will fulfil the coordination associated with its Final Proposal.

MBI’s approach to stakeholder engagement focused on both geography and underrepresented populations.

1. Geographic all-corer “events” (e.g., listening sessions); and
2. Population-specific focus groups.

Additionally, the Broadband and Digital Equity Working group and existing MBI programs helped inform each engagement with residents and underrepresented populations.

Figure 6: Stakeholder Engagement Process Diagram



Listening Sessions: Throughout the planning process, MBI hosted regional digital equity listening sessions across the state, inviting all residents within a region to participate. These events served to introduce the concept of digital equity and the role of the Plan in bridging the digital divide, present region-specific digital equity assets and barriers, and invite participants to share their experience of regional digital equity needs and barriers, as well as their vision for a future Massachusetts with Internet for All.

MBI partnered with local and regional organizations to host listening sessions in each of Massachusetts’ 7 workforce regions: Berkshires, Connecticut River Valley, Central Massachusetts, Southeast, Cape and Islands, Greater Boston, and Northeast. MBI also held a listening session specifically for rural residents from all of Massachusetts. During listening sessions, partner organizations shared specific needs and assets within the region and participated in the listening portion of the session. After the presentations concluded, MBI’s facilitators split residents into in-person and virtual breakout groups to discuss their experiences and learn about specific barriers to access and adoption and existing organizations and resources within their region.

Participants could choose to take part in-person at a main venue hosted by a local community anchor institution, attend a “satellite” location closer to their homes, or join virtually. Over 317 Massachusetts residents took part in the digital equity planning process through these sessions as provided in the table below:

Table 5: Regional Listening Sessions

Region	Number of people reached
Berkshire	38
Central Massachusetts	10
Northeast	25
Cape & Islands	60
Connecticut River Valley	65
Greater Boston	21
Southeast	70
Rural	28
TOTAL	317

Focus Groups: In addition to listening sessions, MBI worked with community-based organizations—organizations driven by community residents and/or community wellbeing—to conduct focus groups with all underrepresented populations. MBI designed focus groups to learn in depth about the challenges and barriers to digital equity that specific populations face in the state. MBI and its partners across the state to conduct 27 focus groups engaging 277 individuals (see table below). MBI developed population targets for each region based on regional population demographics to ensure that all unrepresented populations were engaged through dedicated focus groups: aging individuals, limited English speakers, low-income residents, people of color, rural residents, veterans, individuals with disabilities, and formerly incarcerated people. MBI also distributed focus groups geographically across the state, prioritizing regions with high proportions of underrepresented populations.

Focus groups added further detail and depth to the data MBI collected through the online survey. MBI designed focus group discussion guides to align with questions in the survey, but with more time allocated to hear anecdotes and capture nuance and sentiments from participants who might not otherwise be represented in the survey or who might have multiple, overlapping barriers that are hard to capture through a survey. Partner organizations used an online notetaking form structured around the 5 Measurable Objective areas, and guided participants through a demographic intake form available both online and on paper. MBI then collected data from both of these sources and analyzed the consistent themes and anecdotes we heard throughout the focus groups, breaking them down by underrepresented population, demographic and socioeconomic factors, Measurable Objectives, and other characteristics to identify trends and patterns. This analysis informed Chapter 3 of the Plan.

MBI and its partners provided incentives (typically gifts cards to local grocery stores) to focus group participants to compensate individuals for their time. This made focus groups more accessible to those with limited resources, who might lose income for participation, or who face economic hardships that prevent them from participating in civic engagement opportunities.

Table 6: Focus Groups

Underrepresented Population	Groups	Participants
Aging*	2	20
Low-income*	5	68
Those with disabilities*	5	44

Underrepresented Population	Groups	Participants
Indigenous & Native American	2	23
Racial & Ethnic Minorities*	2	23
Veterans	1	3
Incarcerated/Re-Entry*	3	35
Limited English & Low Literacy*	3	43
LGBTQIA+*	2	23
Women*	1	9
Rural*	8	66

*Rural Groups within

Survey: MBI created a statewide Digital Equity Survey to gather information about needs, barriers, and opportunities from as large and representative sample as possible of Massachusetts residents. The survey was available online and on paper in 9 languages (English, Spanish, Portuguese, Chinese, Haitian Creole, Vietnamese, Russian, Arabic, and Khmer). Through the survey cutoff date of October 2, we received 7,865 responses (see table below).

This large number of responses, with strong representation throughout the state and underrepresented populations, is a result of the work that MBI and its partners committed to reaching as many Massachusetts residents as possible. MBI developed response rate targets for the survey based on regional and statewide population demographics to ensure that responses and results represented all underrepresented populations and regions in statewide data to the greatest possible extent. Municipal Digital Equity Consultant partners and community-based organizations helped distribute the survey in their communities, using unique outreach strategies to reach residents. These partners also facilitated survey completion for the hardest-to-reach people within their communities.

The survey addressed the five Measurable Objective areas of broadband availability and affordability, device availability and affordability, digital literacy, online privacy and cybersecurity, and online accessibility and inclusivity. MBI used this data to understand the baseline statewide digital equity needs and barriers, such as who has access to the internet, what gaps participants have when it comes to digital skills, and if participants have trouble accessing public resources. MBI also analyzed this data by underrepresented population and region across the state to understand how these needs and barriers show up differently across demographics and geographies. MBI validated this information with listening session and focus group findings.

Table 7: Regional Surveys

Region	Responses	Target
Connecticut River Valley	933	307
Greater Boston	1,182	1,085
Cape Cod & Islands	936	112
Southeast	1,303	608

Region	Responses	Target
Northeast	1,181	455
Central Mass	764	378
Berkshire	1,479	55
Unknown	87	-
Total	7,865	3,000

Table 8: Breakdown of Participants in Survey

Underrepresented Population	Responses	Target
Aging Individuals	2,822	695
Veterans	334	119
Racial and Ethnic Minorities	3,032	764
Households with Limited English*	316	71
Individuals with Disabilities	1,069	341
Low-Income Households	1,253	454
Rural Inhabitants	2,257	302

* Corresponds to individuals with a language barrier.

Note: Respondents could identify as belonging to one or more group. The survey did not ask respondents about their experience with the justice system and will not be used to isolate findings for incarcerated individuals.

To facilitate ongoing collaboration, MBI has developed a set of strategies that encourage collaboration among stakeholders and center the voices of those doing this work in the field or experiencing the effects of the digital divide. MBI will employ the following strategies to continue to collaborate with key stakeholders in the Commonwealth:

1. Continue to convene the Digital Equity Practitioners Network to understand the needs of those working within the field, and what they are hearing from constituents.
2. Continue to convene the Broadband and Digital Equity Working Group to support the implementation of the Plan and receive feedback on MBI initiatives and progress.
3. Continue to support the Municipal Digital Equity Planning Program by integrating municipal and regional Digital Equity Plans into MBI's Plan and Plan implementation.

4. Following the release of the Massachusetts State Digital Equity Plan, and supported by the federal and state funding dedicated to broadband and digital equity, MBI may employ the following strategies to form new relationships across the Commonwealth:
5. Utilize the Needs Assessment and Asset Inventory to support the full digital equity ecosystem enhancing connections, identifying valuable resources, and conducting public outreach efforts.
6. Arrange forums for ISPs and other stakeholders as questions and concerns emerge, while also expanding resources and technical support for these specific groups. Establish and support relationships with Digital Equity Coalitions, Regional Planning Associations, Tribal Nation leaders and organizations, and community-based organizations. These partnerships will facilitate the sharing of information, gathering of diverse ideas and feedback, and the maintenance of a well-coordinated digital equity engagement approach tailored to specific geographic areas across Massachusetts.
7. Create an internal policy for community members' compensation in engagement. This will ensure representation from members who would be adversely impacted by participation without compensation.
8. Continue to create content and share communication in multiple languages via more common multimedia avenues, so those in the divide can access information in easily available and more common formats.
9. Convene peer to peer networks to develop relationships among digital equity partners and stakeholders
10. Identify and align existing regional initiatives for expansion and growth into other regions
11. Establish a Community Advisory Board comprised of stakeholder organizations serving underrepresented populations and members from underrepresented populations themselves to ensure lived experiences are a foundational consideration by MBI in design, implementation, and evaluation of programming.

From plan to Action: MBI will also work with statewide partners to ensure that the stakeholder engagement plan as detailed in the SDEP plan is a living document that is updated to reflect evolving needs and solutions in Massachusetts. This will involve activities such as:

- Share key elements from local coordination on a consumer-friendly website [broadband.masstech.org/internet for all](http://broadband.masstech.org/internet-for-all)
- Incorporate municipal digital equity plans into the implementation of BEAD and SDEP to provide more specific local strategies.
- Establish an ongoing survey platform and questionnaire to conduct regular surveys.
- Develop a program evaluation methodology, including data from ongoing surveys and other sources to determine what initiatives are effective and how to modify them to increase effectiveness.
- Develop knowledge sharing platforms/forums in Massachusetts so that partners can discuss what works and what doesn't and adopt successful strategies from other parts of the Commonwealth.

2.3.1.1 As a required attachment, submit the Local Coordination Tracker Tool to certify that the Eligible Entity has conducted coordination, including with Tribal Governments, local community organizations, unions and work organizations, and other groups.

As required, MBI has provided certification of coordination efforts through the Local Coordination Tracker Tool. This tool documents MBI's collaboration with various groups, including Tribal Governments, local community organizations, unions and work organizations. The file name is: [Local_Coordination_Documentation_Tracker_2023.xlsx](#).

2.3.2 Describe the formal tribal consultation process conducted with federally recognized Tribes, to the extent that the Eligible Entity encompasses federally recognized Tribes. If the Eligible Entity does not encompass federally recognized Tribes, note "Not applicable."

MBI has also collaborated on outreach and engagement activities facilitated by the federally recognized Mashpee Wampanoag Tribe as a lead for additional outreach with indigenous communities across the Commonwealth. Sister tribes including the cultural group, Herring Pond Tribe of the Wampanoag nation and the North American Indian Center of Boston NAICOB, formerly, the Boston Indian Council were engaged for surveys and focus groups. One hundred and twenty or 4% of MW Tribes 3000 members completed surveys at housing, veteran and elder-serving tribal agencies of the MWT. A coordinated effort between MBI and MWT coded surveys so that MWT could extract and analyze Tribe-

specific data for their digital equity needs assessment and programmatic planning. Two focus groups and 23 participants were engaged for a total of 143 participants. The Tribal Employment Rights Director spoke at a regional listening session where she shared the specific barriers faced by tribal members in MA.

2.3.2.1 Optional Attachment: As a required attachment only if the Eligible Entity encompasses federally recognized Tribes, provide evidence that a formal tribal consultation process was conducted, such as meeting agendas and participation lists.

7. Deployment Subgrantee Selection (Requirement 8)

Provide a detailed plan to competitively award subgrants. This is a critical Requirement of the Initial Proposal as subgrantees will be primarily responsible for completing eligible deployment activities.

2.4.1 Describe a detailed plan to competitively award subgrants to last-mile broadband deployment projects through a fair, open, and competitive process.

The Commonwealth of Massachusetts is in a unique situation for BEAD deployment projects. The Gap Networks Program may have the capacity to serve most of the unserved and underserved locations in the Commonwealth prior to BEAD funding becoming available. The Gap Networks Program, with a total funding of \$145 million, will fund the deployment of broadband infrastructure to areas that currently lack broadband service. The program's objective is to bridge the digital divide by expanding access and connectivity to unserved, underserved, and CAI locations throughout the Commonwealth. The Gap Networks Program was launched on October 25, 2023, and MBI plans to run two funding rounds of the program prior to the start of the BEAD challenge process.

MBI expects that, due to the CPF-funded Gap Networks Program, few or no mass market BSLs may remain by the time the BEAD subgrantee selection process begins. However, there is a possibility that higher-than-expected costs, lower-than-expected participation, and/or coverage gaps identified through the BEAD challenge process, will result in a situation where the BEAD program in Massachusetts has a large coverage gap problem to solve. The process laid out here seeks to ensure that Massachusetts will achieve universal broadband access, by the "reliable" broadband technologies of fiber, cable, and/or licensed fixed wireless (not DSL), at speeds of at least 100 Mbps /20 Mbps, by the time both the BEAD and CPF programs are complete.

Continuities and Differences Between CPF and BEAD

To the extent possible, MBI will leverage applications received as part of the CPF program to supply projects that it can fund. The BEAD and CPF programs have similar goals. There are advantages to aligning the CPF and BEAD programs, especially efficiencies to applicants by eliminating or mitigating the need for project redesign. However, there are differences between the programs which make it infeasible to simply treat BEAD as additional funding for CPF.

First, universal broadband access is a clearly defined and mandatory objective of the BEAD program but not of CPF. Other differences include:

- A different rubric for scoring and selecting among projects.
- A different match requirement (20% for Gap Networks program vs. 25% for BEAD, though with a potential for waivers).
- A different speed target (100 Mbps /100Mbps for Gap Networks versus 100 Mbps /20 Mbps for BEAD).
- A required low-cost option for BEAD.
- Somewhat more stringent requirements in certain respects of the BEAD program, e.g., with respect to workforce.
- An additional BEAD program objective of gigabit symmetric speed service for all Eligible CAIs.

MBI anticipates that some Gap Networks projects may not qualify for BEAD funding, while in other cases Gap Networks requirements are more stringent and may have excluded a project that the BEAD program will be able to accept. But MBI plans to reuse Gap Networks projects for BEAD, and notify applicants if:

- a. their unfunded Gap Networks projects qualify for BEAD as originally submitted, or
- b. they need to make amendments to their Gap Networks projects in order to qualify for BEAD.

At the same time, MBI will open an application window for new applicants to participate in the BEAD program, if necessary.

MBI hopes that the program participation incentives will be complementary, and broadband providers will apply for Gap Networks and BEAD.

Uncertainty, Contingency Planning, and Timelines

While it is fortunate that Massachusetts is on track to achieving 100% availability, the challenge is designing a BEAD program capable of achieving universal service with locations remaining after CPF.

With this in mind, MBI envisions three rounds of BEAD funding for broadband deployment:

Round One: 300+ Locations Remaining After CPF

This approach will focus on **municipalities** as the geographic units or project service areas, and involve municipal governments in finding solutions for their areas.

Round Two: Remaining Locations

Rather than defining project areas, MBI will announce the targeted locations and invite ISPs to apply for any of the locations that they are willing and able to serve.

Round Three: Community Anchor Institutions

This deployment will focus on community anchor institutions (CAIs) that lack gigabit symmetric service, in the event that MBI elects to fund CAI connectivity with BEAD funds. If CAIs are funded, MBI may elect to address CAIs in Round 2.

These three rounds will be sequential:

- Upon completion of the CPF grantmaking, when all awards have been announced, MBI will make a determination of whether there are still unserved and underserved BSLs in Massachusetts. If needs remain, a List of BEAD Eligible Locations will be created.
- Based on analysis of the List of BEAD Eligible Locations, MBI will determine whether implementing a Round One of BEAD grantmaking is worthwhile. This determination will depend on the number and distribution of the BEAD eligible locations. Numerically, 300 can serve as the rough cutoff for launching Round One, but the distribution among municipalities will also be taken into account. If locations are more scattered, with only a handful of location per municipality, the Round One process involving municipalities may not be worthwhile.
- If Round One is launched, MBI will proceed through application review, deconfliction, and award.
- After Round One has made its awards, **or** after MBI has determined that Round One is not feasible, MBI will make a determination whether Round Two is necessary. Round Two will be conducted if and only if there are still BEAD eligible locations in the state.
- If Round Two is launched, MBI will proceed through application review, deconfliction, and award. Given the pre-eminent importance of the 100% availability goal, ad hoc negotiations may be resorted to at this stage to ensure that no gaps remain.
- Round Three will be launched after Round One and Round Two are complete, if possible, but also with sufficient time to complete its grantmaking efforts and allocate awards in time to incorporate them into the Final Proposal.

While a strict sequencing of Round One, then Round Two, then Round Three is desirable, the 365-day window between approval of the full Initial Proposal and submission of the Final Proposal may not permit it. The sequencing is desirable because Round Two should deal with coverage gaps left behind by Round One, while Round One and Round Two are likely to fund gigabit deployment to many CAIs along the way, which should then be removed from eligibility for funding as part of Round Three. Overlaps between the rounds complicate program administration, however, it may be necessary to meet the deadline for submission of the Final Proposal. MBI will determine which rounds will occur once the number of locations to serve through BEAD is known.

Since potential applicants for these funding rounds need appropriate advance notice in order to prepare their projects for submission, MBI will keep industry informed of its progress and evolving plans on an ongoing basis and announce specific dates and deadlines for the BEAD deployment funding rounds, along with application materials and preregistration information, sometime early in 2024, and no later than the opening of the application window for Round One.

It should be noted that while MBI conducts the BEAD deployment subgrant program, MBI also plans to begin funding priority non-deployment initiatives using BEAD funds immediately upon approval of the Initial Proposal. Please see response to 2.4.4. below for a more detailed explanation of this approach.

BEAD Round One: Focus on Municipalities

For both Gap Networks and BEAD Round One, the basic geographic unit is the municipality. MBI will leverage municipalities to pursue a universal solution, with local officials well-positioned to advocate for each BSL where BEAD subgrantees make funded deployment commitments and ensure that subgrantees are held accountable. Gap Networks and BEAD Round One subgrantees must commit to serve 100% of any municipalities they include in their application.

MBI will consider whether BEAD Round One awards should be tentative and contingent on the outcome of the remaining rounds. There is a possibility that BEAD Round One awards may be updated to reflect negotiations triggered by Round Two. MBI will communicate the awards once all rounds are carried out and final negotiations finalized.

BEAD Round Two: Focus on Locations

BEAD Round Two will close small coverage gaps remaining after CPF and BEAD Round One. Although the problem to be solved is small in scale, BEAD Round Two will be a competitive broadband grant program with a formal application period and a scoring system that follows pre-established rules. MBI may leverage previous grantmaking and invite bids from CPF and BEAD Round One awardees. To the extent possible, direct negotiations with ISPs and advocacy for specific projects and line extensions by MBI will be channeled through the competitive grant program apparatus.

BEAD Round Three: Focus on CAIs

MBI's strategy for CAIs involves up to three grantmaking rounds since deployment of gigabit symmetric service to CAIs will be an allowable expense for Round One and Round Two projects and will be rewarded with additional points in the scoring rubric. Based on the number and geography of unserved and underserved BSLs remaining after Round One, MBI may elect to cover CAIs with gigabit service during Round Two. While deploying to any residual unserved and underserved BSLs, MBI may seek to simultaneously gain momentum towards the next goal, which is universal gigabit symmetric service for eligible CAIs.

Overview

While MBI's proposed approach for BEAD subgrantee selection has built-in flexibility to accommodate uncertainty, at the time of writing, of the extent and nature of the coverage gap that will remain at the time of launch, MBI has taken great care to ensure that it is fair, open, competitive, and transparent. Transparency measures implemented throughout the process design, provide transparent oversight, an objective scoring process based on quantitative measures, and alignment with state and federal laws and guidance, such as the BEAD NOFO.

The subgrantee selection process will consist of up to four stages: Prequalification, Round One, Round Two, and Round Three. Both Round One and Round Two are contingent on the nature and extent of residual coverage gaps, and determinations will be made at the proper time.

Prequalification

To expedite the review and approval of subgrantee applications given the time constraints of the BEAD program, a preregistration process will take place to certify subgrantees meet the minimum qualification requirements. The prequalification phase will leverage CPF applications, where possible, to verify subgrantees' qualifications in areas such as financial capability, technical capability, and organizational capabilities. Applicants will be strongly encouraged but not required to prequalify for BEAD deployment projects. Applicants that elect not to participate in the prequalification process will still be subject to a full review of qualifications during the funding round(s) that they participate in. A list of the information will be requested as part of preregistration is included below:

- Financial capability: 2.4.11
- Managerial capability: 2.4.12
- Technical capability: 2.4.13
- Compliance with applicable law: 2.4.14
- Operational capability: 2.4.15

- Information on ownership: 2.4.16
- Information on other public funding: 2.4.17
- EHP and BABA compliance: 2.4.5
- Labor standards and protection: 2.7.1
- Cybersecurity Compliance: 2.16.4
- Supply chain risk management compliance: 2.16.4

MBI will seek to review and approve this information pertaining to each organization, or subgrantee in advance of applications for Round One projects. If an applicant chooses not to apply for a BEAD project following submitting material as part of the preregistration, MBI will dispose of any information provided as part of the preregistration process.

Round One Project Applications

Following the prequalification phase, MBI will accept applications for Round One. Round One applications will be accepted for project areas that serve a municipality or multiple contiguous municipalities, with the consent and approval of those municipalities. This project area aligns to the project area definition in the CPF program and provides a minimum geographic unit for program applications (see response to 2.4.6 below for more information on project areas). Within each municipality, applicants will commit to serving all unserved and underserved locations. Applicants will be encouraged, but not required, to serve all CAIs located within the municipality. Serving CAIs within the municipality boundaries will constitute an allowable expense for these projects and is incentivized through the scoring rubric shown in section 2.4.2. Once all Round One applications are received, an assessment will be completed to determine if a municipality requires deconfliction (if more than one applicant applied to serve a single municipality). Deconfliction will be based on the score from the assessment rubric, with the higher scoring project being provided with a tentative award for the overlapping area. Following deconfliction, negotiations may occur to extend projects to reach outlier locations. More explanation of MBI's principles for deconfliction is provided in response to requirement 2.4.6.

Round Two Project Applications

Round Two will be conducted in a manner similar to Round One, except that applicants can propose any project areas they wish to serve, provided they consist of eligible locations. At this stage, any proposal to deploy to remaining BEAD eligible BSLs may be considered, and MBI may not require applicants that committed to serve BSLs in a municipality to cover other BSLs in the same municipality. MBI will make this determination based on the number and geography of unserved and underserved BSLs remaining after Round One. MBI may, however, on a case-by-case basis, advocate for or require the inclusion of BSLs still lacking a solution in proposed projects. The deconfliction process described in 2.4.6 will be applied again, this time to individual BSLs.

Round Three Project Applications

Following Round One and/or Round Two, or a determination that primary Rounds are not needed, MBI may launch a dedicated grant program to deliver gigabit symmetric service to CAIs. This grant program is intended to have the following features:

1. CAIs identified through Volume 1 and the Challenge Process may be targeted for gigabit symmetric service and can be a standalone project. Ideally, projects will include multiple CAIs.
2. Projects must be co-signed by a qualified ISP and the CAI to which it proposes to deploy gigabit symmetric service. A CAI may co-sign for multiple projects to maximize its odds of getting gigabit symmetric service, but in that case, it must rank order the projects. To the extent possible, ISPs should be ready to serve each CAI as a viable standalone project. Deconfliction will proceed on the basis of giving each CAI the project that it indicates it most prefers.
3. There will be a subsidy cap per CAI, to be set after the completion of the coverage gap solution and in light of funding available, lessons learned, and any further cost analysis that has been performed by that time.
4. Exceptions to the subsidy cap per CAI can be made for applicants who provide a detailed budget justifying the extra costs as well as a persuasive, data-driven narrative showing that the CAI is exceptionally important to providing connectivity and promoting broadband usage among one or more of the underrepresented populations identified in the Digital Equity Act.

5. The allowable expenses for the projects include capital expenditures for network construction and for customer drops, but no operating expenses or customer-owned equipment.
6. Incidental passings are allowable if they are technically necessary and/or contribute to commercial sustainability, but the network infrastructure built for the project should be reasonably direct in serving the CAI and connecting to backhaul.
7. Projects must pass the following gating criteria:
 - i. The organization is a CAI.
 - ii. Gigabit symmetric service is not currently available.
 - iii. The project will provide gigabit symmetric service.
 - iv. The ISP is qualified, by the same criteria as for BEAD subgrantees for residential network construction, as described elsewhere in this document.
 - v. The CAI consents to and endorses the project, and plans to subscribe to the resulting service.
 - vi. There is a coherent narrative about the project's purpose, duration, and impact.
 - vii. The project has a plausible plan for commercial sustainability, with reasonable projected revenue exceeding reasonable projected operating cost.
 - viii. The budget demonstrates that the ISP will provide matching capital equal to at least 25% of the capital expenditure needed by the project.
 - ix. The ISP demonstrates that it has sufficient financing to cover the match.
8. Among projects that pass the gating criteria, the following criteria will be used to select at most one project per CAI:
 - a. The level of need, i.e., how bad is current broadband. Weight: 20%, with scores favoring CAIs with greater need.
 - b. Technical robustness of the solution. Weight: 20%
 - c. Cost effectiveness / Minimal BEAD program outlay. Weight: 20%, scored on a sliding scale, with 0 points if the subsidy request equals the cap, and 20 points would be if the subsidy request were \$0
 - d. Neighborhood impact. Weight: 20%, where full points may require that the CAI have a plan to provide public Wi-Fi from the roof for the benefit of the surrounding area
 - e. Creativity and innovation. Weight: 20%

More discussion of how MBI will address the connectivity needs of an important subset of CAIs, affordable housing MDUs, is provided in Section 7. Deployment projects in affordable housing MDUs will also have opportunities to access funds through the Residential Retro-Fit and Apartment Wi-Fi programs.

2.4.2 Describe how the prioritization and scoring process will be conducted and is consistent with the BEAD NOFO requirements on pages 42 – 46.

The application and scoring rubric were designed to encourage serving all remaining locations efficiently. The scoring criteria for Rounds One and Two are based on straightforward and quantitative measures that serve as objective metrics to select subgrantees.

Scoring Criteria

Minimal BEAD Program Outlay

MBI will prioritize proposals that minimize BEAD funding requirements. The requested funding will be assessed by both the total proposed cost of the project and the subgrantee's proposed match, which must account for at least 25% of the project cost unless waived. As the BEAD costs decrease, there will be an increase in points awarded.

The most cost-efficient applications, evaluating the total funding requested to provide broadband access to a project area as compared to an internal cost estimate, will receive the highest points.

Affordability

MBI will prioritize proposals that commit to offer a Middle-Class Broadband Service Option, as described in response to requirement 2.13.1. Each applicant's plans for implementation should include a specific price point, subject only to increases in line with consumer price inflation. The lower the price point the applicant is willing to commit to, the more points will be awarded.

Affordability of 1 Gbps/1 Gbps service, for Priority Broadband Projects. This category scores Priority Broadband Projects based on the prospective subgrantee's commitment to providing the most affordable total price to the customer for 1 Gbps/1 Gbps service in the project area, for the life of the BEAD funded network, allowing for increases aligned to inflation, as follows.

- A tiered rubric may be used to assess plan prices, whereby points will be allotted based on the price range.
- For example, an application will receive maximum points if the cost of 1Gbps/1Gbps symmetrical service is less than an initial \$80 per month, including all taxes, fees and charges charged to the customer, subject to annual increases no greater than the official rate of consumer price inflation. A sliding scale will be used to score applications that provide 1Gbps/1Gbps symmetrical services from \$81 or more per month, including all taxes, fees, and charges to the customer. \$100 per month, the maximum price point allowable for a Middle-Class Broadband Service Option for 1Gbps/1Gbps, will be the top of the sliding scale.
- Priority Broadband Project applicants who commit to a Middle-Class Broadband Service Option at the maximum allowable price of \$100 per month will receive half of the available points for affordability.

Affordability of 100 Mbps/20 Mbps service, for Non-Priority Broadband Projects. This category scores Non-Priority Broadband Projects based on the prospective subgrantee's commitment to providing the most affordable total price to the customer for 100 Mbps/20 Mbps service in the project area, for the life of the BEAD funded network, allowing for increases aligned to inflation, as follows.

- A tiered rubric may be used to assess plan prices. Points will be allotted based on the price range.
- For example, an application will receive maximum points if the cost of 100 Mbps/20 Mbps symmetrical service is less than \$50 per month, including all taxes, fees and charges charged to the customer, subject to annual increases no greater than the official rate of consumer price inflation. A sliding scale will be used to score applications that provide 100 Mbps/20 Mbps symmetrical services from \$51 or more per month, including all taxes, fees, and charges to the customer. \$75 per month, the maximum price point allowable for a Middle-Class Broadband Service Option for 100 Mbps/20 Mbps, will be the top of the sliding scale.
- Non-Priority Broadband Project applicants who commit to a Middle-Class Broadband Service Option at the maximum allowable price of \$75 per month will receive half of the available points for affordability.

Fair Labor Practices

Prospective subgrantees will be required to provide details of their past compliance with federal fair labor laws in accordance with the NOFO guidelines. Prospective subgrantees will need to commit to adhering to federal fair labor laws throughout the life of the BEAD funded asset.

Prospective subgrantees will be evaluated on compliance with federal fair labor laws based on their previous record and their future commitments. Maximum points will be awarded to prospective subgrantees with no prior violations and who commit to adhering to federal fair labor laws throughout the life of the BEAD funded asset.

Speed To Deployment

All subgrantees that receive funding from the BEAD Program must complete the planned broadband network and begin providing services to customers within four years of receiving the subgrant from MBI.

Applications will be evaluated on a sliding scale based on the project's committed timeline to completion. No points will be awarded for project scheduled to be completed in four years. Maximum points will be awarded if projects can commit to completing the project within two years or less.

Speed of Network and Other Technical Capacities

MBI will weigh the speeds, latency, and other technical capabilities of the technologies proposed by prospective subgrantees seeking to deploy projects that are not Priority Broadband Projects (projects that will not provide end-to-end fiber).

Speed of network proposals will be evaluated using a sliding scale. Prospective subgrantees proposing to use technologies featuring lower future investments and longer production lifecycles, with ease of scalability, will receive higher weight during the evaluation process. In contrast, those proposing more costly technologies with shorter production lifecycles and upgrade times will receive comparatively less weight.

Open Access

MBI will promote prospective subgrantees provision of open access wholesale last-mile broadband service for the life of the subsidized networks, on fair, equal, and neutral terms to all potential retail providers.

Prospective subgrantees will receive points if their open access commitment and description of planned protocols includes:

- An open-access policy framework
- Wholesale service descriptions and rates
- Identification of retail ISP partners and status of contract negotiations (such as an memorandum of understanding or a signed commitment)

Serving CAIs

Serving CAIs will not be mandatory as part of Round One or Round Two of the BEAD deployment program, however, applicants will received additional points during evaluation and scoring based on the percentage of CAIs lacking gigabit symmetric service who will be offered gigabit symmetric service within the project area as a result of the project. No points will be awarded if none of the CAIs will be provided with gigabit symmetric service. The maximum points allocation will be awarded if 100% of the CAIs within the project area are proposed to be served.

Low-Cost Plans

Affordable service is a top priority for MBI. In addition to the scoring criteria established for affordability of 1Gbps/1Gbps service and 100Mbps/20Mbps service, MBI will allocate points for committed service pricing of the low-cost plan. While the Affordable Connectivity Program (ACP) currently provides a subsidy that makes service to eligible individuals essentially free, ACP is expected to exhaust its funding in the first half of 2024 if there is no federal action to renew the funding by the end of 2023. With uncertainty on the future of ACP and any successor programs that may follow, MBI has opted to include scoring criteria that awards additional points to applicants who commit to offering a low-cost plan that is below \$30/month. Points for this criteria will begin at zero for offering a low-cost plan at \$30/month and increase over a gradient of price ranges that eventually reach \$0/month.

Serving MDUs at the Enterprise Level

It is expected that a significant number of MDUs will become eligible for BEAD funding through the Challenge Process. MBI encourages applicants to provide affordable service to MDUs in an efficient and cost-effective manner. MBI will award additional points to applicants that commit to offering Enterprise Level Agreements, which is a single price that provides service to every unit within the MDU at a discounted rate, due to economies of scale. Full point allocations will be provided to those applicants that can commit to this service offering for the life of the BEAD program funded infrastructure.

2.4.2.1 As a required attachment, submit the scoring rubric to be used in the subgrantee selection process for deployment projects. Eligible Entities may use the template provided by NTIA or use their own format for the scoring rubric.

Table 9: Rounds One and Two Priority Project Scoring Rubric

Primary Criteria:			
Minimal BEAD Program Outlay	To determine the BEAD funding needed for a project, both projected costs and the subgrantee's proposed match (minimum 25% of project cost) will be accounted for. Points or credits will increase as BEAD costs decrease. MBI shall also consider the cost per location and any factors that may impact the project's scalability or resilience.	32.5%	75%

Affordability	The prospective subgrantee's commitment to provide the most affordable total price to the customer for 1 Gbps/1 Gbps service in the project area.	32.5%	
Fair Labor Practices	MBI shall prioritize projects based on prospective subgrantees' compliance with federal labor and employment laws. New entrants without a compliance record may make specific commitments to strong labor and employment standards to mitigate this. Section IV.C.1.e of the NOFO provides more details about this prioritization requirement.	10%	
Secondary Criteria:			
Speed To Deployment	All subgrantees that receive BEAD Program funds for network deployment must deploy the planned broadband network and begin providing services to each customer that desires broadband services within the project area not later than four years after the date on which the subgrantee receives the subgrant from MBI. MBI shall give secondary criterion prioritization weight to the prospective subgrantee's binding commitment to provide service by an earlier date certain, subject to contractual penalties to MBI, with greater benefits awarded to applicants promising an earlier service provision date.	5%	25%
Open Access	Provision of open access wholesale last-mile broadband service for the life of the subsidized networks, on fair, equal, and neutral terms to all potential retail providers.	5%	
Serving CAIs	Servicing CAIs as part of Round One projects will not be mandatory but is strongly encouraged and incentive by MBI. This scoring criteria will assess the percentage of CAIs within the project area that will be served as part of the proposed project.	5%	
Low-Cost Plans	MBI will allocate points for committed service pricing of the low-cost plan below \$30/month and \$75/month in tribal lands.	5%	
Serving MDUs at Enterprise Level	This scoring criteria will award points if applicants plan to offer service at an enterprise level for MDUs. Full points will be awarded if the applicant can commit to offering this service option.	5%	

Rounds One and Two All Other Last Mile Deployment Project Scoring Rubric

Primary Criteria:			
Minimal BEAD Program Outlay	To determine the BEAD funding needed for a project, both projected costs and the subgrantee's proposed match (minimum 25% of project cost) will be accounted for. Points or credits will increase as BEAD costs decrease. MBI shall also consider the cost per location and any factors that may impact the project's scalability or resilience.	32.5%	75%
Affordability	Prospective subgrantee's commitment to providing the most affordable 100/20 Mbps service in the proposed area	32.5%	
Fair Labor Practices	MBI shall prioritize projects based on prospective subgrantees' compliance with federal labor and employment laws. New entrants without a compliance record may make specific commitments to strong labor and employment standards to mitigate this. Section IV.C.1.e of the NOFO provides more details about this prioritization requirement.	10%	
Secondary Criteria:			
Speed To Deployment	All subgrantees that receive BEAD Program funds for network deployment must deploy the planned broadband network and begin providing services to each customer that desires broadband services within the project area not later than four years after the date on which the subgrantee receives the subgrant from MBI. MBI shall give secondary criterion prioritization weight to the prospective subgrantee's binding commitment to provide service by an earlier date certain, subject to contractual penalties to MBI, with greater benefits awarded to applicants promising an earlier service provision date.	4.16%	25%
Speed of Network and Other Technical Capacities	Applications proposing easily scalable technologies with longer asset cycles and lower future investment should be favored over those with costlier upgrades and shorter asset cycles.	4.16%	
Open Access	Provision of open access wholesale last-mile broadband service for the life of the subsidized networks, on fair, equal, and neutral terms to all potential retail providers.	4.16%	
Serving CAIs	Servicing CAIs as part of Round One projects will not be mandatory but is strongly encouraged and incentivized by MBI. This scoring criteria will assess the percentage of CAIs within the project area that will be served as part of the proposed project.	4.16%	
Low-Cost Plans	MBI will allocate points for committed service pricing of the low-cost plan below \$30/month and \$75/month in tribal lands.	4.16%	
Serving MDUs at Enterprise Level	This scoring criteria will award points if applicants plan to server service at an enterprise level for MDUs. Full points will be awarded if the applicant can commit to offering this service option.	4.16%	

2.4.3 Describe how the proposed subgrantee selection process will prioritize Unserved Service Projects in a manner that ensures complete coverage of all unserved locations prior to prioritizing Underserved Service Projects followed by prioritization of eligible CAIs.

Based on current estimates using benchmark cost data, Massachusetts is optimistic that it has sufficient funding between the CPF and BEAD programs to deploy service to all unserved and underserved BSLs in the Commonwealth. It therefore does not intend to specifically prioritize unserved BSLs in its design of the BEAD program, as it regards such prioritization as unnecessary. For the same reason, MBI plans will encourage CAIs in plans to deploy to unserved and underserved locations, through the rubric score, as described above. It believes this will not violate BEAD priorities because solutions for unserved and underserved locations are achievable and will not be crowded out by the inclusion of CAIs in these projects' service areas.

However, before it turns to a more deliberate pursuit of gigabit symmetric service for CAIs throughout the state, MBI will need to summarize the results of Round One and Round Two grantmaking, as well as other state and federal programs, and make a careful determination that the universal broadband access goal of the BEAD program is on track to being achieved. Only after this determination has been made will it launch the CAI broadband grant program described in 2.4.1.

Beyond CAIs, MBI hopes to have BEAD funding available for non-deployment projects, in alignment with the State Digital Equity Plan, as described in Section 7. To align with the BEAD program's prescribed prioritization, MBI will summarize the results of the CAI broadband grantmaking effort and confirm that a reasonably exhaustive solution to reported needs for gigabit symmetric service at CAIs is on track to being achieved before any large-scale transfer of BEAD funds to the State Digital Equity Plan workstream is carried out.

2.4.4 If proposing to use BEAD funds to prioritize non-deployment projects prior to, or in lieu of the deployment of services to eligible CAIs, provide a strong rationale for doing so. If not applicable to plans, note "Not applicable."

MBI plans to begin funding priority non-deployment initiatives using BEAD funds immediately upon approval of the Initial Proposal. Its rationale for doing so is, first of all, that with well over \$250 million of CPF and BEAD funding and ~18,000 locations thought to still need broadband service (pending the results of the challenge process), MBI is confident that the remaining coverage gaps for mass market residential and commercial service can be closed. MBI also plans to pursue aggressively the deployment of gigabit symmetric service to CAIs throughout the state through the sub-grantee deployments

Given this situation, MBI will prioritize non-deployment programs quickly. Building on successful existing Digital Equity programs, MBI will develop its priority non-deployment activities and launch them while deployment subgrantee selection is underway.

Although MBI aims for gigabit symmetric service for CAIs, MBI's evaluation process will determine which CAIs actually advance BEAD NOFO objectives and would benefit from and actually subscribe to gigabit symmetric service. We believe our non-deployment programming meets urgent needs and should not be postponed until universal gigabit service for CAIs has been determined to be achieved.

2.4.5 The proposed subgrantee selection process is expected to demonstrate to subgrantees how to comply with all applicable Environmental and Historic Preservation (EHP) and Build America, Buy America Act (BABA) requirements for their respective project or projects. Describe how the Eligible Entity will communicate EHP and BABA requirements to prospective subgrantees, and how EHP and BABA requirements will be incorporated into the subgrantee selection process.

The Commonwealth of Massachusetts is deeply committed to environmental and historic preservation, as well as Build America, Buy America Act (BABA), and will require all potential applicants to comply with related requirements when applying for the BEAD grant program. MBI will require applicants to certify their track record of compliance with these requirements and provide detailed narrative and documentation regarding any challenges or noncompliance. MBI intends to actively monitor subgrantees post-award to ensure continued compliance with environmental and historic preservation and BABA requirements.

2.4.6 Describe how the Eligible Entity will define project areas from which they will solicit proposals from prospective subgrantees. If prospective subgrantees will be given the option to define alternative proposed project areas, describe the mechanism for de-conflicting overlapping proposals to allow for like-to-like comparisons of competing proposals.

MBI plans to employ different project area definitions for Round One—municipalities—and Round Two—ISP-defined. It anticipates a limited need for deconfliction, based on its broadband grantmaking experience to date and its relationships with industry, but has robust plans to handle deconfliction where needed.

Round One—Municipal and Multi-Municipality Project Areas

The basic geographic unit for project service areas in BEAD Round One is the municipality. All land in Massachusetts is under the jurisdiction of some municipality, so municipalities are in a good position to advocate for and monitor the achievement of universal broadband coverage on behalf of their residents.

For Round One, Massachusetts will require, as it does in the CPF/Gap Networks program, that if a project proposes to serve *any* unserved or underserved BSLs in a municipality, it must both (a) propose to serve all unserved or underserved BSLs in a municipality, and (b) have a letter of support from that municipality. If all municipalities get a BEAD project, Round One will set Massachusetts on track to achieve the BEAD program's universal access goal.

While MBI is hopeful that the municipality-centric strategy of Round One will succeed in closing the vast majority, and perhaps all, of Massachusetts' remaining coverage gaps, this cannot be guaranteed, both because some municipalities may not engage with the process, and because ISP willingness to deploy may not be forthcoming. There could be cases, for example, where BSLs in a single municipality are inconveniently distributed and the obligation to serve them as part of a single project interferes with efficient network design. MBI therefore plans Round Two to cover the scenario in which Round One does not close all the gaps. Round One may require deconfliction if (a) applicants propose multi-municipality projects, and (b) these multi-municipality project footprints partially but not fully overlap.

Round Two—ISP-Defined Project Areas

In BEAD Round Two, MBI may welcome all proposals to serve the hopefully very few unserved and underserved BSLs that still lack a deployment solution, with no gating criteria with respect to the project area. The ISP-defined project areas in Round Two might contain many BSLs or as few as one, within single municipalities or spread across several of them. Although there may be no general requirements about project areas, MBI may in specific cases decline to fund projects that would leave nearby BSLs "orphaned" and render the design of viable projects to serve them more difficult. In such cases, MBI may require the applicant to extend its project footprint to include such BSLs as a condition for continued consideration leading to award.

A need for deconfliction will arise during Round Two if projects include some but not all of the same BSLs.

Round Three—ISP-Defined CAI Lists

In BEAD Round Three, MBI will welcome proposals to serve CAIs that lack gigabit symmetric service. As with Round Two, ISPs will be able to define project areas, in this case consisting of the sets of CAIs that they want to serve, albeit with a need to get the consent of each CAI included. A need for deconfliction will arise if multiple ISPs propose to serve partially overlapping lists of CAIs.

Deconfliction

In all three rounds, One, Two, and Three, a need for deconfliction can arise when project areas overlap. Based on past experience, MBI does not expect much competition for most of the places that the BEAD program will be targeting. Massachusetts' broadband industry is fairly mature and has already built to the vast majority of BSLs, and the few that remain unserved or underserved generally offer poor returns on investment, which is why they have not been served to date. MBI expects in many cases to have to deal with a single provider willing to deploy, and considers it possible that in other cases, even one offer to deploy may not be forthcoming.

When competition takes the form of multiple bidders for exactly coextensive territories, like-to-like comparison based on the rubric provided in attachment 2.4.2.1 is straightforward. "Deconfliction" is here taken to address primarily the case where partial overlaps among project areas do not allow for straightforward like-to-like comparison.

The rubric will help MBI to decide, but it does not address the spatial complexities of competition for territorial network expansion. In order to pursue a cost-effective and sustainable solution to broadband coverage gaps in Massachusetts, MBI must take into account that:

1. Proposals to serve neighboring towns (Round One), nearby locations (Round Two), or nearby CAIs (Round Three) may sometimes be commercially interdependent, with a variety of fixed costs, such as backhaul, permitting, and marketing, needing to be shared across towns or locations in order to make them viable.
2. The best way, or even the only way, to secure deployment to some hard-to-serve towns, locations, or CAIs, and/or to make it commercially sustainable, will sometimes be to pool those towns, locations, or CAIs with others that are more commercially desirable.

These factors give rise to a need for deconfliction of projects with partially overlapping proposed funded service areas, in a way that may need to leverage both BEAD applicants' revealed willingness to build to hard-to-serve locations and BEAD applicants' prospective profits from more desirable and competitive areas in order to maximize the reach of the

program, and minimize the residual work that needs to be done through ad hoc negotiations with specific providers in order to achieve a universal coverage solution.

Deconfliction will be conducted in a manner consistent with the principle that broadband providers can only be required to build to territories that they consent to, either through their original application or through a consensual revision of their originally proposed territory. In order to pursue a universal solution within the constraints of the consent principle, MBI will carry out an iterative deconfliction process, repeatedly analyzing incoming proposals to determine a tentative selection decision for each proposed area, then directing inquiries to some applicants about whether they are willing to serve a specific subset of the locations in their original proposal as indicated by the allocation decision, and if so, what subsidy they will require in order to do so. Applicants who accept revisions of their projects will typically get funded, although MBI will keep analyzing revised project areas and may make offers to other applicants if applicants who accept revisions make subsidy requests that excessively escalate costs.

More details about iterative deconfliction will be provided in the future, if necessary. At this stage, as discussed above, MBI hopes that the Gap Networks Program funded by the US Treasury's Capital Projects Fund will either fully close the remaining broadband coverage gaps in Massachusetts, or else close the vast majority of the gaps, with only slight coverage gaps remaining. The nature and extent of the unfunded coverage gaps remaining after two rounds of Gap Networks grantmaking will affect MBI's strategy for deploying BEAD funds to complete the work of universal broadband coverage, and sophisticated rules for deconfliction are likely to be developed only if the gaps remain substantial. But whether through elaborate explicated rules or through a more ad hoc approach, MBI will select among projects both on the rubric and in the interests of maximizing reach, revising applicants' projects only with their consent, while keeping competition in play as much as possible to discipline bids. Some areas may get less preferred projects because MBI needs to select a project that will reach another area, otherwise lacking a solution, that cannot support a project on its own.

2.4.7 If no proposals to serve a location or group of locations that are unserved, underserved, or a combination of both are received, describe how the Eligible Entity will engage with prospective subgrantees in subsequent funding rounds to find providers willing to expand their existing or proposed service areas or other actions that the Eligible Entity will take to ensure universal coverage.

As discussed elsewhere in this section, e.g., 2.4.1 and 2.4.6, MBI is planning two rounds of competitive grantmaking for unserved and underserved locations to ensure a comprehensive solution, even though the remaining problem is expected to be small. As needed, MBI will engage in multi-faceted engagement with providers to encourage participation and mobilize proposals for all remaining unserved and underserved BSLs in the state. While Round Two will be structured as a competitive grant program, MBI anticipates that it may be necessary to lean on direct outreach to and/or negotiation with specific providers to induce them to volunteer for the plans and commitments necessary to put the finishing touches on a statewide solution. Hopefully, the involvement of municipalities through the Round One process will be helpful in finding solutions to any residual locations where proposals are initially not forthcoming from industry. Ongoing analysis will be conducted to inform MBI's decisioning and outreach as it works towards a complete solution to the state's remaining broadband coverage gap.

2.4.8 Describe how the Eligible Entity intends to submit proof of Tribal Governments' consent to deployment if planned projects include any locations on Tribal Lands.

MBI recognizes that deployment of broadband infrastructure on Tribal Lands requires coordination and collaboration with Tribal Governments. MBI is committed to ensuring that all broadband deployment projects on Tribal Lands are developed in partnership with Tribal Governments and with their informed consent. As such, MBI will require project applicants to obtain formal written consent from the affected Tribal Governments before deploying any broadband infrastructure on Tribal Lands.

MBI plans to reach out to each Tribal Government that may be affected by the proposed broadband deployment to initiate a consultation process. The consultation process will involve discussions with Tribal Governments on the planned broadband deployment, including the specific location(s), the type of infrastructure to be deployed, and any potential impacts of the deployment.

MBI intends to submit proof of Tribal Governments' consent to deployment as part of the BEAD grant application, in compliance with the BEAD NOFO requirement. Proof of consent can take the form of a signed document from each Tribal Government indicating their formal written approval of the proposed broadband deployment on their lands. The MBI will work closely with the affected Tribal Governments to ensure that any necessary review and approval is obtained in a timely and efficient manner, while meeting the needs of Tribal Governments and respecting their sovereignty and decision-making authority.

2.4.9 Identify or outline a detailed process for identifying an Extremely High Cost Per Location Threshold to be utilized during the subgrantee selection process. The explanation must include a description of any cost models used and the parameters of those cost models, including whether they consider only capital expenditures or include the operational costs for the lifespan of the network.

MBI recognizes the importance of identifying an Extremely High Cost Per Location Threshold (EHCPLT) that will allow for as many end-to-end fiber projects to be deployed as possible, which is a primary goal of the BEAD program. The EHCPLT will be determined no earlier than after Round One applications have been accepted, in a manner that emphasizes fiber prioritization to the extent that it is economically reasonable, while confirming that MBI has sufficient funds to achieve universal broadband access and leaving fiscal space for other priorities. The MBI will review the available BEAD allocation to determine if it can rely solely on fiber deployment to serve all unserved and underserved locations. The threshold may allow for the use of alternative technology types where fiber is cost-prohibitive but will be designed in a way that prioritizes end-to-end fiber projects, to maximize the impact of the BEAD program.

2.4.10 Outline a plan for how the Extremely High Cost Per Location Threshold will be utilized in the subgrantee selection process to maximize the use of the best available technology while ensuring that the program can meet the prioritization and scoring requirements set forth in Section IV.B.6.b of the BEAD NOFO. The response must describe:

- a. The process for declining a subgrantee proposal that exceeds the threshold where an alternative technology is less expensive.

When an end-to-end fiber project exceeds the Threshold in terms of subsidy cost per location, it loses the benefits of being a Priority Broadband Project and has to compete with other Non-Priority Broadband Projects, notably with projects using alternative technologies. End-to-end fiber projects would be scored as Non-Priority Broadband Projects in such cases, and compete with any other Non-Priority Broadband Projects on the same basis of the rubric and deconfliction as if they had not used end-to-end fiber technology. They might still win funding, but would be likely to lose out to lower cost projects if any are available.

- b. The plan for engaging subgrantees to revise their proposals and ensure locations do not require a subsidy exceeding the Threshold.

The BEAD NOFO envisions scenarios in which a statewide funding shortfall necessitates negotiations with subgrantees to reduce their subsidy requests, in order to bring the total BEAD spend within the state's BEAD funding allocation. Massachusetts does not anticipate this scenario arising, as funding appears sufficient to close gaps. However, it is possible that some subsidy requests will be unreasonably high. Methods of mitigating excessively high subsidy requests include scrutiny of budgets to ensure that quantities, prices, hours and compensation rates are realistic and fair, and that funded activities are allowable expenses of the BEAD program. The Threshold could be used as a trigger for negotiations and a target to negotiate towards, but MBI would be reluctant to do this in ways that might induce an ISP to withdraw and leave an unserved or underserved BSL without adequate broadband service. MBI is aware of the option of using the Threshold in negotiations and will take it under advisement.

- c. The process for selecting a proposal that involves a less costly technology and may not meet the definition of Reliable Broadband

MBI hopes and expects that it will not need to resort to technologies that do not meet the definition of Reliable Broadband. However, there are some subsidy price points beyond which funding a broadband deployment project could be an unreasonable use of public funds. If this situation arises, MBI will look to emerging NTIA guidance and/or the experience of other states that have more need to resort to this for best practices that can be emulated.

2.4.11 Describe how the Eligible Entity will ensure prospective subgrantees deploying network facilities meet the minimum qualifications for financial capability as outlined on pages 72-73 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

- a. Detail how the Eligible Entity will require prospective subgrantees to certify that they are qualified to meet the obligations associated with a Project, that prospective subgrantees will have available funds for all project costs that exceed the amount of the grant, and that prospective subgrantees will comply with all Program requirements, including service milestones. To the extent the Eligible Entity disburses funding to subgrantees only upon completion of the associated tasks, the Eligible Entity will require each prospective subgrantee to certify that it has and will continue to have sufficient financial resources to cover its eligible costs for the Project until such time as the Eligible Entity authorizes additional disbursements.

As mentioned above, MBI has included a preregistration phase as part of the subgrantee selection process to certify subgrantees meet the minimum qualification requirements related to their financial, technical, managerial, etc., capabilities. MBI will require subgrantees to provide the following documentation to ensure subgrantees deploying network facilities meet the minimum qualifications for financial capability:

1. Certification that they are qualified to meet the obligations associated with a Project
2. Certification will have funds available for all project costs that exceed the amount of the grant
3. Certification that prospective subgrantees will comply with all BEAD Program requirements, including service milestones
4. Where MBI disburses funding to subgrantees only after completion of the related tasks, each applicant shall certify that it has and will continue to have sufficient financial resources to cover the eligible costs of the project until such time as MBI authorizes further disbursements.

If the applicant is a publicly traded company, the applicant must submit a 10-K for the most recent five fiscal years and the 10-Q for the most recent quarter (if the 10-Q was filed after the most recent 10-K). Supporting documentation from non-publicly traded applicants may include: a letter of credit, letter confirming funds from a bank, board resolution committing funding, or loan documentation. If the grant application has additional financial partners contributing to the funds, the application must also identify the financial partner(s) and documentation of the amount and availability of each partner's financial contribution.

- a. Detail how the Eligible Entity plans to establish a model letter of credit substantially similar to the model letter of credit established by the FCC in connection with the Rural Digital Opportunity Fund (RDOF).

Irrevocable Letter of Credit

The BEAD NOFO requires MBI to create a model letter of credit (LOC) similar to the model LOC established within the Rural Digital Opportunity Fund (RDOF) from an eligible bank (see 47 C.F.R. § 54.804(c)(2)) in which the bank commits to issuing an irrevocable standby LOC to the applicant. The letter must include the dollar amount of the LOC and the issuing bank's agreement to adhere to BEAD's model LOC terms and conditions and amounts to no less than 25% of the subaward amount. Additionally, an opinion letter from legal counsel must be included with the LOC stating, subject only to customary assumptions, limitations, and qualifications, that in a proceeding under Title 11 of the United States Code, 11 U.S.C. 101 et seq. (the "Bankruptcy Code"), the bankruptcy court would not treat the LOC or proceeds of the LOC as property of the winning subgrantee's bankruptcy estate under Section 541 of the Bankruptcy Code.

On November 1, 2023, the NTIA published guidance on Conditional Programmatic Waivers for the BEAD LOC. The LOC Requirement is waived only to the extent to and as described below:

Option to Use Credit Unions

The LOC requirement to use of a bank that meets the eligibility requirements of 47 C.F.R. § 54.804(c)(2) is waived if the applicant is instead using any United States Credit Union that is insured by the National Credit Union Administration and has a credit union safety rating issued by Weiss of B- or better.

Option to Use Performance Bonds

MBI will permit the subgrantee to use performance bonds.

The LOC Requirement is waived where:

1. During the application process, prospective subgrantees are required to submit a letter from a company holding a certificate of authority as an acceptable surety on federal bonds as identified in the Department of Treasury Circular 570 committing to issue a performance bond to the prospective subgrantee.¹⁴ The letter shall at a minimum provide the dollar amount of the performance bond.
2. Prior to entering into any subgrantee agreement, each prospective subgrantee obtains a performance bond, acceptable in all respects to MBI and in a value of no less than 100 percent of the subaward amount.

Where a subgrantee chooses to exercise the option to obtain a performance bond under this waiver, the requirement that the subgrantee "provide with its LOC an opinion letter from legal counsel clearly stating, subject only to customary assumptions, limitations, and qualifications, that in a proceeding under Title 11 of the United States Code, 11 U.S.C. § 101 et seq. (the "Bankruptcy Code"), the bankruptcy court would not

¹⁴See <https://www.fiscal.treasury.gov/surety-bonds/list-certified-companies.html>

treat the LOC or proceeds of the letter of credit as property of the winning subgrantee's bankruptcy estate under Section 541 of the Bankruptcy Code" is waived.

Reduction of LOC/Performance Bonds Upon Completion of Milestones

Providing a LOC with a value of at least 25% the subaward amount is waived, conditioned on the requirement that the subgrantee obtain a new a LOC in a reduced amount upon achievement of specific deployment milestones that are publicly specified by MBI and applicable to all subgrantees subject to the LOC Requirement. MBI reserves the right to reduce the amount of the performance bond by a commensurate amount as subgrantees meet the same service milestones.

Option for Alternative Initial LOC or Performance Bond Percentage

The requirement that the initial LOC be for 25% of the subaward amount, or in the case where a subgrantee chooses to utilize a performance bond consistent with the description above, allow the initial amount of the performance bond to be lower than 100% of the subaward amount, where:

1. MBI issues funding on a reimbursable basis consistent with Section IV.C.1.b of the NOFO;
2. Reimbursement is for periods of no more than six months; and
3. The subgrantee commits to maintain a LOC or performance bond in the amount of 10% of the subaward until it has demonstrated to the satisfaction of MBI that it has completed the buildout of 100 percent of locations to be served by the project or until the period of performance of the subaward has ended, whichever occurs first.¹⁵

- b. Detail how the Eligible Entity will require prospective subgrantees to submit audited financial statements.

MBI will assess the financial capacity of the Applicant for the proposed project by evaluating the Applicant's revenue growth, profitability, solvency, and liquidity. If available, Applicants shall provide five years of audited financial statements or financial records of the Applicant and parent company. If the Applicant does not have audited financial statements, the Applicant must provide a statement signed by either the Applicant's Chief Executive Officer or Chief Financial Officer affirming that the unaudited financial statements are true and correct.

- c. Detail how the Eligible Entity will require prospective subgrantees to submit business plans and related analyses that substantiate the sustainability of the proposed project

MBI will require prospective subgrantees to submit business plans and related analyses that substantiate the sustainability of the proposed project. This can be provided in the form of pro forma statements or analyses, inclusive of cash flow and balance sheet projections and should include at least three years of operating cost and cash flow projections post targeted completion of project.

2.4.11.1 Optional Attachment: As an optional attachment, submit application materials related to the BEAD subgrantee selection process, such as drafts of the Requests for Proposals for deployment projects, and narrative to crosswalk against requirements in the Deployment Subgrantee Qualifications section.

Not Applicable.

2.4.12 Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for managerial capability as outlined on pages 73 – 74 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

MBI, in fulfillment of its responsibility for the deployment of network facilities by subgrantees, will ensure that the subgrantees meet the minimum qualifications for managerial capability. This will be achieved by reviewing documentation related to key personnel resumes, organizational policies, experience and qualifications in undertaking similar projects, as well as recent and upcoming organizational changes including mergers and acquisitions. Applicants who fail to meet the minimum requirements may not be eligible to receive funding. MBI will communicate the regulations

¹⁵ For the sake of clarity, the option to reduce the amount of the performance bond by a commensurate amount as subgrantees meet the same service milestones described in section 2.3 may not be applied to a letter of credit or performance bond obtained under this section 2.4

to all prospective subgrantees before and throughout the selection process through webinars, posting regulations on the website, and including requirements in grant application instructions and grant agreement terms and conditions.

- a. Detail how the Eligible Entity will require prospective subgrantees to submit resumes for key management personnel.

MBI will require subgrantees to provide a project organizational chart and resumes detailing the education and years of experience of key project personnel. Subgrantees shall also provide a description of key business partners that will help deliver the proposed project and the roles and responsibilities of each entity. Additionally, applicants shall provide up to three (3) similar projects in terms of project size and complexity performed in the past three (3) years highlighting the approach taken and results accomplished.

- b. Detail how it will require prospective subgrantees to provide a narrative describing their readiness to manage their proposed project and ongoing services provided.

Each applicant must also provide a narrative describing the applicant's readiness to manage a broadband services network project. The narrative should describe the experience and qualifications of key management for undertaking this project, its experience undertaking projects of similar size and scope, recent and upcoming organizational changes including mergers and acquisitions, and relevant organizational policies. Regarding previous experience, applicants shall provide up to three (3) similar projects in terms of project size and complexity performed in the past three (3) years highlighting the approach taken and results accomplished.

2.4.13 Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for technical capability as outlined on page 74 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

- a. Detail how the Eligible Entity will require prospective subgrantees to certify that they are technically qualified to complete and operate the Project and that they are capable of carrying out the funded activities in a competent manner, including that they will use an appropriately skilled and credentialed workforce.

MBI will thoroughly evaluate all applicants aiming to deploy network facilities, ensuring that they meet the essential technical qualifications outlined in the BEAD NOFO. Applicants will be required to provide a certification of their technical competence to execute and manage the project efficiently, including the commitment to employ a skilled and credentialed workforce (as detailed in Section IV.C.1.e of the BEAD NOFO). MBI will require prospective subgrantees to submit resumes and project qualifications to certify they are technically qualified to complete and operate the project competently, including the use of an appropriately skilled and credentialed workforce. Refer to section 2.4.12a for documentation requested regarding resumes and project qualifications.

- b. Detail how the Eligible Entity will require prospective subgrantees to submit a network design, diagram, project costs, build-out timeline and milestones for project implementation, and a capital investment schedule evidencing complete build-out and the initiation of service within four years of the date on which the entity receives the subgrant, all certified by a professional engineer, stating that the proposed network can deliver broadband service that meets the requisite performance requirements to all locations served by the Project

MBI will require prospective subgrantees to submit a project plan description that clearly outlines the steps involved in the capital investment schedule including but not limited to planning, design, implementation, and operation. This plan should also include high-level network designs and diagrams, project costs, timelines, and evidence of build-out within the timeline identified and required by the BEAD NOFO. Furthermore, the subgrantee will need to provide an attestation that the proposed network can deliver broadband service that meets the requisite performance requirements to all locations served by the Project. This attestation should be certified by a professional engineer. The capital investment schedule should include a complete build-out and the initiation of service within four years of the date on which the entity receives the subgrant.

2.4.14 Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for compliance with applicable laws as outlined on page 74 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

- a. Detail how the Eligible Entity will require prospective subgrantees to demonstrate that they are capable of carrying out funded activities in a competent manner in compliance with all applicable federal, state, territorial, and local laws.

MBI is committed to ensuring that prospective subgrantees deploying network facilities meet the minimum qualifications for compliance with applicable laws, as outlined in the BEAD NOFO. MBI will require prospective subgrantees to provide officer (CEO/CFO) or senior executive certification that the subgrantee is capable of carrying out funded activities competently and in compliance with all applicable federal, state, territorial, and local laws.

- b. Detail how the Eligible Entity will require prospective subgrantees to permit workers to create worker-led health and safety committees that management will meet with upon reasonable request

To ensure that an applicant complies with occupational safety and health requirements, MBI will require applicants to provide a certification stating the applicant will permit workers to create worker-led health and safety committees that management will meet with upon reasonable request.

2.4.15 Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for operational capability as outlined on pages 74 – 75 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

MBI is dedicated to thoroughly screening applicants who wish to deploy network facilities and ensuring that they meet the minimum qualifications as stated in the BEAD NOFO in terms of operational capability. MBI will mandate that applicants confirm their eligibility to complete and operate the Project by certifying their operational capability. Examples of certification requirements that demonstrate this capability follows.

- a. Detail how the Eligible Entity will require prospective subgrantees to certify that they possess the operational capability to qualify to complete and operate the Project.

MBI is committed to ensuring that prospective subgrantees deploying network facilities meet the minimum qualifications for compliance with applicable laws, as outlined in the BEAD NOFO. MBI will require prospective subgrantees to provide officer (CEO/CFO) or senior executive certification that the subgrantee is capable of carrying out funded activities competently and in compliance with all applicable federal, state, territorial, and local laws. Applicants should also provide up to three (3) similar projects in terms of project size and complexity performed in the past three (3) years highlighting the approach taken and results accomplished.

- b. Detail how the Eligible Entity will require prospective subgrantees to submit a certification that have provided a voice, broadband, and/or electric transmission or distribution service for at least two (2) consecutive years prior to the date of its application submission or that it is a wholly owned subsidiary of such an entity, attests to and specify the number of years the prospective subgrantee or its parent company has been operating.

An applicant that has provided a voice, broadband, and/or electric transmission or distribution service for at least the two (2) consecutive years prior to the date of its application submission or that it is a wholly owned subsidiary of such an entity, must attest to these facts and specifies the number of years the applicant or its parent company has been operating.

- c. Detail how the Eligible Entity will require prospective subgrantees that have provided a voice and/or broadband service, to certify that it has timely filed Commission Form 477s and the Broadband DATA Act submission, if applicable, as required during this time period, and otherwise has complied with the Commission's rules and regulations.

MBI will require a certificate from prospective subgrantees that have provided a voice and/or broadband service, certifying that it has timely filed Commission Form 477s and the Broadband DATA Act submission, if applicable, as required during this time period, and otherwise has complied with the Commission's rules and regulations.

- d. Detail how the Eligible Entity will require prospective subgrantees that have operated only an electric transmission or distribution service, to submit qualified operating or financial reports, that it has filed with the relevant financial institution for the relevant time period along with a certification that the submission is a true and accurate copy of the reports that were provided to the relevant financial institution.

If the applicant has operated only an electric transmission or distribution service, a submittal of qualified operating or financial reports that it has filed with the relevant financial institution for the relevant time period is required along with a certification that the submission is a true and accurate copy of the reports that were provided to the relevant financial institution.

- e. In reference to new entrants to the broadband market, detail how the Eligible Entity will require prospective subgrantees to provide evidence sufficient to demonstrate that the newly formed entity has obtained, through internal or external resources, sufficient operational capabilities.

Applicants that are new entrants to the broadband market, must provide evidence sufficient to demonstrate that the newly formed entity has obtained, through internal or external resources, sufficient operational capabilities. Such evidence may include resumes from key personnel, project descriptions and narratives from contractors, subcontractors, or other partners with relevant operational experience, or other comparable evidence.

Applications that fail to meet the minimum qualifications for compliance with applicable laws as outlined on pages 74 - 75 of the BEAD NOFO will not be considered to receive BEAD funding.

2.4.16 Describe how the Eligible Entity will ensure that any prospective subgrantee deploying network facilities meets the minimum qualifications for providing information on ownership as outlined on page 75 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

- a. Detail how the Eligible Entity will require prospective subgrantees to provide ownership information consistent with the requirements set forth in 47 C.F.R. § 1.2112(a)(1)-(7).

MBI will ensure that prospective applicants seeking to deploy network facilities are thoroughly vetted and meet the minimum qualifications for providing information on ownership as outlined in the BEAD NOFO and consistent with the requirements set forth in 47 C.F.R. § 1.2112(a)(1)-(7).

The Code of Federal Regulations regarding ownership information requires the following:

1. List the real party or parties in interest in the prospective applicants or application, including a complete disclosure of the identity and relationship of those persons or entities directly or indirectly owning or controlling (or both) the prospective applicant
2. List the name, address, and citizenship of any party holding 10% or more of stock in the prospective applicant, whether voting or nonvoting, common, or preferred, including the specific amount of the interest or percentage held
3. List, in the case of a limited partnership, the name, address and citizenship of each limited partner whose interest in the prospective applicant is 10 percent or greater (as calculated according to the percentage of equity paid in or the percentage of distribution of profits and losses)
4. List, in the case of a general partnership, the name, address and citizenship of each partner, and the share or interest participation in the partnership
5. List, in the case of a limited liability company, the name, address, and citizenship of each of its members whose interest in the prospective applicant is 10 percent or greater
6. List all parties holding indirect ownership interests in the prospective applicant as determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain, that equals 10 percent or more of the prospective applicant, except that if the ownership percentage for an interest in any link in the chain exceeds 50 percent or represents actual control, it shall be treated and reported as if it were a 100 percent interest
7. List any FCC-regulated entity or prospective applicant for an FCC license, in which the prospective applicant or any of the parties identified in paragraphs:
 - a. (a)(1) through (a)(5) of this section, owns 10 percent or more of stock, whether voting or nonvoting, common, or preferred. This list must include a description of each such entity's principal business and a description of each such entity's relationship to the prospective applicant (e.g., Company A owns 10 percent of Company B (the prospective applicant) and 10 percent of Company C, then Companies A and C must be listed on Company B's application, where C is an FCC licensee and/or license prospective applicant)
 - b. Designated entity status. In addition to the information required under paragraph (a) of this section, each prospective applicant claiming eligibility for small business provisions, or a rural service provider bidding credit shall disclose the following:
 - c. On its application to participate in competitive bidding (i.e., short-form application (see 47 CFR 1.2105)):
 - a) List the names, addresses and citizenship of all officers, directors, affiliates, and other controlling interests of the prospective applicant, as described in § 1.2110, and, if a consortium of small businesses or consortium of very small businesses, the members of the conglomerate organization

- b) List any FCC-regulated entity or prospective applicant for an FCC license, in which any controlling interest of the prospective applicant owns a 10% or greater interest or a total of 10% or more of any class of stock, warrants, options or debt securities. This list must include a description of each such entity's principal business and a description of each such entity's relationship to the prospective applicant
- c) List all parties with which the prospective applicant has entered into agreements or arrangements for the use of any of the spectrum capacity of any of the prospective applicant's spectrum
- d) List separately and in the aggregate the gross revenues, computed in accordance with §1.2110, for each of the following:
 - e) The prospective applicant, its affiliates, its controlling interests, and the affiliates of its controlling interests; and if a consortium of small businesses, the members comprising the consortium
 - f) If claiming eligibility for a rural service provider bidding credit, provide all information to demonstrate that the prospective applicant meets the criteria for such credit as set forth in §1.2110(f)(4)
 - g) If applying as a consortium of designated entities, provide the information in paragraphs (b)(1)(i) through (v) of this section separately for each member of the consortium
- d. As an exhibit to its application for a license, authorization, assignment, or transfer of control:
 - a) List the names, addresses, and citizenship of all officers, directors, and other controlling interests of the prospective subgrantee, as described in §1.2110
 - b) List any FCC-regulated entity or prospective applicant for an FCC license, in which any controlling interest of the prospective applicant owns a 10 percent or greater interest or a total of 10 percent or more of any class of stock, warrants, options or debt securities. This list must include a description of each such entity's principal business and a description of each such entity's relationship to the prospective applicant
 - c) List and summarize all agreements or instruments (with appropriate references to specific provisions in the text of such agreements and instruments) that support the prospective applicant's eligibility as a small business under the applicable designated entity provisions, including the establishment of de facto or de jure control. Such agreements and instruments include articles of incorporation and by-laws, partnership agreements, shareholder agreements, voting or other trust agreements, management agreements, franchise agreements, spectrum leasing arrangements, spectrum resale (including wholesale) arrangements, and any other relevant agreements (including initial applications), oral or written
 - d) List and summarize any investor protection agreements, including rights of first refusal, supermajority clauses, options, veto rights and rights to hire and fire employees and to appoint members to boards of directors or management committees
 - e) List separately and in the aggregate the gross revenues, computed in accordance with §1.2110, for each of the following: the prospective applicant, its affiliates, its controlling interests, and affiliates of its controlling interests; and if a consortium of small businesses, the members comprising the consortium
 - f) List and summarize, if seeking the exemption for rural telephone cooperatives pursuant to §1.2110, all documentation to establish eligibility pursuant to the factors listed under §1.2110(b)(4)(iii)(A)
 - g) List and summarize any agreements in which the prospective applicant has entered into arrangements for the use of any of the spectrum capacity of the license that is the subject of the application
 - h) If claiming eligibility for a rural service provider bidding credit, provide all information to demonstrate that the prospective subgrantee meets the criteria for such credit as set forth in §1.2110(f)(4)

2.4.5.17 Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for providing information on other public funding as outlined on pages 75 – 76 of the BEAD

NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

- a. Detail how it will require prospective subgrantees to disclose for itself and for its affiliates, any application the subgrantee or its affiliates have submitted or plan to submit, and every broadband deployment project that the subgrantee or its affiliates are undertaking or have committed to undertake at the time of the application using public funds.

MBI is committed to ensuring that applicants who are seeking to deploy network facilities are thoroughly vetted and meet the minimum qualifications for providing information on other public funding as outlined in the BEAD NOFO.

MBI will require each applicant to disclose, for itself and for its affiliates any application the applicant or its affiliates have submitted or plan to submit, and every broadband deployment project that the applicant or its affiliates are undertaking or have committed to undertake at the time of the application using public funds, including but not limited to funds provided under:

- Families First Coronavirus Response Act (Public Law 116- 127; 134 Stat. 178)
 - CARES Act (Public Law 116-136; 134 Stat. 281)
 - Consolidated Appropriations Act, 2021 (Public Law 116-260; 134 Stat. 1182)
 - American Rescue Plan of 2021 (Public Law 117-2; 135 Stat. 4)
 - Federal Universal Service Fund high-cost program (e.g., RDOF, CAF)
 - Any MBI or local universal service or broadband deployment funding program
- b. At a minimum, the Eligible Entity shall require the disclosure, for each broadband deployment project, of: (a) the speed and latency of the broadband service to be provided (as measured and/or reported under the applicable rules), (b) the geographic area to be covered, (c) the number of unserved and underserved locations committed to serve (or, if the commitment is to serve a percentage of locations within the specified geographic area, the relevant percentage), (d) the amount of public funding to be used, (e) the cost of service to the consumer, and (f) the matching commitment, if any, provided by the subgrantee or its affiliates.

In grant applications, prospective subgrantees will be required to provide the details listed below for each broadband deployment project:

- The speed and typical latency of the broadband service to be provided (as measured and/or reported under the applicable rules)
- The geographic area to be covered
- The number of unserved and underserved locations committed to serve (or, if the commitment is to serve a percentage of locations within the specified geographic area, the relevant percentage)
- The amount of public funding to be used
- The cost of service to the consumer
- The matching commitment, if any, provided by the applicants or its affiliates

8. Non-deployment Subgrantee Selection (Requirement 9)

2.5.1 Describe a fair, open, and competitive subgrantee selection process for eligible non-deployment activities. Responses must include the objective means, or process by which objective means will be developed, for selecting subgrantees for eligible non-deployment activities. If the Eligible Entity does not intend to subgrant for non-deployment activities, indicate such.

The vision for broadband and digital equity for the Healey-Driscoll Administration in the coming years is that:

Figure 7: Massachusetts vision for broadband and digital equity

Availability	Adoption	Quality of Service
Every location has high-speed internet available .	Every resident can utilize and afford the internet.	Every location has reliable service.

Through the CPF funded Gap Networks Program and additional BEAD deployment subgrants as needed, the Commonwealth will soon achieve the longstanding goal of universal broadband availability. Therefore, MBI has begun focusing on additional BEAD planning for non-deployment uses of BEAD funds building its State Digital Equity Plan (SDEP) around fulfilling the following Unified Vision:

Every resident in Massachusetts has high-speed, high-quality internet availability and can confidently adopt and use the internet regardless of who they are or where they live. This universal connectivity will ensure that everyone has the support they need to enjoy full personal, civic, and economic digital participation throughout their lives with safety and security.

Given MBI's rich history of supporting broadband access and digital equity initiatives for every Massachusetts resident, MBI intends to use non-deployment BEAD funds to support deeper investment into already existing digital equity programs while also developing new, complementary programs as a part of its digital equity plan. This approach will make the most efficient use of federal funds while advancing progress toward the Commonwealth realizing MBI's Unified Vision.

For each of the Healey-Driscoll Administration's 3 broadband pillars—availability, adoption, and quality of service—MBI will deploy one or more of 3 implementation strategies. The goal across all categories is for activities to be scalable across the state if they are proven to be effective.

1. **Build on Existing Programs:** MBI will build on its existing programs by extending their duration and increasing their funding to make them reach a larger scale. This effort builds on MBI and its partners' track record of addressing digital equity barriers in the state.
2. **Develop New Programs:** MBI will develop and implement new strategies—in collaboration with organizations and communities throughout the state—that focus on Underrepresented Communities, regions, or Measurable Objectives that have received less support to date or that face the largest barriers to digital equity. MBI will develop new partnerships, programs, and funding streams to address these gaps.
3. **Create Foundations for Success:** MBI will establish initiatives that build the foundations for success in Massachusetts' digital equity ecosystem. The approach here will have 2 components: ensuring that there is a robust ecosystem of digital equity partners with capacity to collaborate in MBI activities, and establishing policies, data systems, and other resources to support SDEP's activities in the long term.

The 3 categories of action are designed to be flexible in how Massachusetts will support digital equity throughout the state ecosystem.

In particular, MBI plans to channel any BEAD funding over and above what is needed for broadband **availability** into **adoption** and **quality of service** priorities:

Figure 8: Broadband Digital Equity Use of Funds

Availability	Adoption	Quality of Service
Every location has high-speed internet available .	Every resident can utilize and afford the internet.	Every location has reliable service.
BEAD Planning	Digital Equity Planning	Affordable Housing Retrofit Program
Gap Networks Program	Digital Equity Partnerships Program	Front Door Program (Digital Navigators, Escalation Path)
Final Gap & CAI Program	Municipal DE Planning and Implementation Program	
	New Digital Equity Programs	

Subgrantee application and selection will be managed through a fair, equitable, and transparent process as outlined in the State’s Digital Equity Plan.

2.5.2 Describe the Eligible Entity’s plan for the following:

- a. How the Eligible Entity will employ preferences in selecting the type of non-deployment initiatives it intends to support using BEAD Program funds;

MBI’s strategies and non-deployment initiatives align with constituent feedback gleaned through statewide listening sessions, surveys, and citizen feedback from the Commonwealth’s Internet for All planning process. These engagement outcomes have been captured in the State’s Digital Equity Plan which establishes preferences and priorities for non-deployment BEAD investments.

- b. How the non-deployment initiatives will address the needs of residents within the jurisdiction;

In the course of stakeholder outreach and subsequent research prepared for the State Digital Equity Plan, MBI gained many insights about the factors that prevent some Massachusetts residents from thriving online. These include affordability of internet service, lack of device access in the home, and lack of digital skills. Most residents have home internet connections (93%), have sufficient devices (85%), and use the internet for online activities regularly (90%), but the flip sides of these percentages comprise substantially digitally disadvantaged populations. Further, demographic review consistently reveals more digital disadvantage among low-income, racial minority, and other historically under-represented populations.

The State Digital Equity Plan confronts these historical barriers head-on and organizes the state’s plan around the 3 pillars of the state broadband vision: availability, adoption, and quality of service. Non-deployment activities as proposed in the State Digital Equity Plan will be funded in part with non-deployment BEAD dollars to address the needs of the digitally disadvantaged in Massachusetts.

- c. The ways in which engagement with localities and stakeholders will inform the selection of eligible non-deployment activities;

During the months of September and October 2023, MBI conducted a series of 8 regional listening sessions and 27 focus groups designed to solicit public feedback in establishing the Commonwealth’s priorities for the best use of unprecedented federal broadband investments. Through this Internet for All outreach initiative, open dialogue with the general public and special focus groups targeting underrepresented communities provided a forum to share experiences, ideas, and vision for a connected Massachusetts and how to best ensure the full participation by everyone in our digital society.

These insights have been used to inform non-deployment subgrant funding priorities as outlined in the State Digital Equity Plan.

Figure 9: Statewide Listening Tour Events



- d. How the Eligible Entity will determine whether other uses of the funds might be more effective in achieving the BEAD Program’s equity, access, and deployment goals.

While the BEAD program will be administered by MBI, a core component to the Commonwealth’s broadband strategy includes collaborative engagement with diverse stakeholder groups.

As a part of the BEAD planning process, MBI convened a statewide team of leaders who offered specific topic area expertise and represented underrepresented populations as defined by federal funding guidelines and MBI’s programs. Known as the State Broadband and Digital Equity Working Group, this team offered invaluable feedback, supported local engagement, and helped inform BEAD planning priorities throughout the stakeholder engagement process. MBI is grateful for the service of these individuals and will continue organizing and supporting working groups like this throughout the BEAD program to provide ongoing perspective and feedback to MBI for the best and most effective uses of federal broadband dollars.

2.5.3 Describe the Eligible Entity’s plan to ensure coverage to all unserved and underserved locations prior to allocating funding to non-deployment activities.

As described in Section 2.4 Requirement 8 above, years of planning, leadership and prioritizing broadband expansion have placed Massachusetts in the unique position of having relatively few unserved and underserved BSLs. Based on the cost estimation tools provided by the NTIA, the Commonwealth has the opportunity to achieve universal broadband availability through the Gap Networks Program funded by U.S. Treasury’s Capital Projects Funds. Subject to the results of the Challenge Process described in Volume 1, the necessity of investment of BEAD dollars may not be required or limited for traditional unserved/underserved network deployment projects. Regardless, **universal access remains MBI’s top priority in the BEAD program.** For this reason, MBI anticipates delaying the start of non-deployment subgrant programs until enforceable commitments are in place from CPF. At that time, MBI will assess what, if any,

BEAD funds may be necessary to ensure universal coverage and then begin making investments with the remainder of BEAD funds into those funding priorities defined in the State's Digital Equity Plan.

2.5.4 Describe how the Eligible Entity will ensure prospective subgrantees meet the general qualifications outlined on pages 71 – 72 of the NOFO.

As indicated above, MBI has extensive experience operating various non-deployment grant programs. **MBI will employ similar application, screening, and due diligence as a part of any non-deployment subgrant program created or expanded consistent with the State Digital Equity Plan.** MBI will assess organizational capacity of all applicants as a part of the application review process to assure reasonable financial, managerial, technical, and operational capacity to operate the proposed program as well as missional alignment with the 3 pillars of MBI's broadband strategy. Further, MBI will include certain certifications and covenants of compliance in all subgrant agreements.

9. Eligible Entity Implementation Activities (Requirement 10)

2.6.1 Describe any initiatives the Eligible Entity proposes to implement as the recipient without making a subgrant, and why it proposes that approach.

MBI intends to utilize non-deployment funds to support existing state operated non-deployment activities and programmatic support without making a subgrant. The funding allocated to Implementation Activities is dependent on the funds remaining after deployment activities to serve all unserved and underserved areas are finalized.

9.1 Funding Existing and New State Digital Equity Programs

MBI plans to allocate a portion of the remaining funding for non-deployment uses to the Front Door Program. The Front Door Program will support Digital Navigators that will provide Massachusetts residents guidance on connectivity, devices, and digital skills at the community and grassroots level to expand digital inclusion efforts across the Commonwealth. Digital Navigators are anticipated to provide MBI with visibility on emerging and recurring service issues and the ability to track trends with providers, locations, and regions.

Any remaining funding for non-deployment activities after the identified programs are funded will go toward implementing initiatives described in the Massachusetts Digital Equity Plan, some of which may be implemented by the Commonwealth without making a subgrant.

9.2 Funding MBI Programmatic Support Activities

MBI will also require funding for administrative and programmatic activities related to the BEAD program without making a subgrant. The funds allocated to administrative and programmatic activities will ensure the timeline, requirements, and compliance for the BEAD program are met. Administrative and programmatic activities include, but are not limited to the following items:

- Development of the challenge process portal
- Implementation of the challenge and subgrantee selection process
- Grant management portal
- Technical assistance to subgrantees
- Pre-marketing assistance
- Pre qualifications process
- Running the grant program
- Continued stakeholder engagement efforts
- Setting up manuals and SOP for programs
- Performance dashboards and analysis tools
- Field/desktop verification of work completed by subgrantee

10. Labor Standards and Protections (Requirement 11)

2.7.1 Describe the specific information that prospective subgrantees will be required to provide in their applications and how the Eligible Entity will weigh that information in its competitive subgrantee selection processes. Information from prospective subgrantees must demonstrate the following and must include information about contractors and subcontractors:

MBI is steadfast in our commitment to meeting labor standards and protecting workers. Subgrantees that share our commitment to transparency, quality, and labor compliance, in alignment with our values and objectives, will be scored more favorably during the subgrantee selection process.

- a. Prospective subgrantees' record of past compliance with federal labor and employment laws, which:
 - i. Must address information on these entities' compliance with federal labor and employment laws on broadband deployment projects in the last three years;

We will institute a rigorous review process focusing on the previous three years to provide a holistic perspective. By anchoring our evaluation within this recent timeframe, we aim to secure compliant partners with the latest requirements and best practices in the sector.

- ii. Should include a certification from an Officer/Director-level employee (or equivalent) of the prospective subgrantee evidencing consistent past compliance with federal labor and employment laws by the subgrantee, as well as all contractors and subcontractors; and

MBI will require a certification from a senior Officer/Director-level employee from the prospective subgrantee's organization, as well as all contractors and subcontractors.

- iii. Should include written confirmation that the prospective subgrantee discloses any instances in which it or its contractors or subcontractors have been found to have violated laws such as the Occupational Safety and Health Act, the Fair Labor Standards Act, or any other applicable labor and employment laws for the preceding three years.

MBI will require prospective subgrantees to disclose any past violations. Specifically, they will be required to provide written confirmation of any instances in the preceding three years where they, or their affiliated contractors or subcontractors, violated regulations covered under the Occupational Safety and Health Act, the Fair Labor Standards Act, or any other applicable labor and employment laws.

- b. Prospective subgrantees' plans for ensuring compliance with federal labor and employment laws, which must address the following:

MBI will require prospective subgrantees and their contractors and subcontractors to submit a plan on how they intend to monitor and ensure compliance with labor and employment laws.

- i. How the prospective subgrantee will ensure compliance in its own labor and employment practices, as well as that of its contractors and subcontractors, including:

- 1. Information on applicable wage scales and wage and overtime payment practices for each class of employees expected to be involved directly in the physical construction of the broadband network; and

We will require the prospective subgrantee to provide information on their labor and employment practices related to wages and overtime payments.

- 2. How the subgrantee will ensure the implementation of workplace safety committees that are authorized to raise health and safety concerns in connection with the delivery of deployment projects.

MBI prioritizes ongoing workplace safety and will require subgrantees to develop workplace safety plans, including establishing safety committees to voice concerns and cultivate a culture where safety is a top priority for all workers. Potential subgrantees that already have workplace safety plans will submit them to MBI during the subgrantee

selection process. MBI will require applicants to provide a certification stating the applicant will permit workers to create worker-led health and safety committees that management will meet with upon reasonable request.

2.7.2 Describe in detail whether the Eligible Entity will make mandatory for all subgrantees (including contractors and subcontractors) any of the following and, if required, how it will incorporate them into binding legal commitments in the subgrants it makes:

- a. Using a directly employed workforce, as opposed to a subcontracted workforce;
- b. Paying prevailing wages and benefits to workers, including compliance with Davis Bacon and Service Contract Act requirements, where applicable, and collecting the required certified payrolls;
- c. Using project labor agreements (i.e., pre-hire collective bargaining agreements between unions and contractors that govern terms and conditions of employment for all workers on a construction project);
- d. Use of local hire provisions;
- e. Commitments to union neutrality;
- f. Use of labor peace agreements;
- g. Use of an appropriately skilled workforce (e.g., through Registered Apprenticeships or other joint labor-management training programs that serve all workers, particularly those underrepresented or historically excluded);
- h. Use of an appropriately credentialed workforce (i.e., satisfying requirements for appropriate and relevant pre-existing occupational training, certification, and licensure); and
- i. Taking steps to prevent the misclassification of workers.

MBI's application process will identify subgrantees who are following federal labor and employment laws and will be in alignment with the BEAD NOFO guidelines. These items outlined below (sections a through i) will serve as criteria during the selection process. To guarantee that subgrantees uphold robust labor standards and safeguards for project workers, MBI will require the submission of compliance details by each applicant.

MBI will require that potential subgrantees submit a plan outlining their approach to maintaining compliance within and adherence to applicable laws governing employee wages and benefits, including Davis-Bacon and Service Contract Act requirements. The plan shall also address collecting and compiling the necessary certified payrolls, when applicable.

MBI will require potential applicants to describe their approach to ensuring the employment of a skilled workforce, including those effort that target groups that have been historically underrepresented.

MBI will require potential subgrantees to describe their approach to ensuring that their workforce has the appropriate credentials and certifications, as applicable, to technical duties and responsibilities.

MBI will require applicants to describe their approach to prevent workers' misclassification as outlined by the BEAD NOFO.

MBI acknowledges the labor standards and worker protections standards in the BEAD NOFO and expects potential subgrantees to include them in their applications. These standards will serve as criteria during the evaluation process, with clear instructions provided on how to address each item and how they factor into the scoring and evaluation process.

Through these measures, MBI's aim is to ensure that all potential subgrantees are well-informed and adequately equipped to align with the desired standards, while promoting a skilled workforce.

11. Workforce Readiness (Requirement 12)

2.8.1 Describe how the Eligible Entity and their subgrantees will advance equitable workforce development and job quality objectives to develop a skilled, diverse workforce. At a minimum, this response should clearly provide each of the following, as outlined on page 59 of the BEAD NOFO:

- a. A description of how the Eligible Entity will ensure that subgrantees support the development and use of a highly skilled workforce capable of carrying out work in a manner that is safe and effective;

In alignment with the requirements set by the NOFO, MBI is committed to maintaining the highest standards in labor practices and will be committed to extending this requirement to its subgrantees and their contractors. This will entail strict adherence to federal labor and employment laws, particularly those associated with equal employment opportunities, wage guidelines, and occupational safety. To support the workforce needs generated from the BEAD deployment, MBI recognizes the importance of a highly skilled workforce and the valuable roles of existing state and local workforce and education agencies, unions, community colleges, vocational techs, and community-based organizations. Our priorities emphasize not just technical training but also inclusivity, ensuring that historically underserved communities have equal access to training programs, apprenticeships, and job fairs. Understanding the challenges many face, MBI is also evaluating approaches to expand access to supportive services, such as transportation assistance and childcare, to bolster participation. Additionally, safety will remain at the forefront of our priorities. Effective safety training is critical, including promoting a consistently safe working environment.

MBI has assessed our current workforce's strengths and areas for improvement. We will leverage data from trusted sources, such as O*NET, to analyze technical skills across various occupations required during each phase of broadband deployment. The data will provide insights into the technical competencies vital for the effective rollout of BEAD. The information in Figure 11 is extracted from O*NET and details the occupational traits and worker prerequisites essential for broadband deployment across the four phases.

Figure 10: Occupational Traits and Worker Prerequisites Essential for Broadband Deployment

Job Title	Category	Education	Work Experience	On-The-Job Training
Architectural and engineering managers	Development	Bachelor's degree	5 years or more	None
Computer and information systems managers	Administration	Bachelor's degree	5 years or more	None
Computer network architects	Development	Bachelor's degree	5 years or more	None
Construction and building inspectors	Construction	High school diploma or equivalent	5 years or more	Moderate-term on-the-job training
Administrative services managers	Administration	Bachelor's degree	Less than 5 years	None
First-line supervisors of mechanics, installers, and repairers	Installation	High school diploma or equivalent	Less than 5 years	None
Personal service managers, all other	Administration	High school diploma or equivalent	Less than 5 years	None
Audiovisual equipment installers and repairers	Installation	Postsecondary nondegree award	None	Short-term on-the-job training
Business operations specialists, all other	Administration	Bachelor's degree	None	None
Civil engineering technologists and technicians	Development	Associate's degree	None	None
Civil engineers	Development	Bachelor's degree	None	None
Commercial and industrial designers	Development	Bachelor's degree	None	None
Computer and information research scientists	Development	Master's degree	None	None
Computer hardware engineers	Development	Bachelor's degree	None	None
Computer network support specialists	Administration	Associate's degree	None	Moderate-term on-the-job training
Computer programmers	Development	Bachelor's degree	None	None
Computer systems analysts	Administration	Bachelor's degree	None	None
Construction laborers	Construction	No formal educational credential	None	Short-term on-the-job training
Construction managers	Construction	Bachelor's degree	None	Moderate-term on-the-job training
Customer service representatives	Administration	High school diploma or equivalent	None	Short-term on-the-job training
Drafters, all other	Development	Associate's degree	None	None
Electrical and electronic engineering technologists and technicians	Development	Associate's degree	None	None
Electrical and electronics repairers, commercial and industrial equipment	Installation	Postsecondary nondegree award	None	Long-term on-the-job training
Electrical engineers	Development	Bachelor's degree	None	None
Electrical power-line installers and repairers	Installation	High school diploma or equivalent	None	Long-term on-the-job training
Electrical, electronic, and electromechanical assemblers, except coil winders, tapers, and finishers	Installation	High school diploma or equivalent	None	Moderate-term on-the-job training
Electricians	Installation	High school diploma or equivalent	None	Apprenticeship
Electro-mechanical and mechatronics technologists and technicians	Development	Associate's degree	None	None
Engineering technologists and technicians, except drafters, all other	Development	Associate's degree	None	None
Health and safety engineers, except mining safety engineers and inspectors	Administration	Bachelor's degree	None	None
Heavy and tractor-trailer truck drivers	Construction	Postsecondary nondegree award	None	Short-term on-the-job training
Industrial truck and tractor operators	Construction	No formal educational credential	None	Short-term on-the-job training
Laborers and freight, stock, and material movers, hand	Construction	No formal educational credential	None	Short-term on-the-job training
Light truck drivers	Construction	High school diploma or equivalent	None	Short-term on-the-job training
Mechanical drafters	Development	Associate's degree	None	None
Miscellaneous assemblers and fabricators	Construction	High school diploma or equivalent	None	Moderate-term on-the-job training
Network and computer systems administrators	Administration	Bachelor's degree	None	None
Operating engineers and other construction equipment operators	Construction	High school diploma or equivalent	None	Moderate-term on-the-job training
Project management specialists	Administration	Bachelor's degree	None	None
Radio, cellular, and tower equipment installers and repairers	Installation	Associate's degree	None	Moderate-term on-the-job training
Sales representatives of services, except advertising, insurance, financial services, and travel	Administration	High school diploma or equivalent	None	Moderate-term on-the-job training
Software developers	Development	Bachelor's degree	None	None
Surveyors	Development	Bachelor's degree	None	Internship/residency
Telecommunications equipment installers and repairers, except line installers	Installation	Postsecondary nondegree award	None	Moderate-term on-the-job training
Telecommunications line installers and repairers	Installation	High school diploma or equivalent	None	Long-term on-the-job training

Figure 11 provides valuable data for MBI to consider when crafting workforce development strategies. The education requirements for workforce roles in broadband deployment vary widely, ranging from no formal education for some construction-related jobs to master's degrees for specific technical roles. The work experience requirements differ significantly, from less than five years for some administrative roles to 5 years or more for management and technical positions. The on-the-job training varies from short-term to long-term and includes apprenticeships and internships. Many technical roles, such as computer and information systems managers, computer network architects, and software developers, fall under the "Development" category. These roles generally require at least a bachelor's degree, emphasizing the need for a highly skilled technical workforce for broadband development. The "Construction" and "Installation" categories include positions like construction managers, electrical power-line installers and repairers, and telecommunications equipment installers and repairers. These roles often require hands-on training and on-the-job experience, making them vital for the physical deployment of broadband infrastructure. Administrative and managerial roles, including administrative services managers and project management specialists, typically require Bachelor's degrees but less extensive work experience. These roles play a crucial part in overseeing broadband projects, managing resources, and ensuring regulatory compliance. MBI, in partnership with its subgrantees, will be poised to advance equitable workforce development and job quality objectives. MBI understands the importance of enhancing the broadband workforce and developing a skilled and diverse workforce. Below are a list leading practices that we will continue to review and consider:

- **Workforce Assessments:** Review existing workforce studies and data to assess current gaps in the current landscape of skills, diversity, and inclusion within the workforce.
- **Review of Workforce Development Initiatives:** MBI may consult with state and local workforce development entities including unions, community colleges, and vocational schools to help to amplify the impact of equitable workforce development.

- **Cultivating Partnerships:** Cultivating partnerships with organizations that prioritize workforce diversity is vital. MBI will encourage its subgrantees to engage with these entities to support their training needs to help to prepare participants for the rigors of the industry.
- **Supportive Services:** Recognizing the barriers that impede equitable participation in workforce development, MBI will encourage subgrantees to provide supportive services to help to remove obstacles that disproportionately affect low-income and minority populations.
- **Quality Employment Standards:** To ensure job quality, during the application process, MBI will require subgrantees to certify their adherence to employment standards that prioritize fair wages, benefits, and safe working conditions. Subgrantees will be evaluated on their commitment to these standards, ensuring that workforce development is coupled with job quality.
- **Continuous Monitoring and Improvement:** MBI may require subgrantees to provide regular reporting on diversity metrics, wage standards, and safety records.

Through these focused efforts, MBI and its subgrantees are committed to not only meeting the technical and operational demands of broadband deployment but also doing so in a manner that advances the use of a highly skilled workforce capable of carrying out work in a safe manner, fosters inclusivity, and ensures that job quality is at the heart of workforce development.

- b. A description of how the Eligible Entity will develop and promote sector-based partnerships among employers, education and training providers, the public workforce system, unions and worker organizations, and community-based organizations that provide relevant training and wrap-around services to support workers to access and complete training (e.g., child care, transportation, mentorship), to attract, train, retain, or transition to meet local workforce needs and increase high-quality job opportunities;

MBI understands the importance of forging and fostering sector-based partnerships, which are foundational to developing a highly-skilled, robust workforce for the broadband industry. Recognizing the multifaceted nature of workforce development, MBI will continue to work within its network to synergize the strengths of employers, educational institutions, training providers, the public workforce system, unions, worker organizations, and community-based entities. Through this collaboration, MBI will be well-positioned to have visibility on the workforce pipeline and the availability and quality of broadband job opportunities across the Commonwealth.

Key areas for collaborative efforts and sector-based partnerships that harnesses the strengths our ecosystems and that stimulate an environment that is conducive to the addressing the nuanced needs of the workforce may include:

1. **Curriculum Alignment:** MBI will encourage industry, academic institutions and vocational training centers to identify any misalignment of educational offerings with the specific needs of the broadband sector and bring the voice of the industry to the curriculum development process.
2. **Practical Experience with Apprenticeships:** MBI will encourage subgrantees to utilize Registered and Pre-Apprenticeships that are pivotal in providing a framework for experiential learning. These apprenticeships, enhanced through the guidance of seasoned industry professionals, offer the dual benefit of imparting practical skills while fostering mentorship. This practical aspect of skill acquisition ensures that learning is directly linked to on-the-ground work situations, enhancing employability and job performance.
3. **Inclusivity in Apprenticeships:** Apprenticeship tracks should be accessible to and supportive of diverse populations, including minorities, women, and individuals from historically underserved communities. The focus on inclusivity ensures that the benefits of training and workforce development reach all sectors of the community, driving towards equity in employment and empowerment through skill development.
4. MBI will continue to review the information on the state apprenticeship office page, found at <https://www.mass.gov/info-details/apprenticeship-data> for inclusion of broadband-related apprenticeships.
5. Regarding work-based learning, MassHire Workforce Boards leverage Connecting Activities to create relationships between educational institutions and businesses. These collaborations

facilitate structured work-based learning opportunities for students, contributing to their academic and vocational competencies. More details about these initiatives can be found at https://massconnecting.org/default.asp?entity_id=150. MBI will encourage subgrantees to take advances of these resources.

Workforce Development Collaboration

To significantly strengthen workforce capabilities, MBI will explore opportunities to collaborate with industry, education and training providers, the public workforce system, unions and worker organizations, and community-based organizations to keep a pulse on the evolving needs of the BEAD deployment. MBI will seek to stay abreast of both the immediate and long-term needs of the broadband workforce.

Providing Wrap-Around Services:

Understanding the potential barriers workers might face in accessing and completing training, MBI will explore opportunities to partner with community-based organizations and worker organizations to provide supportive services. This includes:

1. **Child Care and Transportation:** Recognizing that financial constraints can be a primary obstacle, MBI will explore the feasibility of providing funding support. This initiative may involve providing funding to offset the costs associated with childcare and transportation, ensuring that financial limitations do not stand in the way of skill development and career progression.
 2. **Supportive Services:** MBI will gain a better understanding of the demand for supportive services needed, such as career counseling and coaching, financial guidance, job placement assistance, and more. With the support of state resources, these services can be tailored to more effectively meet the needs of a diverse workforce, thereby expanding the reach and impact of each program to aid more workers in transitioning into high-quality job roles within the industry.
- c. A description of how the Eligible Entity will plan to create equitable on-ramps into broadband-related jobs, maintain job quality for new and incumbent workers engaged in the sector; and continually engage with labor organizations and community-based organizations to maintain worker voice throughout the planning and implementation process;

MBI is acutely aware of the importance of establishing equitable on-ramps to open opportunities to pathways into broadband-related careers. MBI commits to a facilitative role, emphasizing continual engagement with labor organizations and community-based groups to maintain a strong worker voice throughout our planning and implementation processes. Our approach is deeply rooted in leading practices, informed by evidence-based data and research, ensuring that every strategy we coordinate is responsive and aligned with workers' real-time needs and concerns. To accomplish this, our approach involves strategic partnerships, a commitment to job quality, and consistent engagement with essential community and labor organizations.

Engaging with Key Stakeholders:

MBI will explore opportunities to collaborate with various stakeholders, including state, territorial, and local workforce boards, training partners, labor, and community organizations. We aim to leverage their unique insights, reach, and resources to support effective and inclusive pathways into broadband careers.

Promoting Leading Practices and Research-Driven Strategies:

MBI will seek to identify and promote leading practices that have successfully created inclusive, sustainable career pathways in the broadband sector.

MBI's efforts to facilitate an inclusive workforce strategy reflects a dedication to preserving a consistent and respected worker voice. Our collaborative approach, reinforced by evidence and research, ensures that the broadband sector benefits from a workforce strategy that is equitable, informed, and reflective of the collective aspirations of workers and the communities where they live and work.

- d. A description of how the Eligible Entity will ensure that the job opportunities created by the BEAD Program and other broadband funding programs are available to a diverse pool of workers.

MBI's strategy is dedicated to supporting diversity within the broadband industry, with a particular focus on addressing the historical underrepresentation of certain groups in the workforce, including communities traditionally marginalized in the broadband and IT sectors, including women, people of color, and other underrepresented groups.

MBI will seek opportunities to amplify the need for apprenticeship opportunities tailored to underrepresented communities to achieve this vision. MBI recognizes the importance of prioritizing diversity and facilitating the inclusion of underrepresented populations in the workforce. In pursuit of these goals, MBI will require all subgrantees to identify their approach to hiring and recruiting those from historically underrepresented backgrounds.

2.8.2 Describe the information that will be required of prospective subgrantees to demonstrate a plan for ensuring that the project workforce will be an appropriately skilled and credentialed workforce. These plans should include the following:

- a. The ways in which the prospective subgrantee will ensure the use of an appropriately skilled workforce, e.g., through Registered Apprenticeships or other joint labor management training programs that serve all workers;
- b. The steps that will be taken to ensure that all members of the project workforce will have appropriate credentials, e.g., appropriate and relevant pre-existing occupational training, certification, and licensure;
- c. Whether the workforce is unionized;
- d. Whether the workforce will be directly employed or whether work will be performed by a subcontracted workforce; and
- e. The entities that the proposed subgrantee plans to contract and subcontract with in carrying out the proposed work.

If the project workforce or any subgrantee's, contractor's, or subcontractor's workforce is not unionized, the subgrantee must also provide with respect to the non-union workforce:

- a. The job titles and size of the workforce (FTE positions, including for contractors and subcontractors) required to carry out the proposed work over the course of the project and the entity that will employ each portion of the workforce;
- b. For each job title required to carry out the proposed work (including contractors and subcontractors), a description of:
 - i. Safety training, certification, and/or licensure requirements (e.g., OSHA 10, OSHA 30, confined space, traffic control, or other training as relevant depending on title and work), including whether there is a robust in-house training program with established requirements tied to certifications, titles; and
 - ii. Information on the professional certifications and/or in-house training in place to ensure that deployment is done at a high standard.

The effectiveness of broadband deployment relies heavily on the abilities and expertise of the workforce involved. With this understanding, MBI will put in place requirements that must be met by all potential subgrantees, confirming that each project is backed by a workforce equipped with the necessary skills and qualifications. These requirements will be robust, enhancing the dependability, productivity, and safety of all undertakings funded through BEAD.

Skill & Credential Assurance:

a. Ensuring an Appropriately Skilled Workforce:

Registered Apprenticeships: MBI will encourage subgrantees to participate in Registered Apprenticeships. Subgrantees may leverage Registered Apprenticeships in partnership with community colleges, labor unions, and industry stakeholders to provide hands-on training for key roles.

Joint Labor-Management Training Programs: MBI will be supportive of a joint program but will not require these programs.

b. Ensuring Appropriate Credentials:

Document Verification: Subgrantees will be required to submit documentation verifying the credentials of their workforce.

c. Unionization Status: Subgrantees will be required to disclose the union status of their workforce during the application phase. This information will contribute to an understanding of the potential for collective bargaining and other labor dynamics within the project.

d. Employment Nature: Subgrantees will be required to declare if the workforce will be directly employed or subcontracted or a combination of both approaches.

- e. **Contractual Transparency:** It is paramount for MBI to understand all players involved in a project. Hence, subgrantees will be expected to provide detailed information about all entities they plan to contract or subcontract with during the proposed work.

Non-Union Workforce Specifications:

a. Job Titles & Workforce Size:

Subgrantees must provide a clear breakdown of job roles and the full-time equivalent (FTE) positions required for the project. This also includes roles within any contractor or subcontractor they employ. For example, if a subgrantee intends to hire ten broadband technicians and five network engineers, each role and the corresponding FTE must be specified.

b. Job Specifics:

i. Safety Training & Certification:

Safety and job quality are paramount for MBI throughout the BEAD deployment lifecycle. Subgrantees, alongside their affiliated contractors and subcontractors, will be required to provide details during the application process on how they plan to be engaged in a culture that prioritizes workforce safety and effectiveness. If any subgrantee's workforce is not unionized, the subgrantee must provide with respect to the non-union workforce a project workforce continuity plan and the steps taken and to be taken to ensure a safe and healthy workplace.

Subgrantees will also be asked to specify if they have a robust in-house training program. If so, they must provide details on how the program is linked to specific certifications and job titles.

ii. Professional Certifications & In-House Training:

Subgrantees must list the professional certifications held within their workforce and describe any internal training initiatives that augment quality standards and expertise in broadband deployment.

Details of in-house training programs designed to enhance quality and deployment standards should also be provided. This could include specific courses on emerging broadband technologies or quality assurance processes.

MBI remains committed to the excellence of each project, ensuring that a qualified, certified workforce operates within a secure and effective work environment. Through these requirements for subgrantees, MBI champions superior project delivery and occupational safety in the broadband arena.

12. Minority Business Enterprises (MBEs)/ Women's Business Enterprises (WBEs)/ Labor Surplus Firms Inclusion (Requirement 13)

2.9.1 Describe the process, strategy, and the data tracking method(s) the Eligible Entity will implement to ensure that minority businesses, women-owned business enterprises (WBEs), and labor surplus area firms are recruited, used, and retained when possible.

MBI acknowledges the vital need in developing opportunities for Minority Business Enterprises (MBEs), Women's Business Enterprises (WBEs), and Labor Surplus Firms to participate in the BEAD program deployment and non-deployment projects. Incorporating perspectives from MWBEs is crucial for diversity but also for gaining unique insights and broadening the program's economic impact. To ensure that MBEs, WBEs, and Labor Surplus Firms are recruited, utilized, and retained as much as possible, MBI will implement the strategies, processes, and data tracking methods outlined below while implementing the BEAD program.

Below, we outline the steps MBI will take to understand the skills necessary for the various phases of broadband deployment while supporting MWBE suppliers. It emphasizes the importance of proactive engagement, data collection and analysis, program development, and ongoing evaluation to ensure the alignment of workforce initiatives with the evolving needs of the broadband industry.

Phase 1: Research and Assessment

1. **Identify Target MWBE Employers:** Identify key industries and sectors where MWBE suppliers play a significant role in Massachusetts' broadband deployment. This involves analyzing existing data, reports, and initial surveys.
2. **Engage MWBE Stakeholders:** Collaborate closely with MWBE business associations, chambers of commerce, and advocacy groups to understand their unique skill requirements and challenges.
3. **Procurement Assessment:** Review procurement practices to understand the challenges MBEs and WBEs face in different phases of broadband deployment.

Phase 2: Outreach and Partnerships

1. **Promotion of Procurement Opportunities:** Identify opportunities to promote the availability of contract bidding opportunities to increase awareness of among certified diverse businesses, thereby creating mutually beneficial business relationships with minorities, women, disabled veterans, and others with disabilities.

Phase 3: Reporting and Documentation

1. **Documentation:** Maintain comprehensive records of program implementation, outcomes, and lessons learned.

By systematically following this action plan, MBI will be well-prepared to understand the skills required by businesses in Massachusetts at different phases of broadband deployment. This understanding will promote economic growth and inclusivity within the Commonwealth and ensure that workforce initiatives are finely tuned to support MWBE suppliers throughout the broadband deployment lifecycle.

MBI intends to leverage connections to existing programs, initiatives, and organizations within Massachusetts to increase awareness of opportunities provided through the BEAD program. Some of which include:

- **Supplier Diversity Office (SDO):** This office promotes diversity, equity, and inclusion in state contracting for businesses owned by minorities, women, veterans, service-disabled veterans, those with a disability, and LGBT individuals, as well as small Massachusetts businesses. The SDO's goals are to increase opportunities for certified businesses and Small Business Purchasing Program (SBPP) participants through annual state

agency spending benchmarks and include bid evaluation criteria within the state goods and services bid process.

- **Supplier Diversity Program (SDP):** This program encourages the award of state contracts in a way that strengthens and increases business opportunities for Minority Business Enterprises (MBEs), Women Business Enterprises (WBEs), Service-Disabled Veteran Business Enterprises (SDVOBEs), Veteran Business Enterprises (VBEs), Lesbian, Gay, Bisexual, and Transgender Business Enterprises (LGBTBEs); and Disability-Owned Business Enterprises (DOBEs).
- **Center for Woman and Enterprise:** This organization provides opportunities for women entrepreneurs and women in business to increase professional success, personal growth, and financial independence.
- **Small Business Strong:** A non-profit organization empowered to help women and minority owned small businesses by providing expedited, pro-bono resources ranging from access to capital to consulting, business restructuring, business growth, digital marketing and customer engagement plans.
- **Building for Growth (BFG):** A national, online, tuition-free executive education program that primarily helps BIPOC- and Women-Owned construction contractors build capacity and develop sustainable growth strategies that position their businesses to increase revenues and profits. The BFG program launched its inaugural cohort in 2022, which served 54 construction businesses from 19 states. 91% of the businesses were BIPOC-owned and 53% were woman-owned.
- **Disadvantaged Business Enterprise Program and Utilization of MBE and WBE Firms:** The Massachusetts Department of Environmental Protection (MassDEP) aims to inform municipalities, regional authorities, consultants, contractors, and sub-contractors about the Disadvantaged Business Enterprise (DBE) Program and the utilization of Minority-Owned Business Enterprises (MBE) and Women-Owned Business Enterprises (WBE) on Federally Assisted Projects, especially those financed through the State Revolving Fund (SRF) loan programs.

By following this action plan, MBI will be well-prepared to understand the skills required by businesses in Massachusetts at different phases of broadband deployment. A strategic and comprehensive approach to evaluating the skill landscape within the Commonwealth, with a special focus on Minority and Women-Owned Business Enterprises (MWBE) suppliers, is fundamental.

2.9.2 Certify that the Eligible Entity will take all necessary affirmative steps to ensure minority businesses, women's business enterprises, and labor surplus area firms are used when possible, including the following outlined on pages 88 – 89 of the BEAD NOFO:

- a. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- b. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- c. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
- d. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
- e. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and

Requiring subgrantees to take the affirmative steps listed above as it relates to subcontractors

MBI, as described in the detailed action plan above, MBI certifies that it will take all necessary affirmative steps provided in the BEAD NOFO and as described in 2 CRF 200 Part 321 to ensure MBE, WBE, and labor surplus area firms are used when possible. Below we describe the affirmative steps and how they will be addressed as part of the MBI action plan.

1. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
2. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
3. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;

4. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
5. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
6. Requiring subgrantees to take the affirmative steps listed above as it relates to subcontractors

13. Cost and Barrier Reduction (Requirement 14)

2.10.1 Identify steps that the Eligible Entity will take to reduce costs and barriers to deployment. Responses may include but not be limited to the following:

- a. Promoting the use of existing infrastructure;
- b. Promoting and adopting dig-once policies;
- c. Streamlining permitting processes;
- d. Streamlining cost-effective access to poles, conduits, easements; and
- e. Streamlining rights of way, including the imposition of reasonable access requirements.

Massachusetts expects to achieve the BEAD program's primary goal of providing universal broadband access at 100/20 speeds without major obstacles. The Commonwealth already has excellent broadband coverage across most areas, and there is ample funding available from multiple programs such as CPF, BEAD, RDOF, and CAF II to support the goal of universal broadband availability. However, while Massachusetts has made great strides in achieving universal broadband access, there are still challenges that must be addressed to ensure that everyone in the Commonwealth has access to high-quality broadband services. The remaining locations that are unserved and underserved will be the most difficult to reach and present the greatest challenge in terms of closing the broadband availability gap.

MBI will continue discussions with stakeholders and explore various pathways and measures to address barriers that impact the cost-effective and timely expansion of broadband infrastructure in the state. These efforts would aim to reduce the costs and obstacles associated with broadband deployment and support Massachusetts's efforts to achieve universal broadband access.

13.1 Promoting the use of existing infrastructure

MBI is exploring the opportunity to support the development of asset maps for infrastructure, similar to the map that has been developed for digital equity assets. The aim of this map would be to identify and provide the location of hard assets that would facilitate the ability of BEAD-funded projects to leverage existing infrastructure and bring high-speed internet to communities in the most efficient, cost-effective manner. Additionally, MBI encourages applicants to use existing infrastructure to lower to the overall cost and requested funding of deployment projects. The scoring criteria for Minimal BEAD Program Outlay incentivizes the reduced the cost of deployment, which among other factors, can be achieved by leveraging existing infrastructure where possible.

13.2 Promoting policies that facilitate access to critical enabling infrastructure

MBI recognizes the importance of appropriate access to utility poles, conduits, easements and public rights of way and encourages efforts that facilitate timely, cost-effective and orderly access while maintaining safety and other relevant considerations. MBI also recognizes that improved coordination and communication can help to reduce disruptions and avoid duplicating efforts. For example, if a public entity is planning road construction work in an area with insufficient broadband access, broadband providers could coordinate with the public entity to install telecommunications infrastructure alongside the road construction work.

14. Climate Assessment (Requirement 15)

2.11.1 Describe the Eligible Entity’s assessment of climate threats and proposed mitigation methods. If an Eligible Entity chooses to reference reports conducted within the past five years to meet this requirement, it may attach this report and must provide a crosswalk narrative, with reference to page numbers, to demonstrate that the report meets the five requirements below. If the report does not specifically address broadband infrastructure, provide additional narrative to address how the report relates to broadband infrastructure. At a minimum, this response must clearly do each of the following, as outlined on pages 62 – 63 the BEAD NOFO:

Massachusetts occupies a geographical area of 10,555 square miles with a dense population, particularly in the eastern regions. The Commonwealth is heavily wooded with forestlands covering a little over 60 percent of the land area with another 25 percent composed of water bodies, including several large reservoirs and smaller lakes. The Commonwealth has more than 1,500 miles of coastline and generally the Massachusetts climate is characterized by relatively warm summers, but cold, snowy winters. For a state like Massachusetts having such a relatively large amount of coastal areas and islands, combined with the potential for powerful, high impact weather events ranging from freezing ice nor’easters to tropical storms and hurricanes, broadband network resiliency planning is critical.

The Commonwealth’s leaders have recognized the additional, disproportionate risks posed by climate change on the state and commissioned the 2023 ResilientMass Massachusetts State Hazard Mitigation and Climate Adaptation Plan (MA SHMCAP)¹ to understand and aid in planning and climate risk mitigation. The ResilientMass Plan was developed through a process that involved numerous state agencies, a large cross-section of stakeholders, members of the public, working groups, and a consulting team. Led by the Massachusetts Emergency Management Agency (MEMA) in close coordination with the Executive Office of Energy and Environmental Affairs (EEA), the 2023 MA SHMCAP leverages the 2022 Massachusetts Climate Change Assessment² to detail how Massachusetts’ people, environments, and infrastructure (electric transmission and distribution, water, and wired communications and information technology systems) could be affected by climate change and its related hazards through the end of the century.

The Commonwealth is already experiencing the impacts of climate change, including changes to temperature, precipitation, and sea level rise. The NOAA State Climate Summary for Massachusetts³ states temperatures in Massachusetts have risen almost 3.5°F since the beginning of the 20th century and annual average temperatures are projected to exceed historical record levels most likely by the middle of this century.

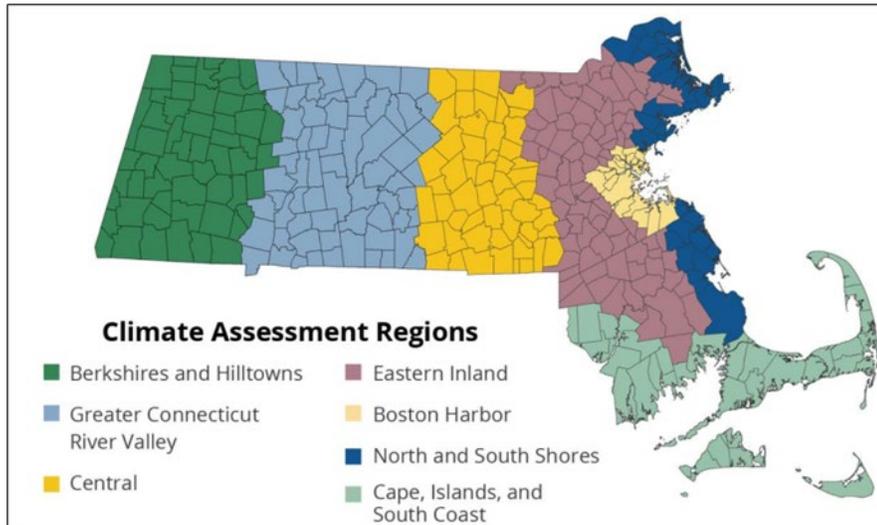
MBI-funded BEAD deployments of fiber broadband infrastructure must consider the impact of climate change on network performance. Primary aspects of risk-aware deployment include developing efficient practices for hardening fiber cables, conduits, and other infrastructure to be more resistant to severe weather challenges and having an emergency response plan in place. This could be costly in rural, low-density areas where current ISPs already face numerous challenges deploying financially viable networks. Yet, the deployment of fiber networks to rural areas will provide crucial communications infrastructure as a safeguard during these very same emergencies.

These decisions require on-going “best practices” discussions with prospective subgrantees, and the broader broadband community throughout the application, selection, and award contracting processes. MBI has engaged the provider community through state-wide working groups, community meetings, webinars, and surveys. MBI and the provider community are working together to achieve MBI’s first BEAD funding priority – bring reliable, highspeed internet to all unserved and underserved locations in the Commonwealth.

- a. Identify the geographic areas that should be subject to an initial hazard screening for current and projected future weather and climate-related risks and the time scales for performing such screenings;

The Commonwealth of Massachusetts features numerous topographically distinctive regions as shown in the graphic below. Beginning on the east side of the Commonwealth, the North and South Shores, Boston Harbor, and the Cape, Inlands and South Coast all consist of a large coastal plain of the Atlantic Ocean. These regions also contain most of the Commonwealth’s population. To the west lies the hilly, rural regions of the Eastern Inland and Central Massachusetts. Further to the west is the low-lying Connecticut River Valley watershed, which bisects the Commonwealth north to south and is a productive agricultural region. Along the western border of Western Massachusetts lies the highest elevated part of the Commonwealth, the Berkshires, holding the scenic Berkshire and Taconic Mountain ranges (whose highest peak, Mount Greylock, measures 3,491 feet in elevation).

Figure 11: Massachusetts Climate Assessment Regions



Source: [Vol II - 2022 MA Climate Assessment - Statewide Report](#)

Though any extreme weather event can directly impact broadband networks, those that are most concerning in Massachusetts include flooding and heavy snow/freezing ice storms. Each of these events can cause widespread, material damage to networks regardless of aerial or underground construction.

For broadband network deployments, the primary areas of concern are the coastal regions because of flooding due to predicted sea level rise as well as from the direct effects of extreme climate events such as tropical storms and hurricanes.

MBI will require applicants to submit climate resiliency plans for proposed networks, specifically those along the coastal areas. Applicants shall address technology platforms, specific design features, retrofitting considerations, and restorative processes.

- b. Characterize which projected weather and climate hazards may be most important to account for and respond to in these areas and over the relevant time horizons;

Flooding and severe snow & ice storms all contribute to the need for resilient network topologies and regional/state-wide mitigation approaches that work to operationally sustain broadband networks and the life-saving communications services they provide. As MBI reviews potential project area networks to be deployed with BEAD funding, the following climate hazards pose the most relevant and critical threat to broadband networks.

- **Flooding** – Flooding of major rivers and tributaries may happen during any season, but they occur with the greatest frequency during spring and autumn months associated with the greatest rainfall.

The Massachusetts Silver Jackets Team⁴ launched in 2016 with the goal of reducing the risk of flooding and other natural disasters by bringing together multiple federal and state agencies. The interagency team facilitates a collaborative process of strategic and integrated mitigation actions to reduce the threat, vulnerability, and consequences of flooding in the Commonwealth of Massachusetts. Through the process of sharing and combining resources, funding, programs, and technical expertise, the team works toward the goal of proactively reducing flood risk.

For the past few years, Massachusetts has received above average rainfall as reflected on the map below for 2021. With the widespread heavy rains, flooding has been common as riverbeds, typically dry for months, have been overrun with fast-running water. In addition to damage to broadband networks, flooding can also cut off access to utilities, emergency services, and transportation near affected areas.

- **Snow and Ice** – The Commonwealth is susceptible to frequent ice storms which result from rain falling through an atmospheric level of cold air turning the rain into ice as it reaches cold, exposed surfaces. The substantial weight of ice buildup on trees and utility lines can easily result in destroyed

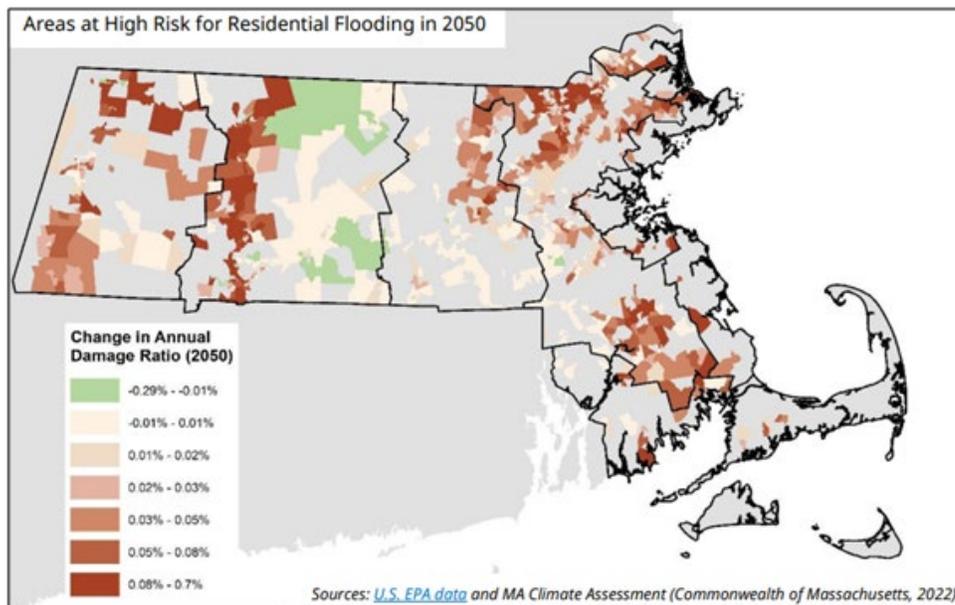
infrastructure. Also, ice buildup on roadways are a common cause of accidents that damage infrastructure, though on a smaller scale.

- c. Characterize any weather and climate risks to new infrastructure deployed using BEAD Program funds for the 20 years following deployment;

MBI has leveraged existing plans and analysis to identify the weather and climate risks to new infrastructure deployments using BEAD program funds for the 20 years following deployment. As described above, statewide physical climate risks that threaten broadband infrastructure include the following climate events:

- **Coastal and Inland Flooding** – Sea levels along Massachusetts’s coast rose about 9 inches during the 20th century. By 2070, some projections estimate a rise in sea level of 2.3 to 4.2 feet over 2000 levels⁵. The map below illustrates the potential for inland flooding by 2050.

Figure 12: Areas at High Risk for Residential Flooding in 2050



Source: ResilientMass Plan: 2023 MA State Hazard Mitigation and Climate Adaptation Plan, Page 5.1-44

Substantial flooding can eventually degrade fiber optic lines negatively impacting broadband signals. Rushing floodwaters can erode infrastructure from foundations thereby severing broadband networks.

- **Winter Storms** – Severe winter storms such as ice storms, nor’easters, heavy snow, blowing snow, and other extreme forms of winter precipitation, occur regularly during the winter months in Massachusetts. Rural populations are more at risk for service and access issues because heavy snow conditions can block roads and often result in downed power and communication lines. Also, icy roads create traffic hazards that result in vehicle crashes into utility poles and roadside network cabinets.

In each of the instances above the effect is not only on the broadband network, but also the electrical grid’s capacity to support aerial infrastructure and, importantly, remain in service.

Lastly, of significant concern is the ability to replace and restore network functionality after a severe climate-related event. Material and labor resources are typically in acute shortage and high demand, plus access to affected network infrastructure can be challenging by standing water, downed electric lines, and diminished transportation infrastructure.

- d. Identify how the proposed plan will avoid and/or mitigate weather and climate risks identified; and

For the identified extreme climate-related risks described above, MBI will screen resiliency plans of potential subgrantees to ensure applicants incorporate climate resilient features into network architecture design that may include some of the following considerations.

- Technology platform, facilities siting (aerial vs underground), and emergency restoration plans.

- Uninterruptible Power Supplies (UPS) devices should be a critical component to ensure essential backup power during weather-related disruptions.
 - Develop a minimum emergency inventory of critical components to guarantee timely restoration.
 - Emergency response plans and communication strategies to ensure timely and effective response to extreme weather events. Such planning will require coordination with power utilities, transportation authorities, public safety agencies, and affected community leaders.
- e. Describe plans for periodically repeating this process over the life of the Program to ensure that evolving risks are understood, characterized, and addressed, and that the most up-to-date tools and information resources are utilized.

The MBI will develop and periodically repeat a screening process over the life of the BEAD program to ensure that evolving risks from climate-related hazards are understood and communicated to subgrantees. The MBI will continue to communicate with relevant state and federal agencies to provide confidence that the on-going plan remains useful in addressing potential climate threats.

The following resources were used in evaluating and composing the Climate Resiliency narrative:

- NOAA National Centers for Environmental Information, State Climate Summaries, Massachusetts, <https://statesummaries.ncics.org/chapter/ma/>
 - ResilientMass Plan, Massachusetts State Hazard Mitigation and Climate Adaptation Plan, September 2023, <https://www.mass.gov/doc/resilientmass-plan-2023/download>
 - Massachusetts Climate Change Assessment, Volume II, Statewide Report, December 2022, <https://www.mass.gov/doc/2022-massachusetts-climate-change-assessment-december-2022-volume-ii-statewide-report/download>
 - Massachusetts Climate Change Assessment, Volume III, Regional Reports, December 2022, <https://www.mass.gov/doc/2022-massachusetts-climate-change-assessment-december-2022-volume-iii-regional-reports/download>
- <https://www.mass.gov/doc/resilientmass-plan-2023/download><https://www.mass.gov/doc/2022-massachusetts-climate-change-assessment-december-2022-volume-ii-statewide-report/download><https://www.mass.gov/doc/2022-massachusetts-climate-change-assessment-december-2022-volume-iii-regional-reports/download>

Additionally, projects will be captured and evaluated using the ResilientMass Action Team (RMAT) tool. The ResilientMass Action Team (RMAT) led development of the Climate Resilience Design Standards Tool, advancing prioritized global (or cross-agency) actions from the 2018 State Hazard Mitigation and Climate Adaptation Plan (SHMCAP). This effort has developed climate resilience design standards and guidance for State agencies in order to incorporate climate resilience into the State's capital planning process and grant-making for local capital projects. The Climate Resilience Design Standards Tool (Version 1.2) provides:

- a preliminary climate change exposure and risk rating;
- recommended climate resilience design standards for projects with physical assets; and,
- guidance with best practices to support implementation.

The Tool outputs are grounded in scientific methodology using available climate science data for Massachusetts, and will be enhanced over time to incorporate new science, additional or changing climate hazards, and ongoing stakeholder feedback.

2.1.1.1 Optional Attachment: As an optional attachment, submit any relevant reports conducted within the past five years that may be relevant for this requirement and will be referenced in the text narrative above.

- ResilientMass Plan, Massachusetts State Hazard Mitigation and Climate Adaptation Plan, September 2023, <https://www.mass.gov/doc/resilientmass-plan-2023/download>
- Massachusetts Climate Change Assessment, Volume II, Statewide Report, December 2022, <https://www.mass.gov/doc/2022-massachusetts-climate-change-assessment-december-2022-volume-ii-statewide-report/download>

- Massachusetts Climate Change Assessment, Volume III, Regional Reports, December 2022, <https://www.mass.gov/doc/2022-massachusetts-climate-change-assessment-december-2022-volume-iii-regional-reports/download>

15. Low-Cost Broadband Service Option (Requirement 16)

2.12.1 Describe the low-cost broadband service option(s) that must be offered by subgrantees as selected by the Eligible Entity, including why the outlined option(s) best services the needs of residents within the Eligible Entity's jurisdiction. At a minimum, this response must include a definition of low-cost broadband service option that clearly addresses the following, as outlined on page 67 of the BEAD NOFO:

- a. All recurring charges to the subscriber, as well as any non-recurring costs or fees to the subscriber (e.g., service initiation costs);
- b. The plan's basic service characteristics (download and upload speeds, latency, any limits on usage or availability, and any material network management practices);
- c. Whether a subscriber may use any Affordable Connectivity Benefit subsidy toward the plan's rate; and
- d. Any provisions regarding the subscriber's ability to upgrade to any new low-cost service plans offering more advantageous technical specifications

As described in the BEAD NOFO Section IV.C.2.c.i, all BEAD-eligible subgrantees in Massachusetts will be required to offer a low-cost broadband service option. MBI will adopt the low-cost broadband service option definition outlined in the BEAD NOFO to fulfill this requirement.

- a. Costs \$30 per month or less, inclusive of all taxes, fees, and charges if the subscriber does not reside on Tribal Lands, or \$75 per month or less, inclusive of all taxes, fees, and charges, if the subscriber resides on Tribal Lands with no additional non-recurring costs or fees to the consumer;
- b. Allows the end user to apply the Affordable Connectivity Benefit subsidy to the service price;
- c. Provides the greater of (a) typical download speeds of at least 100 Mbps and typical upload speeds of at least 20 Mbps, or the fastest speeds the infrastructure is capable of if less than 100 Mbps/20 Mbps or (b) the performance benchmark for fixed terrestrial broadband service established by the Federal Communications Commission pursuant to Section 706(b) of the Communications Act of 1934, as amended;
- d. Provides typical latency measurements of no more than 100 milliseconds; and
- e. Is not subject to data caps, surcharges, or usage-based throttling, and is subject only to the same acceptable use policies to which subscribers to all other broadband internet access service plans offered to home subscribers by the participating subgrantee must adhere;
- f. In the event, the provider later offers a low-cost plan with higher speeds downstream and/or upstream, permits eligible subscribers that are subscribed to a low-cost broadband service option to upgrade to the new low-cost offering at no cost.

To qualify for this low-cost service option, households must either enroll in the ACP, the FCC Lifeline program or meet one of several other criteria as defined in the BEAD NOFO. Specifically, the BEAD NOFO defines "eligible subscribers" for the BEAD low-cost option.

As defined in Section I.C.j of the BEAD NOFO, the term "Eligible Subscriber" means any household seeking to subscribe to broadband internet access service that (1) qualifies for the ACP or any successor program or (2) is a member of a household that meets any of the following criteria:

- A. Household income for the most recently completed calendar year was at or below 200 percent of the Federal Poverty Guidelines;
- B. Any member of the household receives benefits under the Supplemental Nutrition Assistance Program, Medicaid, Federal Public Housing Assistance, Supplemental Security Income, Veterans and Survivors Pension benefit, or Special Supplemental Nutrition Program for Women, Infants, and Children;
- C. Any member of the household participates in Tribal specific assistance programs, such as Bureau of Indian Affairs General Assistance, Tribal TANF, Tribal Head Start, or Food Distribution Program on Indian Reservations;

- D. Any member of the household has applied for and been approved to receive benefits under the National School Lunch Program or the School Breakfast Program, or at least one member of the household is enrolled in a school or school district that participates in the USDA Community Eligibility Provision;
- E. Any member of the household received a Federal Pell Grant during the current award year; [or]
- F. The household meets the eligibility criteria for a participating provider's existing low-income internet program.

MBI believes it is essential for eligible subscribers in Massachusetts to receive free broadband service when the monthly subscription fee is combined with the current ACP benefits. However, MBI is also concerned about the long-term viability of the ACP program and the negative impact on Massachusetts eligible subscribers if the program ends.

In response to the concern and to encourage low-cost broadband subscription plans from subgrantees, MBI will incorporate bonus points in the rubric for any subgrantee offering a low-cost service plan costing less than the monthly fees of \$30/month. Points for the low-cost broadband subscription plan will begin at zero for offering a low-cost plan at \$30/month and increase over a gradient of price ranges that eventually reach \$0/month. Additionally, MBI will continue exploring ways to leverage its prior investment in middle-mile network infrastructure to reduce recurring costs by broadband providers and ultimately the price of broadband to consumers.

2.12.2 Certify that all subgrantees will be required to participate in the Affordable Connectivity Program or any successor program.

Yes, this is required. Eligible subgrantees will be required to participate in the Affordability Connectivity Program or any successor program, and eligible subscribers eligible for a broadband service subsidy can apply the subsidy to the proposed service option.

16. Middle Class Affordability (Requirement 20)

2.13.1 Describe a middle-class affordability plan that details how high-quality broadband services will be made available to all middle-class families in the BEAD-funded network’s service area at reasonable prices. This response must clearly provide a reasonable explanation of how high-quality broadband services will be made available to all middle-class families in the BEAD-funded network’s service area at reasonable prices.

The BEAD NOFO urges eligible entities to look beyond infrastructure investment and the required low-cost service option and identify a plan to ensure that all consumers can access affordable high-speed internet by adopting diverse strategies.

MBI understands the importance of adopting a strong affordability strategy that can impact as many Massachusetts residents as possible. To affect as many residents as possible, MBI will take a multi-pronged approach to Massachusetts's current needs and opportunities.

Background

MBI understands that best practices and the realities of those households within the Commonwealth of Massachusetts should inform any plans or policies. NTIA does not set required levels for affordability, particularly at the middle-class levels. Various groups have sought to provide data and guidance over the last several years to support the decision-makers examining affordability.

1. In 2016, the Federal Communications Commission (FCC) defined a benchmark for reasonable rates for residential broadband service as "2% of monthly household income¹⁶." The FCC further describes the 2% threshold as a "clear yardstick for charting changes, not as an inherently meaningful level."
2. In 2023, Pew Charitable Trusts (Pew) examined affordability by geographic region, assuming middle-class was between \$40,000 and \$150,000 nationally. With that standard, the nationwide median affordability standard is \$93.21/month¹⁷. While the median income varies across the state and region of the country, Pew was able to provide metrics for counties across the Commonwealth.
3. BroadbandNow Research provides broadband pricing, collecting data from the FCC, Census Bureau, and directly from ISPs. The data provides some visibility into provider broadband pricing and is available for download¹⁸.

Each data source referenced above is not without limitations. Still, it provides a starting point for MBI to analyze what a middle-class affordability plan could look like in Massachusetts.

According to BroadbandNow Research data, Table 10 represents the monthly average, weighted monthly average, and minimum monthly price plans by county in Massachusetts. The data is not the entire picture and only represents one aspect. Some of the referenced plans meet the 100/20 threshold set by the NTIA. However, not all plans meet that standard, with some data from BroadbandNow Research not even meeting the standard for the underserved.

Table 10: MA Broadband Pricing Data from BroadbandNow Research

County	Average Plan Price (\$)	Weighted Average Price (\$)	Minimum Plan Price (\$)
Barnstable	77	77	75
Berkshire	68	68	67

¹⁶ <https://docs.fcc.gov/public/attachments/FCC-16-38A1.pdf>

¹⁷ <https://www.pewtrusts.org/en/research-and-analysis/articles/2023/08/30/is-broadband-affordable-for-middle-class-families>

¹⁸ <https://broadbandnow.com/research/data>

County	Average Plan Price (\$)	Weighted Average Price (\$)	Minimum Plan Price (\$)
Bristol	58	58	53
Dukes	80	80	80
Essex	52	52	51
Franklin	70	70	67
Hampden	73	73	72
Hampshire	74	74	73
Middlesex	42	42	41
Nantucket	80	80	80
Norfolk	44	44	41
Plymouth	46	46	45
Suffolk	53	53	48
Worcester	59	59	57

The US Census Bureau tracks income data, which Pew utilized to calculate affordability data. Table 11 shows the affordability metric of two percent of median household income, the total number of households, and median income by county.

Table 11: MA Broadband Two Percent Rate by County¹⁹

County	One Percent of Median Income	Two Percent of Median Income	Total number of Households	Median Income
Barnstable	\$ 68.85	\$ 137.70	98,163	\$ 82,619
Berkshire	\$ 52.64	\$ 105.27	55,525	\$ 63,159
Bristol	\$ 61.91	\$ 123.82	227,816	\$ 74,290
Dukes	\$ 64.50	\$ 128.99	6,801	\$ 77,392
Essex	\$ 72.24	\$ 144.47	307,959	\$ 86,684
Franklin	\$ 54.13	\$ 108.25	30,792	\$ 64,949
Hampden	\$ 51.09	\$ 102.18	183,309	\$ 61,310
Hampshire	\$ 64.14	\$ 128.27	60,903	\$ 76,959
Middlesex	\$ 93.16	\$ 186.32	624,335	\$ 111,790
Nantucket	\$ 97.45	\$ 194.29	4,031	\$ 116,571
Norfolk	\$ 93.41	\$ 186.82	276,744	\$ 112,089
Plymouth	\$ 81.83	\$ 163.65	196,307	\$ 98,190
Suffolk	\$ 66.89	\$ 133.77	315,192	\$ 80,260
Worcester	\$ 68.05	\$ 136.10	326,571	\$ 81,660
Massachusetts	\$ 67.47	\$ 134.93	2,714,448	\$ 89,026

By comparing the above two tables, it is clear that throughout Massachusetts the median household can afford the cheapest available broadband service if the two-percent of household income affordability standard is applied. This would lead to a conclusion that lack of affordability of broadband service is not a problem that most households in Massachusetts face, but based on the Pew analysis of \$40,000 being the lower end of the middle class, there are between 534,000 households and 780,000²⁰ households in Massachusetts that are considered middle-class and make less than the median income of \$89,026.

Relying on the two-percent affordability threshold described by the FCC, a large range exists for households in Massachusetts of what an affordable monthly fee means. The affordability threshold could equate to as low as

¹⁹ <https://data.census.gov/table/ACSST5Y2021.S1901?q=income>

²⁰ U.S. Census Bureau, ACS 5 Year Estimates on household income.

\$66.67/month for a household making \$40,000 For a household making the median income of \$89,026, a two-percent affordability threshold would equal \$134.93/month. Even if MBI lowered the threshold to a one-percent affordability threshold, it would equate to \$67.47/month per household. The challenge for MBI is to develop a strategy that can impact those middle-class households below the median income levels that do not qualify for ACP.

Middle-Class Affordability Planning Components

With the previous section as background, MBI proposed a multi-pronged approach. Each component is described in more detail below.

Continuous Monitoring of BEAD Recipients and Pricing Transparency

As noted in the MA Five-Year Action Plan, MBI will require recipients to report to MBI on the progress of its BEAD deployment. MBI's monitoring plan will include tracking the progress of the BEAD Program, ensuring that it is meeting its goals, and continually improving the process based on collected data, stakeholder feedback, and evolving industry trends. In the reporting requirements for BEAD subgrantees, MBI will include broadband pricing (full price without discounts, including fees and other charges).

In addition to asking BEAD subgrantees to report their broadband pricing packages (full price without discounts, including fees and any other charges), MBI will explore the viability of potential data collection options to procure pricing data for broadband providers beyond BEAD subgrantees, as a way of bringing transparency to broadband pricing across the Commonwealth of Massachusetts.

The recommended data would be consistent with the data likely collected through the FCC's new broadband consumer labels, called "nutrition labels"²¹. Though not yet available at the time of this writing, the new labels promise to be a valuable resource in helping consumers make informed decisions and protect themselves against hidden charges.

Middle-Class Broadband Service Option

As noted in section 2.4.2, MBI will award bonus points for Affordability in the BEAD subgrantee application process to providers if they offer a Middle-Class Broadband Service Option for those households that do not qualify for ACP, by providing a monthly service plan that meets or exceeds the requirements below.

- Costs \$100 per month or less, plus inflationary adjustments, inclusive of all taxes, fees, and charges with no additional non-recurring costs or fees to the consumer; and provides the greater of typical download speeds of at least 1 Gbps and typical upload speeds of at least 1 Gbps and/or costs \$75 per month or less, plus inflationary adjustments, inclusive of all taxes, fees, and charges with no additional non-recurring costs or fees to the consumer; and provides the greater of typical download speeds of at least 100 Mbps and typical upload speeds of at least 20 Mbps.
- Inflationary adjustments to the allowable price for a Middle-Class Broadband Service Option shall align with the Consumer Price Index as published by the Bureau of Labor Statistics.
- Provides typical latency measurements of no more than 100 milliseconds; and
- Is not subject to data caps, surcharges, or usage-based throttling, and is subject only to the same acceptable use policies to which subscribers to all other broadband internet access service plans offered to home subscribers by the participating subgrantee must adhere;

Programs described in Section 7, Non-deployment Subgrantee Selection (Requirement 9), will be able to support broadband affordability. Those efforts include the Front Door Program that will facilitate the escalation of quality-of-service issues to drive better performance and customer service by broadband providers. These programs and others may be able to impact middle-class affordability across Massachusetts positively. MBI will utilize the Massachusetts Digital Equity Plan to implement other strategies as described below.

Digital Equity Implementation

Understanding that middle-mile broadband pricing doesn't happen in a vacuum, MBI has established parallel workstreams that are underway that will have a positive impact.

MBI will utilize the Massachusetts Digital Equity Plan, and its successful Digital Equity Partnerships Program is designating qualified organizations as Partners to implement digital equity projects that meet the goals outlined in the

²¹ <https://www.fcc.gov/broadbandlabels>

Commonwealth's ARPA COVID recovery legislation (codified as Chapter 102 of the Acts of 2021), that created a \$50 million fund to bridge the digital divide. Partners will work with local and regional organizations to implement digital equity projects in six program areas:

1. Digital Literacy
2. Connectivity for Economic Hardship
3. Public Space Internet Modernization
4. Education, Outreach, and Engagement
5. Device Refurbishment and Distribution
6. Apartment
7. Wi-Fi

17. Use of 20 Percent of Funding (Requirement 17)

2.14.1 Describe the Eligible Entity's planned use of any funds being requested, which must address the following:

- a. If the Eligible Entity does not wish to request funds during the Initial Proposal round, it must indicate no funding requested and provide the rationale for not requesting funds.
- b. If the Eligible Entity is requesting less than or equal to 20 percent of funding allocation during the Initial Proposal round, it must detail the amount of funding requested for use upon approval of the Initial Proposal, the intended use of funds, and how the proposed use of funds achieves the statutory objective of serving all unserved and underserved locations.
- c. If the Eligible Entity is requesting more than 20 percent (up to 100 percent) of funding allocation during the Initial Proposal round, it must detail the amount of funding requested for use upon approval of the Initial Proposal, the intended use of funds, how the proposed use of funds achieves the statutory objective of serving all unserved and underserved locations, and provide rationale for requesting funds greater than 20 percent of the funding allocation.

MBI is seeking 100% of the \$147,422,464.39 BEAD funding allocation to be immediately available as part of its Initial Proposal. With the collaboration of state and local governments, industry partners, non-profits, and community groups, MBI is well-positioned to deploy this funding and provide reliable high-speed broadband services to all eligible CAI locations across the Commonwealth, including underserved and unserved areas. To prioritize fiber deployment, the first allocation of funding will be directed towards the deployment subgrant programs specified in Section 5 of the proposal. The requested full amount is vital for successful management of the subgrant program as all eligible locations will be available for applicants to apply to serve during the initial round of funding. The funding leftover from the broadband deployment subgrant program will then be applied to non-deployment purposes as outlined in Section 6 of the proposal. Additionally, these funds will be utilized for administrative costs aligned with NTIA guidance. By prioritizing these subgrants, MBI is working to ensure all eligible locations are served, meeting the objective of providing reliable high-speed broadband services across the Commonwealth.

2.14.2 Enter the amount of the Initial Proposal Funding Request. If not requesting initial funds, enter '\$0.00.'

MBI is requesting \$147,422,464.39 in funding.

2.14.3 Certify that the Eligible Entity will adhere to BEAD Program requirements regarding Initial Proposal funds usage. If the Eligible Entity is not requesting funds in the Initial Proposal round and will not submit the Initial Funding Request, note "Not applicable."

MBI certifies that it adheres with all BEAD Program requirements related to the usage of Initial Proposal funds.

18. Eligible Entity Regulatory Approach (Requirement 18)

2.15.1

- a. Disclose whether the Eligible Entity will waive all laws of the Eligible Entity concerning broadband, utility services, or similar subjects, whether they predate or postdate enactment of the Infrastructure Act that either (a) preclude certain public sector providers from participation in the subgrant competition or (b) impose specific requirements on public sector entities, such as limitations on the sources of financing, the required imputation of costs not actually incurred by the public sector entity, or restrictions on the service a public sector entity can offer.
- b. If the Eligible Entity will not waive all such laws for BEAD Program project selection purposes, identify those that it will not waive (using the Excel attachment) and their date of enactment and describe how they will be applied in connection with the competition for subgrants. If there are no applicable laws, note such.

2.15.1.1 Optional Attachment: As a required attachment only if the Eligible Entity will not waive laws for BEAD Program project selection purposes, provide a list of the laws that the Eligible Entity will not waive for BEAD Program project selection purposes, using the Eligible Entity Regulatory Approach template provided.

Based on our analysis and our experience leading broadband initiatives in the Commonwealth, MBI is not aware of any Massachusetts laws impacting broadband, utility services, or similar subjects that may limit public sector participation in a grant program. Massachusetts fosters an inclusive broadband ecosystem for local governments, ISPs and other entities, which is evidenced in the Commonwealth's commitment to promoting accessibility and inclusion in the broadband infrastructure industry. MBI is committed to closely considering NTIA's guidance and will work diligently towards identifying a practical and actionable solution should any regulatory barrier arise to ensure that our subgrant program remains accessible to all public sector entities who wish to participate.

19. Certification of Compliance with BEAD Requirements (Requirement 19)

2.16.1 Check Box: Certify the Eligible Entity's intent to comply with all applicable requirements of the BEAD Program, including the reporting requirements.

MBI certifies it intends to comply with all applicable requirements of the BEAD program, including the reporting requirements.

2.16.2 Text Box: Describe subgrantee accountability procedures, including how the Eligible Entity will, at a minimum, employ the following practices outlined on page 51 of the BEAD NOFO:

- a. Distribution of funding to subgrantees for, at a minimum, all deployment projects on a reimbursable basis (which would allow the Eligible Entity to withhold funds if the subgrantee fails to take the actions the funds are meant to subsidize);

The Commonwealth of Massachusetts, through EOED, will enter into a subrecipient agreement with MBI. Funds will be disbursed to MBI from EOED for administrative costs using a modified reimbursement model. For each reimbursement request, MBI shall submit to EOED an invoice detailing the requested reimbursement amount, the balance of any funds remaining, and all required documentation sufficiently documenting costs incurred according to state and federal documentation standards.

EOED shall review all reimbursement requests for accuracy and make requests to MBI for additional documentation or clarification as needed to ensure that all costs claimed for reimbursement are eligible. In accordance with Commonwealth fiscal policy, all reimbursement payments shall be made to MBI within 45 calendar days.

Upon establishment of a subgrantee relationship with MBI, the BEAD subgrantees will receive funding on a reimbursable basis based on pre-determined and agreed invoice submission and payment schedule quarterly. Subgrantees are required to have an accounting system that accurately tracks the receipt and distribution of funds received from subgrant awards, as well as adequate employee time tracking systems. Subgrantees will be required to submit invoices at established timelines. MBI will review subgrantee submissions for compliance with the terms of the subgrantee agreement and documentation of applicable milestones. MBI will submit reviewed and approved subgrantee invoices to EOED for final approval. Upon EOED's final approval, EOED will release funding to MBI and subgrantees will receive reimbursements.

MBI will engage in the monitoring of subgrantee activities to ensure subawards are used for authorized purposes, in compliance with Federal statutes, regulations, and the terms and conditions of the subaward. Subgrantee monitoring will also help ensure subaward performance goals are achieved. EOED will conduct quarterly desk reviews of MBI's monitoring by sampling MBI's monitoring files. EOED will issue findings and performance improvement recommendations as necessary. In cases where non-compliance, fraud, waste, or abuse are identified, EOED will work with MBI to identify appropriate next steps, up to and including recoupment, reallocation, or referral for legal action.

- b. The inclusion of clawback provisions (i.e., provisions allowing recoupment of funds previously disbursed) in agreements between the Eligible Entity and any subgrantee;

The Commonwealth's agreement with MBI will include remedies for non-compliance including the ability to impose additional conditions on the receipt of a subsequent tranche of future award funds, if any, or take other available remedies as set forth in 2 C.F.R. § 200.339. In the case of a violation of Section 60102 of the Infrastructure Act regarding the use of funds, previous payments shall be subject to recoupment.

In the event that MBI or EOED's subgrantee monitoring determines that MBI or its subgrantee has not met the requirements outlined by BEAD, the subgrantee agreement, or applicable federal regulations, MBI shall

have the right to request repayment of funds disbursed for BEAD deployment and non-deployment activities. Subgrantees shall return funds within 30 days of receipt of request by MBI.

Additionally, as encouraged by the BEAD NOFO, MBI will include the following enforcement actions in agreement with subgrantees, to be utilized at MBI's discretion and EOED's direction as necessary and appropriate:

- A subgrantee that fails to comply with any requirement under Section 60102 of the Infrastructure Act or the BEAD NOFO shall be required to return up to the entire amount of the subgrant to MBI, at the discretion of MBI or EOED.
- If a subgrantee fails to comply with the low-cost broadband service option requirement set out in Section 60102(h)(4)(B) of the Infrastructure Act, MBI and/or EOED may take corrective action, including recoupment of funds from the subgrantee.
- EOED and MBI may also enforce applicable rules and laws by imposing penalties for nonperformance, failure to meet statutory obligations, or wasteful, fraudulent, or abusive expenditure of grant funds. Such penalties include, but are not limited to, imposition of additional award conditions, payment suspension, award suspension, grant termination, de-obligation/clawback of funds, and debarment of organizations and/or personnel.

c. Timely subgrantee reporting mandates; and

Following the determination of a subgrantee relationship with MBI during the early stages of the procurement process, MBI will conduct a risk assessment to evaluate the risk of non-compliance and monitoring required. Subgrantees will be evaluated on:

- Experience with the same or similar awards
- Results of previous audits, including whether the subgrantee has previously received single audit and the extent to which the subaward has been audited as major
- Whether subgrantee has new personnel or substantially changed systems
- Extent and results of Federal awarding agency monitoring, if the subgrantee has also received Federal awards directly from a Federal awarding agency.

Subgrantees will be mandated to submit reports on the project status and performance on a quarterly basis. Additionally, subgrantees are required to engage in a financial review alongside MBI on either a 3-month, 6-month basis or annual basis, with the cadence determined based on the results of the risk assessment. MBI reserves the right to increase the frequency of the reporting and financial review and conduct an on-site review if any issues or concerns are identified.

Subgrantees will also be required to comply with the reporting requirements as outlined in the BEAD NOFO. These regular reports must be submitted at least on a semiannual basis for the duration of the subgrant. At a minimum, the report must include:

- Include a list of addresses or location identifications (including the Broadband Serviceable Location Fabric established under 47 U.S.C. 642(b)(1)(B)) that constitute the service locations that will be served by the broadband infrastructure to be constructed and the status of each project;
- Identify new locations served within each project area at the relevant reporting intervals, and service taken (if applicable);
- Identify whether each address or location is residential, commercial, or a community anchor institution;
- Describe the types of facilities that have been constructed and installed;
- Describe the peak and off-peak actual speeds of the broadband service being offered;
- Describe the maximum advertised speed of the broadband service being offered;
- Describe the non-promotional prices, including any associated fees, charged for different tiers of broadband service being offered;
- List all interconnection agreements that were requested, and their current status;
- Report the number and amount of contracts and subcontracts awarded by the subgrantee disaggregated by recipients of each such contract or subcontracts that are MBEs or WBEs;

- Include any other data that would be required to comply with the data and mapping collection standards of the Commission under Section 1.7004 of title 47, Code of Federal Regulations, or any successor regulation, for broadband infrastructure projects;
- Include an SF-425, Federal Financial Report and meet the requirements described in the Department of Commerce Financial Assistance Standard Terms and Conditions (dated November 12, 2020), Section A.01 for Financial Reports;
- For projects over \$5,000,000 (based on expected total cost):
 - A subgrantee may provide a certification that, for the relevant Project, all laborers and mechanics employed by contractors and subcontractors in the performance of such Project are paid wages at rates not less than those prevailing, as determined by the U.S. Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (commonly known as the “Davis-Bacon Act”), for the corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work in the civil subdivision of the State (or the District of Columbia) in which the work is to be performed, or by the appropriate State entity pursuant to a corollary State prevailing-wage-in-construction law (commonly known as “baby Davis-Bacon Acts”). If such certification is not provided, a Recipient must provide a project employment and local impact report detailing:
 - The number of contractors and sub-contractors working on the Project;
 - The number of workers on the Project hired directly and hired through a third party;
 - The wages and benefits of workers on the Project by classification; and
 - Whether those wages are at rates less than those prevailing.
 - If a subgrantee has not provided a certification that a Project either will use a unionized project workforce or includes a project labor agreement, meaning a prehire collective bargaining agreement consistent with section 8(f) of the National Labor Relations Act (29 U.S.C. 158(f)), then the subgrantee must provide a project workforce continuity plan, detailing:
 - Steps taken and to be taken to ensure the Project has ready access to a sufficient supply of appropriately skilled and unskilled labor to ensure construction is completed in a competent manner throughout the life of the Project (as required in Section IV.C.1.e), including a description of any required professional certifications and/or in-house training, Registered Apprenticeships or labor-management partnership training programs, and partnerships with entities like unions, community colleges, or community based groups;
 - Steps taken and to be taken to minimize risks of labor disputes and disruptions that would jeopardize timeliness and cost-effectiveness of the Project;
 - Steps taken and to be taken to ensure a safe and healthy workplace that avoids delays and costs associated with workplace illnesses, injuries, and fatalities, including descriptions of safety training, certification, and/or licensure requirements for all relevant workers (e.g., OSHA 10, OSHA 30, confined space, traffic control, or other training required of workers employed by contractors), including issues raised by workplace safety committees and their resolution;
 - The name of any subcontracted entity performing work on the Project, and the total number of workers employed by each such entity, disaggregated by job title; and
 - Steps taken and to be taken to ensure that workers on the Project receive wages and benefits sufficient to secure an appropriately skilled workforce in the context of the local or regional labor market.
 - Comply with any other reasonable reporting requirements determined by MBI or EOED to meet the reporting requirements established by NTIA; and certify that the information in the report is accurate.
- Prior to finalizing the subrecipient agreement with MBI, EOED will update its risk assessment of MBI. As the subrecipient of other federal grants from the Commonwealth, MBI has already been assessed for risk by the Commonwealth. Notwithstanding MBI’s expertise and audit record, MBI is and will continually be treated as a high risk subrecipient by EOED due to the novel nature of the federal grant programs it administers. Given

this determination, EOED will require quarterly reporting from MBI that mirrors the reporting requirements for MBI's subgrantees. EOED will review and consolidate these reports for publication on a reporting dashboard and submission to NTIA.

d. Robust subgrantee monitoring practices

As indicated in the BEAD NOFO, sufficient accountability procedures to ensure subgrantee compliance through subgrantee monitoring and management are required.

EOED will conduct quarterly desk reviews of MBI's monitoring by sampling MBI's monitoring files. EOED will meet quarterly with MBI to discuss findings and identify recommended areas for improvement prior to issuing a written report to MBI. Subsequent quarterly reviews will include checks on compliance with resolution of prior findings and implementation of prior recommendations. In situations where findings rise to the level of requiring recoupment, EOED will work with MBI as discussed earlier to identify the appropriate next steps and track progress towards resolution. As part of its subrecipient oversight of MBI for other federal grant programs, EOED has regular meetings with MBI for both financial and programmatic oversight. EOED has developed training and educational materials on compliance with 2 CFR 200 and continues to implement these trainings. EOED will supplement these materials with information specific to BEAD and the Commonwealth's approved proposal. EOED receives MBI's annual Single Audit in compliance with Subpart F of 2 CFR 200 and monitors MBI for implementation of any areas of material weakness or significant deficiency for both federal and state awards.

MBI intends to engage in the following monitoring activities for subgrantees activities including, but not limited to:

- Coordination with subgrantees through individual discussions, group or team meetings, events or trainings
- Reviewing financial and programmatic reports including invoices and progress and outcome reports in alignment with contractual obligations
- Conducting an annual Subgrantee Assessment, verifying that every subgrantee is audited as required by 2 CFR Part 200, Subpart F.
- Conducting follow-up to ensure that the subgrantee takes timely and appropriate action on all deficiencies pertaining to the federal award through audits, on-site reviews, and other means
- Issuing management decisions for audit findings pertaining to the federal award that have not been sufficiently addressed in a timely or acceptable manner and consider imposing specific subaward conditions upon a subgrantee, if appropriate, based on risk failure to comply as described in 2 CFR 200 Parts 339 to 343.

Other potential monitoring tools per 2 CFR 200 Part 331(e) that MBI may utilize include:

- Providing training and technical assistance
- Performing on-site reviews of program operations
- Developing Remediation and Improvement Plans on the basis of internal, federal, and state audits

Additionally, based upon the on-going monitoring that will be conducted, MBI will perform subaward reviews which at a minimum include a discussion with the Program Manager regarding subgrantee performance, status, and inquiry on whether the subgrantee has met the thresholds requiring an audit under the current 2 CFR Part 200, Subpart F.

If an audit is required, MBI will ensure the subgrantee submits the report, report package or the documents required by federal regulations and/or recipient's requirements and follow up on any findings or issues identified in the audit to ensure they have been satisfactorily addressed.

If any additional findings are identified by the MBI review, we will implement appropriate requirements to ensure the contractual obligations and all requirements are met. To the extent any issues persist, escalation to the legal and program teams may be necessary.

2.16.3 Check Box: Certify that the Eligible Entity will account for and satisfy authorities relating to civil rights and nondiscrimination in the selection of subgrantees.

MBI certifies it will account for and satisfy authorities relating to civil rights and nondiscrimination in the selection of subgrantees.

2.16.4 Check Box: Certify that the Eligible Entity will ensure subgrantee compliance with the cybersecurity and supply chain risk management requirements on pages 70 - 71 of the BEAD NOFO to require prospective subgrantees to attest that:

MBI intends to ensure subgrantee compliance with the cybersecurity and supply chain risk management requirements as indicated in the BEAD NOFO. MBI will ensure the subgrantee complies with the following cybersecurity requirements:

- The prospective subgrantee has a cybersecurity risk management plan (the plan) in place that is either: (a) operational, if the prospective subgrantee is providing service prior to the award of the grant; or (b) ready to be operationalized upon providing service, if the prospective subgrantee is not yet providing service prior to the grant award;
- The plan reflects the latest version of the National Institute of Standards and Technology (NIST) Framework for Improving Critical Infrastructure Cybersecurity (currently Version 1.1) and the standards and controls set forth in Executive Order 14028 and specifies the security and privacy controls being implemented;
- The plan will be reevaluated and updated on a periodic basis and as events warrant; and
- The plan will be submitted to MBI prior to the allocation of funds. If the subgrantee makes any substantive changes to the plan, a new version will be submitted to MBI within 30 days.

MBI will ensure the subgrantee also complies with the following supply chain risk management (SCRM) requirements:

- The prospective subgrantee has a SCRM plan in place that is either: (a) operational, if the prospective subgrantee is already providing service at the time of the grant; or (b) ready to be operationalized, if the prospective subgrantee is not yet providing service at the time of grant award;
- The plan is based upon the key practices discussed in the NIST publication NISTIR 8276, Key Practices in Cyber Supply Chain Risk Management: Observations from Industry and related SCRM guidance from NIST, including NIST 800-161, Cybersecurity Supply Chain Risk Management Practices for Systems and Organizations and specifies the supply chain risk management controls being implemented;
- The plan will be reevaluated and updated on a periodic basis and as events warrant; and
- The plan will be submitted to MBI prior to the allocation of funds. If the subgrantee makes any substantive changes to the plan, a new version will be submitted to MBI within 30 days. MBI will be required to provide a subgrantee's plan to NTIA upon NTIA's request.