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Pennsylvania
Broadband Development Authority

Broadband Equity, Access, and Deployment INITIAL PROPOSAL

VOLUME 2 



Pennsylvania Broadband Development Authority
Honorable, Uri Monson, Chairman
Brandon Carson, Executive Director





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**Broadband
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2.1 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.

Pennsylvania has identified four challenge areas that impede broadband access across the Commonwealth:

1. Broadband services and infrastructure availability
2. Digital equity and affordability
3. Device and technology access
4. Digital literacy and technical support

To address challenges with broadband service infrastructure and availability, the Commonwealth must:

Ensure Universal Availability of High-Speed and Scalable Broadband Networks

Increasing broadband access enables economic development by creating business opportunities and drawing residents. It allows residents fair access to opportunities available online, including those related to education, employment, and healthcare. It enhances the overall quality of life. This includes:

- a. Investing Pennsylvania's BEAD funds to partner with providers to build out infrastructure that supports, at minimum, 100/20 Mbps to all eligible locations (unserved and underserved), with the opportunity to scale to a higher speed.
- b. Investing Pennsylvania's BEAD funds to expand high-speed service to Community Anchor Institutions (CAIs) statewide.
- c. Focusing federal funding on infrastructure projects that are designed for long-term network sustainability.
- d. Focusing federal funding on projects that pair infrastructure deployment with resources that support equitable and affordable service.
- e. Focused efforts and strategies to support the development of a BEAD Infrastructure that promotes private and public partnerships to create sustainable career pathways for job creation.

Increase Widespread Internet Adoption and Meaningful Use

Investments in infrastructure should be accompanied by investments in digital equity and inclusion to ensure that all residents can meaningfully use and benefit. This includes:

- a. Fostering coordination, cooperation, and communication among residents, businesses, and CAIs by providing affordable internet options that fit the budgets of all residents without requiring them to compromise paying for necessities for the cost of internet.
 - Bolster existing programs and educate residents on where digital resources can be found and where public high-speed broadband is available.
 - Maintain a website that identifies where free public wireless fidelity (Wi-Fi) internet access and educational resources are available in Pennsylvania.

- b. Supporting Affordable Connectivity Program (ACP) awareness campaigns to increase broadband adoption among unserved and underserved communities.
 - Partner with local community organizations to provide resources and funding.
 - Support capacity-building programs that help individuals learn how to assist their communities in navigating the ACP enrollment process.
 - Partner with internet service providers (ISPs) to provide programs that subsidize internet services.
 - Support programs for device accessibility and digital literacy to help encourage adoption and meaningful internet usage.
 - Track progress through metrics gathering and data repositories.
- c. Advancing private and public partnerships that strengthen the PA BEAD Ecosystem that uniquely position and prepare businesses, industry partners, and local communities for meaningful job creation and career pathways.
 - Develop a workforce team comprised of internal and external partners to develop workforce related project activities and workforce standards.
 - Develop workforce broadband development areas that align with the priority unserved broadband service locations to cultivate local workforce teams.
 - Partner with the Pennsylvania Department of Labor & Industry, local workforce boards, and other industry groups to develop workforce development resources and funding opportunities.
 - Identify and support the workforce development of Pennsylvania Digital Navigator programs and jobs to support the adoption and meaningful use of the Internet.

Deploy Next-Generation Networks Statewide

BEAD guidance prioritizes fiber as a long-term scalable technology. Pennsylvania is a physically large state with geographic constraints. It contains multiple low density, rural areas and substantial topographic and environmental barriers that support the need to consider a varied range of technologies. Alternate technologies, both existing and emerging, could enable more resilient broadband access in Pennsylvania, even in difficult-to-reach areas. This includes:

- a. Exploring the value of alternate technologies in difficult-to-reach regions, including very remote or environmentally sensitive areas, while considering existing and emerging alternatives to fiber where appropriate, given geographic challenges, cost-effectiveness, or other factors. Alternatives to fiber could include licensed fixed wireless internet, cable, or satellite.
- b. Considering other funding sources, partnerships, and wireless technologies that build resiliency to complement fixed networks and allow more competition and choice.

Build a BEAD Statewide Workforce Ecosystem

Pennsylvania will lead the development of an ecosystem of public and private partnerships to support increasing economic growth and workforce development related to broadband expansion. Innovative and robust partnerships across Pennsylvania remain integral to program success. Enhanced economic growth and development of workforce provide residents with employment and training opportunities that will lead to a sustainable quality of life and overall well-being.

The BEAD Statewide Ecosystem will align local workforce areas, industry partners, and community stakeholders to develop a consortium for expanding a broadband infrastructure workforce talent pipeline and on-ramp to employment opportunities.

Increase Program Stewardship

Pennsylvania will drive successful broadband outcomes for residents through the following steps:

- a. Maximizing long-term, sustainable value to the Commonwealth and to residents.
- b. Providing transparency and accountability for fund allocation by providing the public with guidelines, FAQs, and instructional videos to ensure compliance and implementation meet federal requirements.
- c. Providing tracking mechanisms to ensure funds are used to fuel sustainable programs with measurable outcomes.
- d. Focusing deployments on networks managed by entities that will have the technical and financial capacity to maintain assets and ensure security.

2.2 Local, Tribal, and Regional Broadband Planning Processes (Requirement 2)

2.2.1 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.

Pennsylvania recognizes various needs, barriers, and preferences for engagement among a wide variety of stakeholders, including individuals and organizations representing the eight covered populations as outlined in the Digital Equity Act. The Commonwealth is committed to transparency and inclusivity in its engagement efforts.

A hallmark of the Pennsylvania Broadband Development Authority (PBDA)'s strategic planning and operations for implementing BEAD funds has been its practice of engaging the public and stakeholders in its mission to bring universal broadband access to Pennsylvania. With 67 counties spanning over nearly 45,000 square miles, Pennsylvania is distinct among other states for its high number of counties and governing structures. Forty-eight rural counties in Pennsylvania account for 25% of its population.¹


Furthermore, these counties include 83% of Pennsylvania's unserved and 72% of underserved Broadband Service Locations (BSLs).¹ PBDA has worked to identify the underlying and often varying origination of the digital divide experienced by rural and urban communities, engaging stakeholders from all areas to ensure that voices are heard, and needs are met.

Since its inception in 2021, PBDA has actively developed its outreach framework and executed engagement activities. Its stakeholder engagement process has been multifaceted, with in-person and virtual meetings happening throughout the Commonwealth. This has allowed PBDA to make meaningful connections with Pennsylvania residents, businesses, organizations, and local governments.

Public Engagement Goals and Objectives

Ensuring robust stakeholder engagement through the planning, proposal, and implementation phases of the BEAD Program is vital to the strategic investment of federal funding. PBDA focuses on inclusive engagement activities to draw in the perspectives of the unserved, underserved, and covered populations in addition to those active within the broadband and digital equity spaces. Soliciting input from a broad range of audiences will serve the collective interests of all Pennsylvanians as the Commonwealth works to close the digital divide. PBDA's goals and objectives will help the Commonwealth close the digital divide. They include:

1. Full geographic coverage of the Commonwealth's 67 counties through engagement efforts to assess broadband service and digital equity.
2. Meaningful engagement with diverse stakeholders, including unserved, underserved, and historically underrepresented communities, in a manner that streamlines the process.

¹ Source: *The Center for Rural Pennsylvania* 

3. Implementing a multi-faceted campaign to communicate with and inform all Pennsylvanians.
4. Developing and maintaining a robust stakeholder engagement list that encompasses industry experts, digital equity leaders, workforce developers, economic developers, county and local government leaders, and several state agencies that have a vested interest in broadband.
5. Conducting webinars and summits to increase awareness of PBDA's efforts to educate stakeholders and subject matter experts on PBDA's priorities and goals.
6. Designing and distributing a quarterly newsletter to PBDA's distribution list, which outlines accomplished milestones, opportunities for public engagement, awareness of upcoming Board and sub-committee meetings, and other public outreach events.
7. Coordination with local government leaders to distribute a broadband survey to Pennsylvania's 2,500 municipalities.

2.3 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 fulfill the coordination associated with its Final Proposal.

The Pennsylvania Broadband Development Authority (PBDA) and the Department of Community and Economic Development (DCED) are committed to meaningful community outreach, engagement, and coordination, particularly with those Commonwealth stakeholders most impacted by the implementation of BEAD funds. Throughout the planning phases intended to enable BEAD implementation, PBDA launched a robust engagement plan, designed, and implemented by PBDA staff, consultants, and with support from DCED's Communications and Marketing office. There are tiers of engagement that structure PBDA and its approach. These include the Board of Directors, sub-committees, and stakeholder outreach and engagement.

1. **The Board of Directors:** PBDA is governed by a board of directors functioning as a compass for PBDA. Members of PBDA's Board of Directors receive regular updates from PBDA's Executive Director. Members of the board include legislators and state agency secretaries and directors, all of whom act as spokespeople for PBDA. Board and sub-committee meetings are held in person and virtually and are open to the public.
2. **Sub-Committees:** As an additional mechanism of engagement across diverse stakeholders, four sub-committees were formed to address specific focus areas, including data and mapping, technical, workforce and supply chain, and outreach and education. Sub-committees include members with diverse backgrounds representing industry professionals, subject matter experts, and industry associations. In addition to attending monthly meetings, sub-committee members serve as representatives and trusted advisors to PBDA.
3. **Stakeholder Engagement:** Multiple virtual roundtable events were facilitated by PBDA during the BEAD planning process. These events aimed to engage key stakeholders to cover complex topics, including workforce development, industry perspectives, and community needs. These roundtables were attended by over 150 stakeholders with diverse interests. Additionally, PBDA has responded to several invitations and requests to speak at conferences and events. When engaging communities and stakeholders, PBDA representatives spend significant time listening to, and communicating at both the group and individual levels. This enables PBDA to better gather perspective, while also disseminating key critical information to ensure ongoing stakeholder participation.

In July 2023, PBDA partnered with NTIA, the County Commissioners Association of Pennsylvania (CCAP), the Pennsylvania Municipal League (PML), the Pennsylvania State Association of Township Commissioners (PSATCS), the Pennsylvania State Association of Township Supervisors (PSATS), and the Pennsylvania State Association of Borough Supervisors (PSABS) to co-host an intensive day-long event titled "Internet for All: Connecting the Commonwealth". This event aimed to engage local governments, economic development organizations, and other key stakeholders and educate them about the NTIA's BEAD Program. The event included panel sessions, a keynote address by DCED's secretary, Rick Siger, and was attended by 257 individuals (151 in-person and 106 virtually). Panel topics included Infrastructure Best Practices in Pennsylvania, Why Digital Equity Matters, Infrastructure Access and Equity Barriers and Tools to Break them Down, Local Coordination: How to Get Involved/Maximize Dollars Regionally, and Data Collection and Mapping- Why it Still Matters.

Throughout June, July, August, and September of 2023 PBDA hosted 26 in-person Community Conversation events across the Commonwealth. These sessions were designed to engage members of the community in discussions about broadband experiences, access, and to provide an opportunity for PBDA to disseminate information about PBDA’s Five-Year Action Plan and other efforts to ensure equitable, affordable broadband access for all residents, businesses, and communities. PBDA-organized community conversations were attended by over 550 individuals.

To advertise and build interest in these events, PBDA partnered with regional community institutions to serve as co-hosts. Partner organizations included economic development organizations, local chapters of the United Way, and other local community-based organizations. Local elected officials, including county commissioners and state legislators, were also encouraged to attend. To ensure accessibility and to engage a diverse audience, PBDA arranged childcare at all events, as well as food and refreshments for attendees.

In addition to community partners and a broad distribution list, PBDA requested assistance from sub-committee and Board members, locally elected leaders, and legislative members to assist in crowd building for each of these events. While no personally identifiable information was captured from attendees, through general discussion with participants it was clear that representation came from more than just the town and/or county where the Community Conversation was held.

PBDA sought to limit language, visual, and auditory barriers to participation in events. It hosted two Spanish language sessions, provided various materials in braille, and worked to ensure additional language and physical accommodation options were available as needed.

PBDA also encouraged community-based organizations to host their own Community Conversations utilizing a “meeting-in-a-box” toolkit as a facilitation aid. The “meeting-in-a-box” toolkit included marketing materials, scripts, slides, and a survey to collect feedback from attendees.

Concurrent with the Community Conversations calendar, PBDA developed and deployed the Broadband Connectivity and Digital Access Survey to solicit input from citizens regarding individuals or households with and without reliable internet service, and to seek suggestions about how internet access can be improved. The survey was available to be completed in English, Spanish, Simplified Chinese, Traditional Chinese, Russian, Vietnamese, and Korean. It was also available in braille. The survey was accessible online through the PBDA website and advertised through various channels such as PBDA’s email distribution list, sub-committee meetings, presentations, Community Conversation events, and over the telephone. Paper copies of the survey were also distributed at Community Conversations.

Survey questions included the following:

- Does the respondent have access to home internet?
- Does the respondent have a device to access the internet?
- The type/company of internet subscription the respondent has access to
- The speed of the respondent’s internet subscription.
- The type of cellular data plan(s) the respondent utilizes.
- The frequency the respondent accesses the internet at a variety of locations (home, a community center or library, at friends’ or families’ homes, at school, or at work).

- The frequency that members of the respondent’s household engage in internet-related activities.
- Employment status of the respondent.
- The respondent’s location of work or study.
- Whether stronger internet access would make working from more accessible.

The survey was open to residents across Pennsylvania between June and September 2023 and was completed by more than 7,000 individuals.

To facilitate consistent communication with interested stakeholders, PBDA established an e-mail distribution list. This list has proven to be an extremely efficient and impactful channel of communication. The distribution list includes more than 3,500 contacts from the following sectors:

- Local Development District administrators
- County and Local Governments
- Association partners
- Service Providers
- Economic and Community Development organizations
- Consulting groups
- State and federal legislators
- Digital Equity advocates
- Commonwealth of Pennsylvania employees
- Other non-profit and non-governmental institution representatives

Currently, PBDA’s quarterly newsletter is distributed to stakeholders on this email distribution list, as are major updates, announcements, and opportunities. In addition to email communication, PBDA’s outreach strategy utilizes a variety of other platforms, its website, Facebook, LinkedIn, and Twitter.

PBDA staff regularly respond to email inquiries received through its general resource account email address, and frequently schedule meetings and follow-up discussions in person or over the phone to address questions, concerns, and input from members of the community.

Additionally, PBDA regularly responds to media requests from local and state-level newspapers and magazines. Press releases will be issued in conjunction with important announcements, updates, and accomplishments related to PBDA and BEAD.

Stakeholder feedback has been directly incorporated into the Initial Proposal for BEAD funding. As an example, PBDA sub-committees were consulted on various sections, such as sub-grantee scoring criteria, defining project areas, and determining cost thresholds. Similarly, workforce experts were consulted to determine best practices for NTIA BEAD Initial Proposal workforce development requirements.

PBDA’s outreach and engagement efforts have been instrumental in informing PBDA’s State Broadband Plan, BEAD Five-Year Action Plan, as well as Initial Proposal Volumes I and II. PBDA views ongoing outreach as a crucial tool for fostering strong relationships across diverse stakeholders, developing community awareness about upcoming grant opportunities and broadband deployment, as well as encouraging PBDA and NTIA program buy-in.

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.

See attachment 2.3.1.1.

2.3.2 Describe the formal tribal consultation process conducted with federally recognized Tribes.

Not applicable, as Pennsylvania does not have any federally recognized Tribes.

2.4 Deployment Sub-Grantee Selection (Requirement 8)

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

PBDA has developed a detailed plan to competitively award sub-grants for BEAD-funded last-mile broadband deployment projects through a fair, open, and competitive process. The procedures outlined here aim to highlight PBDA's intent to maintain transparency and details a competitive and data-driven application strategy and materials to ensure that evaluations are not subjective, arbitrary, and/or biased.

The information in this section reflects established PBDA and DCED processes and procedures. Records, including e-mails and applications related to BEAD processes will be maintained in accordance with Commonwealth of Pennsylvania laws related to record retention and the Pennsylvania Right to Know Law (RTKL), 65 P.S. §67.101-67.3104.

The information in this section includes an outline for pre-award, award, and post-award program management:

- Solicitation, advertising, education, and technical advisement for sub-grantees.
- Intent to document and retain records for evaluation review, including rules and submission packages.

Competitive Processes

PBDA will conduct a competitive grant application process that will evaluate objective measures to ensure applications are complete and meet the basic requirements of the program. As part of this process, PBDA will evaluate the competitiveness of applications to ensure that the greatest positive sustainable impacts are achieved. The competitive process includes the various elements and measures explored in detail within section 2.4.1 of this document.

Additionally, PBDA will introduce accountability measures to ensure that applicants adhere to all stated commitments within the competitive process.

For all deployment projects, PBDA's program will primarily disburse funding to sub-grantees through an incremental reimbursement process, contingent upon invoice review, worker protection guarantee fulfillment, and project site inspections. Through this system, PBDA will reimburse the cost of deployment of any broadband technology developed through project funds that result in BSL connectivity within the signed sub-grantee agreement. As outlined in Requirement 19 of this document (section 2.16.2, part C), PBDA will, upon substantive evidence and/or refusal of a sub-grantee to adhere to PBDA and NTIA guidelines, claw back funding by cancelling reimbursement of expenses. More information about the reimbursement process is included in subsequent sections. In limited instances, PBDA will allow for fixed-amount awards. Fixed-amount awards will be considered by request or inquiry from the applicant.

Continuing Guidance, Transparency, and Clarification Commitment

Transparency

Pennsylvania's Right-to-Know Law (RTKL) 65 P.S. §§ 67.101-3104, ("RTKL") was designed to increase transparency in the government's decision-making and activities. The RTKL generally provides public access to the records of Commonwealth agencies, local agencies, courts, and legislative agencies. The sub-grantee shall contractually agree that it understands that the subgrant agreement and records related to, or arising out of the Grant Agreement, are subject to requests made pursuant to the Pennsylvania Right-to-Know Law.

Claw Back Provision

If the sub-grantee does not use all or a portion of the funds paid under the terms of the contract, the sub-grantee shall be liable to PBDA for the amount of unused or improperly used funds and shall return said funds to PBDA.

In the event that PBDA shall be entitled to repayment of all or a portion of the funds granted to the sub-grantee, the repayment shall include all interest, income, accumulations and the monetary equivalent of any appreciation in value of any property (real, personal or mixed) purchased with the funds granted them.

A check shall be written, payable to the Commonwealth of Pennsylvania, and forwarded to PBDA for: (1) the principal and (2) the total of any such interest, income, accumulations, or appreciation in value.

Clarification Commitment

In a timely manner throughout the application process, PBDA will issue clarifying guidance on application requirements, to streamline project development and clarify requirements for applicants. This will include a series of webinars covering frequently asked application questions, prevailing wage requirements, Environmental and Historical Preservation (EHP) requirements, Build America, Buy America (BABA) requirements, FCC data review, and other key application components. Webinars will be accessible to any eligible applicant, and will also review the regulations outlined in the BEAD Notice of Funding Opportunity (NOFO) to ensure adherence including:

- Disbursement of funding to sub-grantees for all deployment projects, at a minimum, on a reimbursable basis (which would allow the state or territory to withhold funds if the sub-grantee fails to take the actions the funds are intended to subsidize).
- Claw back provisions (see above) in agreements between the state or territory and any sub-grantee.
- Timely sub-grantee reporting mandates.
- Robust sub-grantee monitoring practices.

Webinar Provision

Webinar details (such as when they will happen and how applicants can register) will be communicated through PBDA's email distribution list and newsletters. Attendance of webinars is voluntary and will not be considered within the scoring criteria. Applicants, or their proxies, are strongly encouraged to attend all webinars. Where applicants did not attend a webinar and where their subsequent application lacks a required element or is improperly completed, and where that element was covered within a provided webinar, the application may be rejected in whole or deferred to secondary rounds.

Sub-granting Accountability Procedure Agreement

Sub-grantees will be required, as a part of the application process, to complete a “Sub-Granting Accountability Procedure Agreement” form that indicates recognition and acceptance of these accountability procedures.

Comprehensive Monitoring Commitment

PBDA will conduct comprehensive invoice reviews to ensure compliance with grant contracts and requirements outlined in its program guidelines and the BEAD Notice of Funding Opportunity (NOFO). PBDA will conduct project site visits on a random and periodic basis. It will request service provision data from applicants for new areas of services and will utilize Ookla, M-Lab, and other available and similarly developed speed test data to evaluate changes in speed service levels for all BEAD-funded projects.

The status of projects will be monitored using PBDA-developed documentation systems that monitor invoices, financial records, document compliance, and reimbursement calculation. Program reports will be made available to NTIA as scheduled and requested.

Timeline Transparency Commitment

PBDA will regularly publish updates and announcements on its [publicly-facing webpage](#), through emails to its distribution list, monthly newsletters, and announcements to sub-committees and its Board of Directors.

Application Consistency and Efficiency

PBDA will use a multi-phase application process and will structure project areas to be consistent with Census Block Groups to streamline review and implementation. In the application, PBDA will limit narrative responses to an appropriate word or character count, while ensuring opportunity for meaningful narrative. The applicant, if desired, will be invited to submit addenda and additional narrative, but the evaluation will be objective in nature, to include:

- Completeness of proposed service(s) by Census Block Group
- Proposed broadband speeds
- Reliability and technology preference
- Technological scalability to meet a minimum of 100/100 Mbps (where 100/20 Mbps is proposed)
- Detailed cost estimates
- Letter(s) of credit or performance bond(s) pursuant to BEAD Letter of Credit Waiver guidance issued by NTIA.² Letters of Credit issued by credit unions are permissible.
- Permitting acknowledgment or acquisition
- Workforce development program investments

Integrity, Openness, and Competitive Assuredness

PBDA is committed to treating all applicants equally. PBDA strictly forbids PBDA employees from providing any applicant with advanced knowledge of the project information. PBDA will ensure an open, fair, and transparent process.

² <https://broadbandusa.ntia.gov/funding-programs/policies-waivers/BEAD-Letter-of-Credit-Waiver>

All eligible applicants will be given equal access and the opportunity to apply for BEAD funding through the DCED Single Application for Assistance platform. As previously noted in this section, PBDA has established a data-driven, transparent, equitable, and competitive sub-grantee selection process. PBDA and the Commonwealth of Pennsylvania have in place various mechanisms to ensure that adequate safeguards exist to protect the integrity of grant competition, including safeguards against collusion, bias, conflicts of interest, arbitrary decisions, and other factors that could undermine confidence in the process outlined above.

Conflict of Interest Statement

If a PBDA official has or may have a conflict of interest with an applicant, the official shall be required to recuse themselves from all matters related to the grant, including but not limited to application evaluation, evaluation of competing grants subject to an area relating to the conflict of interest, scoring, compliance and monitoring, and reimbursement related to the conflict of interest. In these cases, all responsibilities related to the issue will be assigned to an alternate PBDA official.

Furthermore, all PBDA employees are subject to the Pennsylvania Public Official and Employee Ethics Act 65 Pa.C.S. § 1101 et seq. (“Ethics Act”). Section 1103(f) of the Ethics Act prohibits a PBDA employee or his/her spouse, child, or any business the official/employee, spouse or child is associated with, from entering into a contract (or sub-contract) valued at \$500 or more with PBDA unless the contract has been awarded through an open and public process. The Pennsylvania Ethics Commission has determined that an open and public process is not necessarily competitive bidding, but at a minimum includes prior public notice and subsequent public disclosure of all proposals considered and contracts awarded.

Applications will be evaluated in a neutral manner utilizing one pre-determined scoring matrix for each application. All applicants will be given the same timeline for application curing.

Sub-grantee Application and Vetting

The BEAD program sub-grantee application process is contingent on the following:

- National Telecommunications and Information Administration (NTIA) approval of Initial Proposal Volume II.
- Completion of the BEAD challenge process outlined within Volume I of the Initial proposal.
- Publication of a finalized list of unserved and underserved locations based on data from NTIA and/or FCC.
- Publication of a list of eligible CAIs.
- Program Guidelines that have been approved by PBDA’s Board of Directors.
- As required by PBDA, Program Guidelines will be posted publicly for at least 30 days prior to the opening of applications.

PBDA will ensure that these elements are in place prior to receiving applications.

Definition of a BEAD Eligible Project Area

The grant application process will include two grant rounds both consisting of preliminary and final application phases. Within these application rounds subsequent project areas will be evaluated. The total number of project areas will be reduced based on the award areas anticipated to come from the first round.

The estimated timeline for a two-round approach will progress as follows:

1. BEAD Challenge Process – 90 Days (upon approval of Initial Proposal Volume I)
 - Assumes that the challenge process occurs after the approval of the PBDA Initial Proposal Volume II.
2. Application round one:
 - 60 days
3. Round one application review:
 - 49 days
4. Application round two:
 - 60 days
5. Round two application review:
 - 46 days
6. Drafting of final proposal:
 - 60 days

Below are generalized details regarding project areas. This section serves to ensure that projects are complete and that applications cover whole Census Block Groups, a safeguard to ensure universal coverage. Additional details may be found within Section 2.4.3.

Applicants are permitted and encouraged to combine Census Block Groups and/or PBDA-aggregated project areas into a single project area or application submission.

PBDA will aggregate Census Block Groups into contiguous project areas. This aggregation will be based on, but not limited to, statistical analysis, NTIA cost data, BDC filing data, previous application cost data, existing service, geophysical characteristics, and other authoritative data. These aggregated project areas will be the primary mechanism used for projects in the first application period and will be used as a basis for consideration of project areas within the second-round application period.

Regardless of whether the project area is a single Census Block Group, an aggregate of Census Block Groups, a PBDA-aggregated project area, or a combination thereof, applicants must ensure that the proposed project area includes a minimum of 95% of BSLs located within the project area.

Applicants will be permitted to exclude BSLs up to only 5% of the total project area to control overall project costs. The applicant will indicate, within a PBDA-supplied .csv, those BSLs to be included or excluded, up to 5%. Regardless of inclusion, the applicant must supply associated estimated costs per passing within the .csv file. The 5% exclusion shall be limited to the costliest 5%, which can then be entered into the PBDA gap program.

Applicants will be required to provide a cost per BSL for the entire project area within the supplied .csv file. For the BSLs excluded from the project area, the applicant must note within the provided .csv documents the reasoning for exclusion.

Revised PBDA-supplied .csv Files

The applicant will revise the supplied .csv files to indicate the BSLs proposed to be served or not served, up to 5% with a 'Yes' or 'No' in the "Project BSL" column on the supplied .csv file. PBDA will evaluate the .csv files to ensure compliance with grant guidelines, completeness, and to ensure that no additions to .csv files are made. The .csv will offer the opportunity for the applicant to indicate cost per BSL. This will be completed for each individual BSL and will offer applicant the opportunity to indicate higher cost BSLs, as well as a justification for cost (e.g., for long drops).

Cost per BSL will be determined by the applicant. While PBDA intends to use the NTIA-supplied cost modeling tools, those tools simply provide a baseline metric for evaluation of proposed costs. PBDA will determine the delta between NTIA's cost estimates and the costs proposed by ISP to evaluate and investigate excessive costs. This evaluation will occur on an application-by-application basis after receipt and scoring of applications.

Potential justification may include, but is not limited to:

- a. The provision of service results overbuild;
- b. The provision of service is fiscally infeasible; or

Final determination of project areas will be made at the discretion of PBDA.

To ensure that project applications adhere to the NTIA policy defined within the BEAD NOFO, 20% of BSLs within a proposed project can be considered already served. The applicant must provide an overbuild affidavit indicating that no BEAD funds will be used in a manner exceeding the 20% threshold.

To provide universal service, PBDA reserves the right to re-define project areas, in line with NTIA and federal guidance, where it deems necessary. In areas where no applications are received, PBDA and the Commonwealth of Pennsylvania reserve the right to identify gaps as project areas, and to allocate funds accordingly.

Project Base Line Data Required for Application Submission

The grant application process will consist of two grant rounds, both consisting of preliminary and final application phases. Within the first round, at least 30 days prior to the first-round preliminary screening application deadline, PBDA will publish eligible project locations within two submission template spreadsheets on PBDA's website. These spreadsheets will be in .csv format and must be utilized in the submission process. Spreadsheets will be titled BSL.csv and CAI.csv. Only data published by PBDA as eligible within these .csv files will be accepted.

The BSL.csv file will contain the following columns:

- BSL location identification (as defined by the FCC version 3 fabric, and to be updated based on the most recent version of the FCC fabric);
- BSL service status (i.e., served, unserved, underserved);
- Identification of a Census Block Group the BSL is located within;
- Proposed cost per BSL; and
- Cost/exclusion justification where applicable.

The CAI.csv file will contain:

- BSL Location identification as defined by the FCC VXXX fabric;
- CAI service status (i.e., served, unserved, underserved);
- Identification of a Census Block Group the CAI is located within;
- Proposed cost per BSL; and
- Cost/exclusion justification.

It is incumbent upon the applicant to download the BSL.csv and the CAI.csv files from PBDA's website for use in both the Preliminary Screening and Final Screening applications. The applicant must indicate those BSLs within the .csv files that will provide service as part of the proposed project. An indication of 'Yes' or 'No' within the "Project BSL" column will be required. Other modifications to the .csv files will not be permitted, accepted, or considered.

Grant Application Process

The grant application process will consist of two grant rounds both consisting of preliminary and final application phases. The application process will remain identical between these two rounds, except for modification to the "Project Base Line Data Required for Application Submission" resulting from evaluations of first-round applications. The application system and required documents will remain identical. Applications rejected or deferred within the first round may be resubmitted within the second round.

Preliminary Screening Application Process

Preliminary Screening Applications will be accepted for a period of up to 90 days. Applicants will submit their proposed project through DCED's Single Application for Assistance online portal.

The purpose of the Preliminary Screening Application period is to ensure that applicants submit projects that are eligible, technically sound, and fiscally feasible.

Within 10 business days of Preliminary Screening Application closing date, PBDA will post applications and associated .csv files for all applications through PBDA's website. It should be noted that only project areas resulting from preliminary applications will be posted for public view. These project areas will include project name, provider name, total BSLs served, and proposed technology costs. Technical details, timelines, costs, and other competitive data will not be posted as a result of the preliminary application process.

PBDA will evaluate each Preliminary Application based on the completeness of materials requested, as well as the content of the materials including the following:

- a. Audited financial information for three years prior to application:**
If audited financial data is found to be suspect, inadequate, or contains findings that could negatively impact the applicant's ability to meet the obligations of the reimbursable grant program PBDA will explore curing alternatives. PBDA anticipates utilizing a third part consultant with experience in the analysis of audited financial documents to make determinations.
- b. Revised PBDA-supplied .csv:**
Within the .csv file, the applicant will indicate the BSLs proposed to be served. The .csv will include the opportunity for the applicant to indicate unique costs per BSL, as well as a justification for costs (e.g., long drops). Within the .csv the applicant will be able to identify those BSL IDs that they do not anticipate being able to serve within a project area, as well as providing a justification for each

(i.e., no electrical infrastructure to BSL, extremely high cost, physical barrier, etc.). While the applicant may exclude up to 5% of BSLs within a proposed project area, cost per BSL is required to be provided for those BSLs to be excluded from the project where high cost is cited at the primary justification. PBDA will evaluate the required .csv files to ensure compliance with grant guidelines, completeness, and to ensure that no additions to .csv files are made.

c. **Proposed technology:**

PBDA will evaluate proposed technology to ensure that it meets the minimum requirements as outlined the BEAD NOFO. It should be noted that the technology may differ between and Extremely High Cost Per Location Threshold areas (i.e., unlicensed fixed wireless).

d. **Proposed speeds:**

PBDA will evaluate proposed service speeds to ensure that they meet the minimum requirements and, if applicable, are scalable as required by the BEAD NOFO.

e. **Proposed monthly subscription costs:**

PBDA will evaluate the proposed monthly subscription cost to ensure that it is commensurate with the intent of the BEAD low-cost option and middle-class affordability guidelines.

f. **Proposed cost per passing:**

PBDA will evaluate the proposed cost per passing to ensure that it is commensurate with the intent of the BEAD program. The evaluation will be based upon data provided within the revised .csv returned to PBDA by the applicant.

g. **Proposed project total cost:**

The applicant must enter a dollar value for the total project cost as proposed.

h. **Proposed matching:**

The applicant must enter a dollar value for the total matching commitment.

i. **Match commitment letter:**

The applicant must complete a matching commitment template (to be provided by PBDA for download within the Single Application for Assistance). PBDA will evaluate this document to ensure that the form has been fully and adequately completed.

It should be noted that applications will be scored and deduplicated within the Final Application process to ensure a competitive and objective grant application process.

PBDA will, as needed, work with the applicant to cure applications where incorrect data is supplied or where omissions of required information have occurred. Failure of an applicant to make good faith efforts to cure applications at the request of PBDA within round one may result in the rejection of application(s) and/or deferment to round two. Failure of an applicant to make good faith efforts to cure applications at the request of PBDA within round two may result in the rejection of application(s).

Notice to Proceed for Final Application

Upon conclusion of the preliminary application review period, successful Preliminary Applicants will be notified via e-mail and invited to submit a final application.

Final Application Process

The Final Application process will consist of the elements listed below. All elements must be fully completed for the application to be considered. If elements are incomplete, applicants will be offered the opportunity to cure applications, however refusal to cure element may result in application rejection and/or deferment to round two.

Narrative One: The applicant must provide a brief narrative detailing:

- The scope of work specific to project funding.
- Intent to complete the project as proposed.
- Certification that the applicant will negotiate project areas in good faith as requested by PBDA.
- Intent to commit necessary funds that exceed final award and/or proposed project costs in order to complete the project.

Narrative Two: The applicant must provide a brief narrative detailing:

- Any regional investments already committed within the proposed project area.
- An overview of applicant's qualifications, including the following:
 - Company longevity (i.e., years in service).
 - Types of technology and how long they have been offered.
 - Service area experience (e.g., customers served, square miles, etc.)
 - Staff capacity dedicated to the completion of the project, including the total number of key staff with skills/experience in broadband design, development, deployment, and post deployment maintenance. For each staff position listed below indicate type of experience and years of experience. Staff positions may have more than one skill/experience:
 - Full-time permanent
 - Part-time permanent
 - Full-time temporary
 - Part-time temporary
 - Anticipated third party contractors including:
 - Company name
 - Corporate headquarter address
 - Identify the project manager and/or the local government and permitting coordinator. This should include the project manger's name, contact information, and years of experience.
 - Total number of key staff with skills/experience in broadband design, development, deployment, and post-deployment maintenance. For each staff position listed below indicate type of experience and years of experience.
- Primary applicants' previous experience administering federal and/or state funds for broadband builds. If none, indicate how the firm intends to facilitate reporting and compliance with requirements if funding is awarded.

Infrastructure Investment

To aid in the evaluation and deconfliction of applications, help avoid overbuild, and foster expeditious implementation, the applicant must provide answers to the following:

- Does the proposed project expand upon the applicant’s existing infrastructure? If yes:
 - Is middle mile infrastructure currently available within the project area? If so,
 - What type of technology is available?
 - How was the technology installed?
 - Buried infrastructure
 - Hung infrastructure
 - Tower and/or Wireless Assets
 - The year the infrastructure was installed.
 - Current speeds provided by the infrastructure.
 - Is last mile infrastructure currently available within the project area? If so,
 - What type of technology is available?
 - How was the technology installed?
 - Buried infrastructure
 - Hung infrastructure
 - Tower and/or Wireless Assets
 - The year the infrastructure was installed.
 - Current speeds provided by the infrastructure.
 - Are BSLs currently serviced within the project area? If so,
 - What type of technology is available?
 - Height of infrastructure, in linear feet.
 - The year the infrastructure was installed.
 - Current speeds provided by the infrastructure.
 - Are Microsoft Excel Spreadsheet containing service BSLs available?
 - Will the project provide middle mile open access?
 - Yes / No
 - Will the project provide last mile open access?
 - Yes / No

Key Project Management Individuals List and Attachments

Responses to the following questions will be submitted using a template provided by PBDA to ensure application consistency. To ensure that all applicants meet the minimum qualifications for managerial capability, for up to three individuals, as outlined in the BEAD NOFO, PBDA will require applicants to identify the key individuals responsible for the management of the project, and provide a description of the individuals’ role and responsibilities:

- List the name, current title, and years of experience for up to three individuals responsible for project management.
- For the three individuals listed above, provide a brief narrative (500 characters) of the individuals’ roles and responsibilities for the project.

- For the three individuals listed above, attach detailed resumes (template to be provided by PBDA) outlining relevant experience, including dates of services for each experience. This information must be completed within the template provided; narratives will not be accepted. The template will prompt applicants to provide examples of experiences for each NTIA-defined element of minimum qualifications for managerial capability including:
 - Broadband network development and deployment
 - Fiscal management of public funds
 - Other capacities as needed

Company Status and Profile

Applicants must provide the following responses:

- Does your organization anticipate any organizational changes during the grant/project period?
- Mergers (yes/no)
 - If yes – please describe (500 characters)
- Acquisitions (yes/no)
 - If yes – please describe (500 characters)
- Changes to relevant organizational policies (yes/no)
 - If yes – please describe (500 characters)

Question and Response Section One – Statement of Qualifications:

Certification by the applicant that voice, broadband, cable television, and/or electrical service has been provided for at least two years prior or is a subsidiary of a holding company.

- Total years in business
- List up to five recently completed projects related to broadband development, deployment, and/or upgrades.
 - The total project cost
 - The total number of BSLs served
 - The types of technology utilized

Additional details relevant to this section are included in Section 2.4.15.

Question and Response Section Two – Sub-grantee Ownership Qualification Certification:

- Applicants must list the name, address, citizenship, and percentage holding of all parties holding 10% or more stock in the applicant’s company.
- For limited partnerships, list name, address and citizenship of each limited partner whose interest in the 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).
- For general partnership, list the name, address and citizenship of each partner, and the share or interest participation in the partnership.
- In the instance of a limited-liability company, the name, address, and citizenship of each of its members whose interest in the applicant is 10% or greater.

- List all parties holding indirect ownership interests in the 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 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.
- List any FCC-regulated entity or applicant for an FCC license. The details of this question and requirements of PBDA are provided within Section 2.4.16 of this document.

Additional information relevant to this section is included in Section 2.4.16.

Question and Response Section Three – Sub-grantee Minimum Qualifications for Providing Information on other Public Funding:

- PBDA will require that applicants 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. These elements are listed in detail within
- Section 2.4.17. PBDA will require applicants to enter data directly into the Single Application for Assistance.

Attachment One – Project Proforma: The applicant must complete a project proforma.

Attachment Two– Audited Financial and Funding Availability Form: The applicant will be required to provide an audited financial document, prepared by a third party, which shall include:

- A balance sheet
- A cash flow statement
- An income statement
- A risk assessment
- A statement of shareholder equity

Along with this document, the applicant should work with a third-party vendor to incorporate a funding availability matrix that demonstrates cash on hand to meet the minimum match requirement, as well as what will be required to complete the project at its current proposed estimated cost.

Attachment Three – Letter of Credit: The applicant will be required to submit a letter of credit as required by NTIA and modeled upon the FCC’s template. PBDA will follow the most recent NTIA guidance related to Letter of Credit requirements. This template letter of credit will be supplied by PBDA for download within the Single Application for Assistance.

Attachment Four – Project Timeline Gantt Chart with Project Milestones: The applicant will be required to complete the project timeline Gantt template, provided by PBDA for download within Single Application for Assistance. Applicants will be required to indicate a tentative project start date and days to completion for prospective build-out and various milestone topics and days to completion 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 sub-grant. This document must be 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.

Attachment Five – Network Design Diagram: The applicant will be required to submit an industry standard network design diagram. This diagram must be sealed and certified by a professional engineer.

Attachment Six – Details Cost Estimate: Applicants will be required to provide a detailed cost estimate in table format. The cost estimate must detail cost for each element of the project including costs associated with:

- Design and engineering
- Permitting by type, agency
- Material purchases by item
- Contingency

The cost estimate must include a statement that prevailing wages were included within the estimated costs. It is expected that the applicant will, as will be demonstrated within the prevailing wage webinar, identify a pre-existing project within their geographic impact area for use in determining prevailing wages. The applicant must cite the Pennsylvania Department of Labor & Industry (L&I) project number utilized within detailed cost estimate. Estimates must be sealed by an engineer. Applicants may allow for a 25% contingency line item to assume inflation and labor escalation, but these expenditures will need to be justified during the reimbursement period. All applicants must supply a basis for cost outline that cites the resources used to generate cost estimates. Estimates that cite “industry knowledge” or “experience” will not be considered. Estimates that are redacted in part or in whole will not be considered.

Attachment Seven – Capital Investment Schedule with Implementation: The applicant will be required to provide a tabular report that demonstrates capital investments to be made within a specific range of dates, amount of investment, and a brief statement of investment outcome.

Attachment Eight – Workforce Health and Safety Committee Commitment Affidavit: The applicant will be required to complete the Workforce Health and Safety Committee Commitment Affidavit template, supplied by PBDA for download within the Single Application for Assistance. This template must be completed by the applicant, authorized by a company representative in a position of authority, and notarized.

Attachment Nine – Pennsylvania Prevailing Wage Adherence Affidavit: The applicant will be required to complete the Pennsylvania Prevailing Wage Adherence Affidavit template, supplied by PBDA for download within the Single Application for Assistance. This template must be completed by the applicant, authorized by a company representative in a position of authority, and notarized.

The applicant will be required to include within this template the project identification number from the L&I Prevailing Wage Application that was utilized for the development of the detailed cost estimate.

Attachment Ten – Affidavit Contractor or Sub-contractor Compliance: As required by PA Act 96 of 2021, applicants must submit an affidavit stating that the applicant will ensure that a contractor or sub-contractor performing construction, reconstruction, demolition, repair, or maintenance work on a high-speed broadband service infrastructure project funded through this program meets all requirements detailed in Section 2.4.13. This document will be provided to applicants as a template within the Single Application for assistance. Only this template, completed by the applicant, will be accepted.

Attachment Eleven – Engineers Certification Statement: The applicant will be required to complete the Engineers Certification Statement Affidavit template, supplied by PBDA for download within the Single Application for Assistance. This template must be completed by the applicant, authorized by a company representative in a position of authority, and notarized. This completed attachment will confirm that all services and materials herein will meet the minimum requirements within the guidelines provided.

Final Application Deconfliction and Adjudication

Following the preliminary screening application deadline, PBDA will determine completeness of applications. Applications that do not meet the requirements set forth within these guidelines will not be accepted.

For Census Block Groups that are found to be located within multiple projects, deconfliction will occur at a Census Block Group within Final Application adjudication. Judgment will be based upon proposed technology type, proposed speeds, scalability of proposed infrastructure, and average cost of services per BSL.

Final Project Area Determination

Following the preliminary application submission deadline, PBDA will post a finalized spreadsheet of eligible BSLs that have been assigned to project areas on its website.

While at the conclusion of both grant rounds one and two, PBDA intends to post full awarded applications, however PBDA will not post information that may reduce the competitiveness of grant applications during the round one and two process such as cost per BSL and/or project cost totals.

PBDA will publish applicant defined project areas for public view within PBDA's current web mapping application.

Applicants will, at this time in the process, review their respective project areas. If a project area has been adjusted by PBDA to include additional BSLs, the applicant may contest the inclusion of additional BSLs within their project area based on the criteria that:

- The provision of service would result in overbuild;
- The provision of service would be fiscally infeasible.

If additional modification(s) are warranted, those modifications will be made and posted material may be updated.

Final Application Submission

Within 90 days of notice to proceed, applicants must submit full applications to provide broadband access. PBDA will invite applications through the Single Application for Assistance. Applicants, when submitting a final application, must propose to serve all locations as defined by PBDA and provided within the Final Project Area .csv. Final applications submitted by an eligible entity that fail to provide broadband access to all BSLs identified within the final project areas will not be considered. If an application was rejected and/or deferred within round one (1) these applications may be resubmitted within round two (2).

Posting of Locations Subject to Application

Pursuant to PA Act 96 of 2021, PBDA will, within 10 business days, make the proposed unserved areas, underserved areas, and the community anchor institutions subject to project application available for review on PBDA's publicly accessible website following the submission deadline.

Final Application Curing

Following the submission of full applications, PBDA will begin evaluation of all submitted proposals. Curing of Final Applications will begin upon receipt of an application and continue until scoring of applications begins. Curing will ensure that the applications received adhere to the Final_Project_BSL_ApplicationID.csv and Final_Project_CAI_ApplicationID.csv, ensuring the inclusion of all required BSLs. Curing will also ensure that all required documents and assurances are completed/provided, including, but not limited to:

- Worker Protection and Investment Certification Form
- Prevailing Wage forms/affidavits
- Letters of credit
- Detailed and certified cost estimates
- Build America Buy America (BABA) certifications

Applications that fail to meet the requirements of curing may be rejected and/or deferred.

Final Application Scoring

Upon successful completion of the curing process, applications will move to the scoring phase.

Award and Notification

Once projects are approved by PBDA's Board of Directors, PBDA will notify applicants. At this time, grant agreements will be executed. Grant Programs will be operated as a reimbursable program with 10 % of the total award amount held in reserve and released upon project completion and PBDA acceptance of a final report. If an applicant fails to adhere to the commitments made within its application, or fails to complete the project, reimbursement of the final reserve will not occur and/or the applicant shall be liable to PBDA for the amount of unused or improperly used grants funds and shall return said funds to PBDA. The repayment to PBDA shall include all interest, income, accumulations, and the monetary equivalent of any appreciation in value of any property (real, personal, or mixed) purchased with the funds granted to them.

Final Application Posting

PBDA will, upon award of funding, post for public view those awarded full applications with redactions as deemed appropriate to protect the interests of the applicant. Applications will be available for review on PBDA's publicly accessible internet website.

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.

PBDA will adopt the scoring criteria and respective weight of the criteria as outlined in the BEAD NOFO on pages 42-46, for the purposes of evaluating priority broadband projects.

Scoring for Priority Broadband Projects

PBDA's process for selecting sub-grantees for last-mile broadband deployment projects will first assess which locations or sets of locations under consideration are subject to one or more proposals that constitute Priority Broadband Projects and satisfy all other requirements set out in this NOFO with respect to sub-grantees.

PBDA has committed to ensuring that in the event there is just one proposed Priority Broadband Project in a location or set of locations, and that proposal does not exceed PBDA's defined Extremely High Cost Per Location Threshold, that proposal will be the default winner. PBDA reserves the ability, as outlined within NTIA's Initial Proposal Guidance, to request a grant waiver from the Assistant Secretary, which would allow PBDA to allow to select an alternative project, or if PBDA determines the application to be deficient in meeting NTIA-defined program guidelines.

All proposals that qualify as Priority Broadband Projects will be scored based on the elements outlined below. If there are multiple proposals in a location or set of locations that constitute a Priority Broadband Project and satisfy all other requirements with respect to sub-grantees, PBDA will competitively select a project based on the criteria outlined herein. If there are multiple projects submitted in a given location or locations and one or more do not qualify as Priority Broadband Projects, they may be evaluated as "other last-mile deployment projects".

Composite Score Elements:

- **Minimal BEAD Program Outlay (Range 0 –40 points, or 40% of 100):**
 - **Description:** PBDA will award points based on evaluations of a proposed project's total cost, with adjustment to score based on the inclusion of scalability and resiliency elements, as well as the applicant's proposed match (which must, absent a waiver, cover no less than 25 percent of the project cost).
 - **Base Cost Scoring**
 - **Per BSL Cost Scoring (Range= 0% –100% and maximum of 25 points)** – The most cost-efficient proposal, evaluated by the total funding requested to provide broadband access to a defined application area, will receive full credit under this section. Less cost-efficient proposals will receive a percentage of points available, reflecting the percent distance they are from the most efficient project. Consideration will be given to proposed projects where per location costs account for network design that could potentially make a project more expensive, but also more scalable or resilient.
 - **Match Scoring (Range = 0% –100% and maximum of 15 points)** – Match scoring awards more points to providers offering a higher match:
 - **Minimum Match (5 points)** Based on the total project costs, applicants must supply a minimum of 25% match. For example, if the requested project amount is \$10,000,000, the minimum required grant match amount will be \$2,500,000. Ten points will be awarded to those projects that meet the minimum 25 percent match requirement. Zero or no points will be awarded to those projects that do not meet the minimum match requirement.

- Match Exceeding Minimum (Range= 0% –100% and maximum of 5 points) Applicants will be awarded up to 10 points based on 10% (2 point) increments over the minimum match requirement, up to an excess match of 50% total project costs. For example, if the requested project amount is \$10,000,000 and the applicant provides a match that is 50 % of the total project cost (or \$5,000,000) the program will be awarded 10 points. Projects that only meet the minimum match requirement will not be awarded any points in this category.
- **Affordability (Range 0 –25 points, or 25% of 100):**
 - **Description:** PBDA will conduct a comparison of all applications to determine proposals for affordable pricing based on 1000/1000 Mbps. The price provided by the applicant for this speed shall be inclusive of all equipment, taxes, fees, and charges billed to the customer. Applicant defined pricing for 1000/1000 Mbps will be binding for the period of performance.

Should the applicant choose to provide an alternate speed, PBDA will continue to fund the project, if the provided speeds associated with the application define pricing that is not less than 100/20 Mbps and 1000/1000 Mbps, respectively, for the period of performance.
 - **Scoring:** 12.5 points will be provisioned for each tier of service and will be evaluated comparatively based on the range of prices received across applications to determined baseline averages. Additional evaluation may be conducted where competing and/or overlapping applications are received. Scoring will be based on the deviation from the average on a sliding scale of zero to 12.5 points for each tier. Adherence to the proposed price for the period of performance will be annually adjusted for inflation via the Consumer Price Index (CPI), Philadelphia-Camden-Wilmington.
- **Fair Labor Practices (Range 0 –15 points, or 15% of 100):**
 - **Description:** Applicants must describe a series of projects that demonstrate compliance with Federal labor/employment laws via the submission of a project overview template provided by PBDA. Applicants without a record of labor and employment law compliance are permitted to mitigate this fact by making specific, forward-looking commitments to strong labor and employment standards and protections with respect to BEAD-funded projects. This would be done primarily through the submission of the Worker Protection and Investment Certification Form and Pennsylvania Prevailing Wage Compliance form provided as a template by PBDA. Additionally, the provision of a preliminary detailed cost estimate that certifies the inclusion of prevailing wages.
 - **Scoring:** Applicants will receive an objective score that ranges from 0-100% of possible points:
 - 0% will be awarded if the application lacks all three elements
 - 50% will be awarded to applicants that demonstrate two elements
 - 100% will be awarded to applicants that demonstrate all three elements
- **Speed to Deployment (Range 0 or 1 point, or 1% of 100):**
 - **Description:** All applicants 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 in no more than three years after the date on which the sub-grantee receives the sub-grant from PBDA.
 - **Scoring:** Applicants will be awarded a full point if they demonstrate a plan to deliver services in no more than three years via **Attachment Four – Project Timeline Gantt Chart with Project Milestones**, referenced in section 2.4.1.

- **Equitable Workforce Development and Job Quality (Range 0 –10 points, or 10% of 100):**
 - **Description:** Applicants will be required to provide a detailed workforce development plan that includes the following elements:
 1. A comprehensive workforce plan that utilizes a strategic, measurable, attainable, realistic, time-bound, inclusive, and equitable framework with objectives and goals to develop a diverse workforce.
 2. A description of how the applicant intends to prioritize hiring local workers and a specific plan to recruit and engage with historically underrepresented populations.
 3. PBDA strongly encourages that at least 15% of the sub-grantees’ workforce is comprised of one or more of the following options:
 - a. A directly employed workforce from local or regional areas of Pennsylvania.
 - b. Employees who have completed registered apprenticeships or pre-apprenticeships.
 - c. Employees are hired because of joint labor-management partnerships with a Pennsylvania local union or industry group.
 - d. On-the-job training opportunities to recruit new employees.
 4. Applicants can demonstrate how they intend to address challenges that affect the workforce by providing or connecting employees to wraparound services by one or more of the following elements:
 - a. A letter of intent from a private or public partnership that indicates the type of wraparound services that will be available to the applicant’s workforce.
 - b. A description of current wraparound services offered by the applicant to address challenges that affect work access and training completion. Applicants can provide a PDF copy or link to wraparound services if published.
 - c. A description of how the applicant will develop new or enhance current wraparound services available to the workers hired by the applicant. High-quality, industry-recognized credentialing and training for new employees.
 - **Scoring:**
 - 0 points will be awarded if the application lacks all four elements
 - 2.5 points will be awarded to applicants who demonstrate one element
 - 5 points will be awarded to applicants who demonstrate two elements
 - 7.5 points will be awarded to applicants who demonstrate three elements
 - 10 points will be awarded to applicants who demonstrate all four elements
- **Local Government Coordination (Range 0 –4 points, or 4% of 100):**
 - **Description:** PBDA has developed a Broadband Ready Communities program to aid municipalities in the preparation for broadband demand and deployment within their communities. To further facilitate this mission, PBDA has incorporated into its scoring a requirement for applicants to coordinate and/or demonstrate the attempt to coordinate with municipalities that will be impacted. The applicant may choose how to best coordinate with local municipal governments; however, the following tasks must be completed.

First, the applicant will be required to meet with, individually or within a multi-municipal meeting, a representative of each impacted municipality to discuss the proposed project, impacts, and engage in open dialog with impacted municipal representatives. The applicant may choose to coordinate with the County government to facilitate this outreach.

Second, coordination efforts must be well-documented. To facilitate this, the applicant should complete a Local Government Coordination spreadsheet, provided by PBDA, which outlines all municipalities impacted by the proposed project, the date each municipality was contacted, the point of contact within the municipality, and whether a meeting occurred. PBDA is open to various engagement formats, including:

- Speaking at an impacted municipality’s public meeting
- Meetings with individual local government representatives
- County coordination and facilitated discussion with impacted municipalities.

Should a municipality be nonresponsive or refuse to meet with the applicant, the applicant should provide documentation demonstrating a good faith effort to engage. This can include e-mails and/or efforts documented within the Local Government Coordination spreadsheet. No point deduction will be assessed for lack of coordination with a local government unit that is nonresponsive so long as the lack of response or refusal to participate is well documented.

For each engagement, meeting minutes should be taken outlining topics of discussion, questions asked, and general feedback received. Topics of discussion should include:

- Project timeline
- Project scope and scale
- Infrastructure development type and needs
- Local permitting, bonding, and right-of-way needs and impacts.

Finally, the applicant must complete and submit a single affidavit confirming the applicant’s engagement efforts and consistency with this scoring criteria. This template must be completed by the applicant, authorized by a company representative in a position of authority, and notarized.

- **Scoring:** A full four points will be awarded to applications that demonstrate completeness of this criteria and/or a good faith effort to coordinate with all impacted local government units.
- **Open Access – (Range 0 –5 points, or 5% of 100):**
 - **Description:** PBDA supports 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.
 - **Scoring:** Full points will be awarded to those applicants that provide last mile open access. No points will be awarded for those applicants that fail to provide open access of last mile.

Scoring for Other Last-Mile Broadband Deployment Projects

In determining between competing projects that are not Priority Broadband Projects covering the same locations or area, PBDA will consult the criteria detailed in the BEAD NOFO.

- **Minimal BEAD Program Outlay (Range 0 –35 points, or 35% of 100):**
 - **Description:** The total BEAD funding that will be required to complete the project, accounting for both total projected cost and the applicant’s proposed match (which must, absent a waiver, cover no less than 25% of the project cost), with the specific points or credits awarded increasing as the BEAD outlay decreases.

- **Scoring:**
 - **Per BSL Cost Scoring (Range = 0% –100% and maximum of 25 points)** – The most cost-efficient proposal, evaluated the total funding requested to provide broadband access to a defined application area, will receive full credit under this section. Less cost-efficient proposals will receive a percentage of points available, reflective of their percent distance from the most efficient project.
 - **Scalability of Technology (Range = 0% –100% and maximum of 10 points)** – Scoring for this category will be done on a scaled grading system. One point shall be awarded for proposed speeds of 100/20 Mbps while 10 points will be awarded for 1,000/200 Mbps.
 - **Match Scoring (Range = 1 –5 points)** – Match scoring awards more points to providers offering a higher match:
 - Minimum Match (1 points) will be awarded to those projects that offer a match of equal to 25% up to 50% or less. 2.5 points will be awarded to those projects that offer a match of greater than 50% and less than or equal to 75%. 5 points will be awarded to those projects that offer match greater than 75%.
- **Affordability (Range 0 –25 points, or 25% of 100):**
 - **Description:** PBDA will conduct a comparison of all applications to determine proposals for affordable pricing. PBDA has, in partnership with various stakeholders, determined that the speed of 100/20 Mbps will be utilized for this evaluation. The price provided by the applicant for this speed shall be inclusive of all equipment, taxes, fees, and charges billed to the customer.

The applicant-defined affordable price will be bound to the provision of 100/20 Mbps minimum affordable speed to be provided by the applicant for the period of performance. An alternate affordable speed will be accepted provided it is not less than 100/20 Mbps and adheres to the applicant-defined affordable price for the period of performance.
 - **Scoring:** Costs will be evaluated comparatively based on the range of prices received across applications to pre-determined baseline averages. Additional evaluation may be conducted where competing and/or overlapping applications are received. Scoring will be based on the deviation from average on a sliding scale of 0-20 points. Adherence to the proposed score for the period of performance for the grant will be indexed to the Consumer Price Index (CPI), Philadelphia-Camden-Wilmington to account for inflation.
- **Fair Labor Practices (Range 0 –15 points, or 15% of 100):**
 - **Description:** Applicants must demonstrate a series of projects that demonstrate compliance with Federal labor/employment laws via the submission of a project overview template provided by PBDA. Applicants without a record of labor and employment law compliance are permitted to mitigate this fact by making specific, forward-looking commitments to strong labor and employment standards and protections with respect to BEAD-funded projects.
 - **Scoring:** Applicants will receive an objective score that ranges from 0-100% of possible points:
 - 0% will be awarded if the application lacks all three elements
 - 50% will be awarded to applicants that demonstrate two elements
 - 100% will be awarded to applicants that demonstrate all three elements

- **Speed to Deployment (Range 0 –1 point, or 1% of 100):**
 - **Description:** All applicants 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 three four years after the date that the award is granted.
 - **Scoring:** Applicants will be awarded a full point if they demonstrate a plan to deliver services within no more than three years, or in advance of the period of performance for the project via **Attachment Four – Project Timeline Gantt Chart with Project Milestones**, discussed within section 2.4.1
- **Speed of Network and Other Technical Capabilities (Range 0 –5 points, or 5% of 100):**
 - **Description:** PBDA will weigh the speeds, latency, and other technical capabilities of the technologies proposed by applicants seeking to deploy projects that are not Priority Broadband Projects. Applications that propose using technologies that exhibit greater ease of scalability with lower future investment and whose capital assets have longer useable lives will be afforded additional weight over those proposing technologies with higher costs to upgrade and shorter capital asset cycles.
 - **Scoring:** PBDA will evaluate and score responses under this category.
- **Equitable Workforce Development and Job Quality (Range 0 –10 points, or 10% of 100):**
 - **Description:** PBDA is committed to the cultivation and sustainability of an equitable workforce ecosystem committed to public and private partnerships that invest in developing quality employment opportunities while addressing challenges that affect an evolving workforce's access to training and wraparound services (i.e., childcare, transportation, reasonable accommodations, etc.)

Applicants will be required to provide a detailed workforce development plan that includes the following elements:

- A description of a comprehensive workforce plan that utilizes a strategic, measurable, attainable, realistic, time-bound, inclusive, and equitable framework with objectives and goals to develop a diverse workforce.
- A description of how the applicant intends to prioritize hiring local workers and a specific plan to recruit and engage with historically underrepresented populations.
- PBDA strongly encourages that at least 15% of the sub-grantees' workforce is comprised of one or more of the following options:
 - a. A directly employed workforce from local or regional areas of Pennsylvania.
 - b. Employees who have completed registered apprenticeships or pre-apprenticeships.
 - c. Employees are hired because of joint labor-management partnerships with a Pennsylvania local union or industry group.
 - d. On-the-job training opportunities to recruit new employees.
- Applicants can demonstrate how they intend to address challenges that affect the workforce by providing or connecting employees to wraparound services by one or more of the following elements:
 - a. A letter of intent from a private or public partnership that indicates the type of wraparound services that will be available to the applicant's workforce.

- b. A description of current wraparound services offered by the applicant to address challenges that affect work access and training completion. Applicants can provide a PDF copy or link to wraparound services if published.
- c. A description of how the applicant will develop new or enhance current wraparound services available to the workers hired by the applicant. High-quality, industry-recognized credentialing and training for new employees.

– **Scoring:**

- 0 points will be awarded if the application lacks all four elements
- 2.5 points will be awarded to applicants who demonstrate one element
- 5 points will be awarded to applicants who demonstrate two elements
- 7.5 points will be awarded to applicants who demonstrate three elements
- 10 points will be awarded to applicants who demonstrate all four elements.

• **Local Government Coordination (Range 0 –4 points, or 4% of 100):**

- **Description:** PBDA has developed a Broadband Ready Communities’ program to aid municipalities in the preparation for broadband demand and deployment within their communities. To further facilitate this mission, PBDA has incorporated into its scoring a requirement for applicants to coordinate and/or demonstrate the attempt to coordinate with municipalities that will be impacted. The applicant may choose how to best coordinate with local municipal governments; however, the following tasks must be completed:

First, the applicant will be required to meet with, individually or within a multi-municipal meeting, a representative of each impacted municipality to discuss the proposed project, impacts, and engage in open dialog with impacted municipal representatives. The applicant may choose to coordinate with the County government to facilitate this outreach.

Second, coordination efforts must be well documented. To facilitate this, it is requested that the applicant complete a Local Government Coordination spreadsheet, provided by PBDA, which outlines all municipalities impacted by the proposed project, the date each municipality was contacted, the point of contact within the municipality and whether a meeting occurred. PBDA is open to various engagement formats, including:

- Speaking at an impacted municipality’s public meeting.
- Meetings with individual local government representatives.
- County coordination and facilitated discussion with impacted municipalities.

Should a municipality be nonresponsive or refuse to meet with the applicant, the applicant should provide documentation demonstrating a good faith effort to engage. This can include e-mails and/or efforts documented within the Local Government Coordination spreadsheet. No point deduction will be assessed for lack of coordination with a local government unit that is nonresponsive if the lack of response or refusal to participate is well documented.

For each engagement, meeting minutes should be taken outlining topics of discussion, questions asked, and general feedback received. Topics of discussion should include:

- Project timeline
- Project scope and scale
- Infrastructure development type and needs
- Local permitting, bonding, and right-of-way needs and/or impacts

Finally, the applicant must complete and submit a single affidavit of coordination which confirms the applicant's engagement efforts and consistency with this scoring criteria. This template must be completed by the applicant, authorized by a company representative in a position of authority, and notarized.

- **Scoring:** A full four (4) points will be awarded to applications that demonstrate completeness of this criteria and/or a good faith effort to coordinate with all impacted local government units.
- **Open Access (Range 0 –5 points, or 5% of 100)**
 - **Description:** PBDA supports 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.
 - **Scoring:** Full points will be awarded to those applicants that provide for open. No points will be awarded for those applicants that fail to provide open access to last mile.

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

See attachment 2.4.2.1.

2.4.3 Describe how the proposed sub-grantee 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.

Determination of Unserved and Underserved BSL Count

The final number of unserved and underserved BSLs that will require BEAD funding is unknown at this time. PBDA will allocate \$200 million for broadband expansion through the U.S. Treasury-funded Capital Projects Fund's Broadband Infrastructure Program (CPF BIP) prior to the allocation of BEAD funds. As part of this process, BSLs will be subjected to enforceable commitments because of CPF BIP and therefore will impact the fundability and status of BSLs. A final, definitive number of locations requiring broadband infrastructure investments will be known after the disbursement of other PBDA funds, the BEAD Challenge Process, and the application period for BEAD. However, it is the intent of PBDA that all serviceable locations within the Commonwealth will be addressed through federal funding.

Definition of Project Areas

PBDA will, based upon statistical analysis, NTIA Cost data, BDC filings, previous application project cost filings, geophysical similarity, continuity of current service provision, and other authoritative datasets, aggregate some Census Block Groups into contiguous project areas. These project areas will be primarily developed in areas that radiate outward from currently served areas to under and unserved areas. These aggregated project areas will be the primary focus of the first round of grant applications and used as a basis for consideration of project areas within the second round.

Regardless of whether the project area is a single Census Block Group, an aggregate of Census Block Groups, a PBDA-aggregated project area, or a combination thereof, applicants must ensure that the proposed project area includes a minimum of 95% of eligible BSLs located within that project area. For

BSLs excluded from the project area, the applicant must note within the provided .csv documents the reason for exclusion. Examples of potential justification could include the following:

- The provision of service results in overbuild
- The provision of service is fiscally infeasible
- The location in question does not constitute a BSL.

As a result of rounds one and two of the application process, PBDA reserves the right to divide defined project areas into smaller projects areas as needed. This could also happen (but in limited circumstances) due to extenuating conditions, as a result of an applicant inquiry or request.

To ensure that the project areas meet the NTIA policy that is defined within the BEAD NOFO, a maximum of 20% of BSLs proposed to be served within a given project area may be classified as served or provide an overbuild affidavit indicating that BEAD funds will not be allocated towards overbuild.

To provide universal service, PBDA reserves the right to re-define project areas, in line with NTIA and federal guidance, where it deems necessary. In areas where no applications are received, PBDA and the Commonwealth of Pennsylvania reserve the right to identify gaps as project areas, and to allocate funds accordingly.

The process for outlining the adjustment and negotiation of project areas with sub-grantees is outlined within Section 2.4.1 – Grant Application Process, Final Application Process, Final Application Curing, above.

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”.

Not applicable.

2.4.5 The proposed sub-grantee selection process is expected to demonstrate to sub-grantees how to comply with all applicable Environmental and Historic Preservation (EHP) and Build America, Buy America Act (BABA)⁶ requirements for their respective project or projects. Describe how the Eligible Entity will communicate EHP and BABA requirements to prospective sub-grantees, and how EHP and BABA requirements will be incorporated into the sub-grantee selection process.

To ensure that BEAD funds are spent on broadband implementation-related products and supplies from American businesses and manufacturing, PBDA will comply with the Build America, Buy America Act (BABA). In addition to information on this topic that has already been shared with PBDA stakeholders and potential sub-grantees (in particular, through Workforce & Supply Chain Sub-Committee presentations), this policy will be communicated to all prospective sub-grantees prior to the application period. This will happen through various outlets, including a Frequently Asked Questions (FAQ) page on the PBDA website, a policy-related informational webinar, and instruction included on the BEAD guidelines and application. BABA requirements will be reiterated through the contract agreement and through all monitoring and evaluation requirement instruction documents.

Adherence to BABA requirements will be considered during the sub-grantee selection process. In particular:

- Taxpayer dollars invested in public infrastructure should not be used to reward companies that have moved their operations, investment dollars, and jobs to foreign countries or foreign factories, particularly those that do not share or openly flout the commitments of the United States to environmental, worker, and workplace safety protections.
- Entities using taxpayer-financed Federal assistance should give a commonsense procurement preference for the materials and products produced by companies and workers in the United States in accordance with the high ideals embodied in the environmental, worker, workplace safety, and other regulatory requirements of the United States.
- Construction materials such as steel, iron, manufactured products (including fiber-optic communications facilities), non-ferrous metals, plastic and polymer-based products, glass, lumber, and other construction materials used in the funded BEAD project must be produced in the United States unless a waiver is granted.
- In determining whether a product is produced in America, subrecipients must comply with definitions included in Section 70912 of the Build America, Buy America Act, which provides that a manufactured product is considered produced in the United States if the manufactured product was manufactured in the United States and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation.
- Sub-grantees may not use BEAD funding to purchase or support any covered communications equipment or service, as defined in Section 9 of the Secure and Trusted Communications Networks Act of 2019 (47 U.S.C. § 1608).
- As prohibited by the Infrastructure Act, sub-grantees may not use BEAD funding to purchase or support fiber optic cable and optical transmission equipment manufactured in the People's Republic of China, unless a waiver is granted by the Assistant Secretary.

In accordance with BABA, the U.S. Department of Commerce (DOC) has proposed issuing a limited, general applicability, non-availability waiver of the Buy America Domestic Content Procurement Preference (Buy America Preference) to recipients of Federal financial assistance under NTIA's BEAD Program, which will benefit sub-recipients. The waiver incentivizes the domestic production of specific manufactured products based on strategic prioritization criteria, including network and data security, which will directly expand American job opportunities. It also promotes broad participation in the BEAD program and ensures that BEAD sub-grantees will have access to the manufactured products necessary to fulfill obligations under the program. The waiver allows funding recipients to continue to provide economic opportunity through innovation and timely deployment of broadband infrastructure, which is recognized to expand job opportunities, and supports the timely development of critical domestic infrastructure.

PBDA will adhere to all Environmental and Historic Preservation (EHP) requirements included in the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 et seq.) and National Historic Preservation Act (NHPA) (54 U.S.C. § 300101 et seq.). Said requirements will be communicated to potential applicants and sub-grantees through information included on the above-mentioned Frequently Asked Questions webpage, the above-mentioned policy webinar, and through instruction included on the BEAD guidelines and application. Additionally, information will be reiterated through the contract agreement and through all monitoring and evaluation requirement instruction documents.

Adherence to EHP requirements will be considered during the sub-grantee selection process. In particular:

- Projects that involve construction and/or ground-disruption activities will be required to submit all required environmental documentation to PBDA. PBDA will include this documentation in its Final Proposal.
- Sub-grantees are responsible for obtaining and providing proof of all necessary federal, state, and local government permits and approvals necessary for conducting the proposed work.
- Projects must be designed to minimize potential for adverse impacts on the environment.

PBDA will conduct thorough reviews of all invoices and materials provided by sub-grantees to ensure compliance prior to reimbursement. PBDA will also conduct field views and project inspections on a randomized basis to ensure compliance with submitted documentation.

2.4.6 Describe how the Eligible Entity will define project areas from which they will solicit proposals from prospective sub-grantees. If prospective sub-grantees 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.

Applicants will be solicited to provide projects at a Census Block Group. Generally, the smallest project proposal will be a single Census Block Group.

- Projects must consist of entire Census Block Group, determined by PBDA;
- The minimum project area accepted will be a singular whole Census Block Group;
- If the proposed project includes a BSL that falls within a Census Block Group the entirety of all BSLs un/underserved within that Census Block Group must be included within the project, unless the applicant can provide clear and specific evidence.

All unserved and underserved locations within a Block must be included in any project scope, with minimal exceptions.

To provide universal service, PBDA reserves the right to redefine project areas, in line with NTIA and federal guidance, where it is deemed necessary. In areas where no applications are received, PBDA and the Commonwealth of Pennsylvania reserve the right to identify those gap areas as project areas and allocate funds accordingly via a Commonwealth developed solution, reverse auction, and or subsequent grant rounds open to eligible applicants.

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 sub-grantees 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.

Due to the two-phased application structure of program, PBDA will be able to determine locations that are unserved, underserved, or a combination of where no suitable applications are received. PBDA will refer to these areas as gaps. Gaps in service should be limited based on the requirement that project areas encompass whole Census Block Groups, however deliberation of feasibility is permitted.

If, during the Preliminary Application phase there are identified gaps within the provision of service, PBDA will engage in one of the following three alternatives:

PBDA may negotiate with ISPs to include additional BSLs down to a singular basis where needed. The negotiation of inclusion may dictate the provision of funding, or the prospect of additional funding plus a percentage of the per BSL service costs indicated within the original application. Applicants will have the opportunity to provide clear and specific evidence that service to a negotiation gap area is not feasible, to include:

- a. That the provision of service would result in overbuild;
- b. That the provision of service would be fiscally infeasible;

PBDA will consider including actions such as a location-by-location increase of subsidization; aggregation of BSLs into new project areas to be included in reverse auction; development of new or refined second-round project areas; or state-managed deployment with ISP leasebacks.

If it is determined that service to the BSL is not feasible the following two options may be considered.

1. PBDA may, as a last resort and in extremely limited instances, engage in a reverse auction to ensure service.
2. PBDA may engage in additional rounds of funding to award subsidy to serve unserved or underserved locations that were not identified in initial rounds, using any technology up to and including unlicensed fixed wireless, and/or satellite.

It is assumed that if a gap area exists and negotiation of service to that BSL is not successful that fixed wireless or satellite are the only viable solutions for that gap area and FTTH will not be viable. Gap areas are considered locations where no projects have been proposed. Therefore, after both the first and second round of applications, these locations will be noted within a GIS and evaluated for the best available, most feasible, and most cost-efficient technology.

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.

Not applicable.

2.4.9 Identify or outline a detailed process for identifying an Extremely High Cost Per Location Threshold to be utilized during the sub-grantee 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.

PBDA used the CPF BIP program as the basis for determining an average cost per BSL by technology type within the Commonwealth of Pennsylvania.

As part of the CPF BIP grant application process PBDA received proposals for nearly \$1 Billion of broadband infrastructure development across 213 projects and 43 applicants. It is the position of PBDA that its evaluation, based on the following elements, will enable PBDA to determine an average high cost, average low cost by technology type, and BSL volume.

PBDA will incorporate prevailing wage and material inflation as projected percentages into these average costs. Based on these evaluations PBDA will, on a project-by-project basis evaluate the technology type, BSL volume, and average cost per BSL.

PBDA intends to measure these findings against data obtained within the NTIA Planning Toolkit which will enable staff to capitalize on Cost Data. This comparison will enable PBDA to better ensure that its equations are in line with other widely available and authoritative datasets to limit and/or adjust for outliers.

In areas where high-cost thresholds are exceeded and to better understand the basis of the proposed cost PBDA will evaluate the basis of cost, geographic location of project, overlapping proposed projects, and total number of applications with associated costs.

Where overlapping proposed projects exist, PBDA will award Priority Projects that do not exceed the Extremely High Cost Per Location Threshold (EHCPLT). Should a Priority Project exceed the EHCPLT and there is an overlapping proposed project that is less expensive, and is a viable application, that project may be awarded.

PBDA will base evaluations of project area costs on two key progress indicators:

- PBDA will evaluate project costs received through US Treasury’s Capital Projects Fund Broadband Infrastructure grant program, adjusted for prevailing wage amounts. This would happen as a “worst-case scenario”, with the understanding that Federal Davis Bacon laws may apply for projects exceeding \$5 million, as well as inflation, as a base line measure for subjective evaluation. These evaluations will aid in the outline of regionalized costs to establish a point of clarity for PBDA.
- PBDA will utilize NTIA cost data to determine the standard deviation of statewide costs per BSL. Utilizing this evaluation, PBDA will determine outlier costs, evaluate outliers to gain an understanding of median costs, and establish the EHCPLT.

Where proposed Priority Projects exceed the EHCPLT and no alternate, overlapping proposed projects exist, PBDA will consult its industry partners to determine if fixed wireless or satellite technology is viable. If it is determined that fixed wireless or satellite technology is feasible, PBDA may consider the following alternatives:

- a. PBDA may develop and deploy vertical assets and associated fixed wireless or satellite infrastructure for lease back to a competitively-bid ISP for the provision of service.
- b. PBDA may, as a last resort and in extremely limited instances, engage in a reverse auction to ensure service in these areas at a significantly subsidized price to offset capital expenditure.

2.4.10 Outline a plan for how the Extremely High Cost Per Location Threshold will be utilized in the sub-grantee 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:

- The process for declining a sub-grantee proposal that exceeds the threshold where an alternative technology is less expensive.
- The plan for engaging sub-grantees to revise their proposals and ensure locations do not require a subsidy.
- The process for selecting a proposal that involves a less costly technology and may not meet the definition of Reliable Broadband.

Due to the multi-phase approach to PBDA's grant process, scenarios where projects are likely to exceed the extremely high cost per location threshold will be identified and preempted in one of the following ways:

- PBDA may, where feasible, solicit additional applications from qualified providers utilizing competing and more cost-effective technologies.
- PBDA may, where feasible, identify the project area as a gap location and incorporate it into a state-sponsored project area where the state will construct vertical assets and broadband infrastructure for lease back to interested ISPs.
- The process for declining a sub-grantee proposal that exceeds the threshold where an alternative technology is less expensive will be conducted through the deconfliction process outlined in Section 2.4.1.
- The formation of a plan for engaging sub-grantees to revise their proposals and ensure locations do not require a subsidy. The plan will involve engaging each sub-grantee throughout the Preliminary Application process as needed to revise submitted proposals and to ensure that locations do not require additional subsidies. In cases where competing applications that involve extremely high-cost thresholds are indeed exceeded by an applicant, the opposing applicant (assuming lower cost and alternate, non-fiber technology) would be awarded. Where extremely high-cost thresholds are exceeded and only a single application is received, PBDA may use its gap program to attract alternative investments using reverse auction and/or state-sponsored development.
- The process for selecting a proposal that involves a less costly technology and may not meet the definition of Reliable Broadband.

2.4.11 Describe how the Eligible Entity will ensure prospective sub-grantees 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 sub-grantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

- Detail how the Eligible Entity will require prospective sub-grantees to certify that they are qualified to meet the obligations associated with a Project, that prospective sub-grantees will have available funds for all project costs that exceed the amount of the grant, and that prospective sub-grantees will comply with all Program requirements, including service milestones. To the extent the Eligible Entity disburses funding to sub-grantees only upon completion of the associated tasks, the Eligible Entity will require each prospective sub-grantee 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.
- 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).
- Detail how the Eligible Entity will require prospective sub-grantees to submit audited financial statements.
- Detail how the Eligible Entity will require prospective sub-grantees to submit business plans and related analyses that substantiate the sustainability of the proposed project.

PBDA will require sub-grantees to certify that they are qualified to meet the obligations associated with their proposed project through the submission of the documents discussed below. To date, PBDA has not yet developed the document templates. The development of these documents is contingent and dependent on approval of the Initial Proposal. Template contents will include the following:

Narrative One (500 Characters): The applicant will be required to provide a brief narrative describing:

- Scope of work specific to the application for funding;
- Intent to complete the project as proposed;
- Intent to negotiate project areas in good faith with PBDA;
- Intent to commit funds needed to complete the project that exceed final award and/or proposed project costs.

Narrative Two (500 Characters): The applicant will be required to provide a brief narrative describing:

- Discuss and describe any regional investments already made within the proposed project area;
- Overview of applicant's qualifications that will enable completion of the proposed project.

Narrative Three (500 Characters): The applicant will be required to include a narrative describing its readiness and ability to manage the proposed project and provide ongoing services to maintain it.

Infrastructure Investment

To aid in the evaluation and deconfliction of applications, avoid overbuild, and foster expeditions implementation, the applicant will be required to provide answers to the following:

- Does the proposed project expand upon existing infrastructure? If so:
 - Is middle mile infrastructure currently included within the project area? If so,
 - Is last mile infrastructure currently included within the project area? If so,
 - Are BSLs currently serviced within the project area? If so,
 - Will the proposed project provide middle mile open access?
 - Will the proposed project provide last mile open access?

Responses will enable PBDA to evaluate the best return on investment and avoid overbuild while deconflicting project areas.

Question and Response Section One – Statement of Qualifications:

The applicant will be required to answer the following:

- Certification by the applicant that voice, broadband, or electrical service has been provided for at least two years prior or is a subsidiary of a holding company.
- The applicant's total years in business.
- Provide a list of up to five recently completed projects, including:
 - Total project cost
 - Total BSLs served
 - Technology utilized

Attachment One – Project Proforma: The applicant will be required to complete a project proforma.

Attachment Two – Audited financial and Funding Availability Form: The applicant will be required to provide an audited financial document prepared by a third party.

Attachment Three – Letter of Credit: The applicant will be required to submit a letter of credit as required by NTIA and modeled after the FCC's template. This template letter of credit will be supplied by PBDA for download within the Single Application for Assistance.

Attachment Four – Project Timeline Gantt Chart with Project Milestones: The applicant will be required to complete the project timeline Gantt template, provided by PBDA. Applicants will be required to indicate a tentative project start date and the number of days necessary for completion of the prospective build-out and various milestone topics, as well as days to completion 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 sub-grant. This document must be 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.

Attachment Five – Network Design Diagram: The applicant will be required to submit an industry standard network design diagram. This diagram must be sealed/certified by a professional engineer.

Attachment Six – Details Cost Estimate: Applicants will be required to provide a detailed cost estimate in table format. The cost estimate must detail cost for each element of the project, including costs associated with:

- Design and Engineering
- Permitting by type, agency.
- Material Purchases by item
- Contingency

The cost estimate must include a statement that prevailing wages were included within the estimated costs. The applicant must cite the project number that was utilized within the L&I Prevailing Wage App. Estimates must be sealed by an engineer. Applicants may allow for a 25% contingency line item to assume inflation and labor escalation, but these expenditures will need to be justified during the reimbursement period. All applicants must supply a basis for cost outline that cites the resources used to generate cost estimates. Estimates that cite “industry knowledge” or “experience” will not be considered. Estimates that are redacted in part or in whole will not be considered.

Attachment Seven – Capital Investment Schedule with Implementation: The applicant will be required to provide a tabular report that demonstrates capital investments to be made within a specific range of dates, amount of investment, and a brief statement of investment outcome.

Attachment Eight – Workforce Health and Safety Committee Commitment Affidavit: The applicant will be required to complete the Workforce Health and Safety Committee Commitment Affidavit Template, supplied by PBDA. This template must be completed by the applicant, authorized by a company representative in a position of authority, and notarized.

Attachment Nine – Pennsylvania Prevailing Wage Adherence Affidavit: The applicant will be required to complete the Pennsylvania Prevailing Wage Adherence Affidavit Template, supplied by PBDA. This template must be completed by the applicant, authorized by a company representative in a position of authority, and notarized.

The applicant will be required to include within this template the project ID from L&I’s Prevailing Wage Web Application Portal that was utilized for the development of the detailed cost estimate.

Incomplete applications will be, as is reasonable, offered the opportunity to correct any omissions. Refusal to, and/or repeated failures to provide adequate information may result in elimination from consideration in areas with overlapping projects. In areas where projects are not overlapping and only one application has been received, failure to meet grant guidelines may result in the project area being incorporated as a state-sponsored asset development and lease-backed program, reverse auction, or other NTIA-approved program.

Grant awards will be issued on a reimbursement basis, with 10% of the total award amount held in reserve and released upon project completion, as well as submission and acceptance of a final report. If an applicant fails to adhere to the commitments made within their application, or fails to complete the project, reimbursement of reserve will not occur.

Pro forma statements or analyses, cash flow and balance sheet projections, and three years of operating cost and cash flow projections post-targeted completion of the project will be used to evaluate project sustainability and not for project monitoring. I.e., PBDA will not evaluate project success based on sub-grantee maintenance of this material. Separate reporting criteria will be utilized for that purpose. Rather, this information will be requested to help PBDA determine if an applicant can achieve project sustainability, or if the applicant could be proposing too little in project costs. Additionally, these evaluations will be helpful in determining whether the applicant has the necessary capital available to ensure that matching funds can be covered, and that initial operating expenditures are adequate until return on investment can happen.

2.4.11.1 As an optional attachment, submit application materials related to the BEAD sub-grantee selection process, such as drafts of the Requests for Proposals for deployment projects, and narrative to crosswalk against requirements in the Deployment Sub-grantee Qualifications section.

Not applicable.

2.4.12 Describe how the Eligible Entity will ensure any prospective sub-grantee 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 sub-grantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

- Detail how the Eligible Entity will require prospective sub-grantees to submit resumes for key management personnel.
- Detail how it will require prospective sub-grantees to provide a narrative describing their readiness to manage their proposed project and ongoing services provided.

To ensure that all applicants meet the minimum qualifications for managerial capability, for up to three individuals, as outlined in the BEAD NOFO, PBDA will require applicants to identify key individuals responsible for the management of the project and provide a description of their role and responsibilities for the project. Response to this document will be as follows:

- List the name, current title and years of experience for up to up to three individuals responsible for the management of the project.
- For the three individuals listed above, provide a brief narrative (500 characters) of their role and responsibilities for the project. For the three individuals listed above, attach a detailed resume (template to be provided by PBDA) outlining relevant experience with dates of services for each experience. This must be completed within the template provided, narratives will not be accepted. This template will require example experiences to be demonstrated for each NTIA defined element of minimum qualifications for managerial capability including:
 - Broadband network development and deployment.
 - Fiscal management of public funds
- The applicant will be required to include a brief narrative (500 characters) describing its readiness and ability to manage the proposed project and provide ongoing services to maintain it.

Key Project Management Individuals List and Attachments: These responses will be standardized via a template to ensure vetting and evaluation across applicants is equitable.

Company Status and Profile: Applicants will be required to provide the following fill in the blank responses:

- Has/is the organization anticipating any organizational changes during the grant/project period?
 - Mergers (yes/no)
 - If yes – please describe (500 characters)
 - Acquisitions (yes/no)
 - If yes – please describe (500 characters)
 - Changes to relevant organizational policies or practices that may impact the implementation of awarded funds (yes/no)
 - If yes – please describe (500 characters)

PBDA will not approve any grant for the deployment or upgrade of network facilities unless it determines that the documents submitted to it demonstrate the prospective applicant's managerial capability with respect to the proposed project.

This information will be included in program guidelines, which will be posted on PBDA's website for at least 30 days prior to the application opening date. Additionally, details will be outlined in program webinars, a Frequently Asked Questions page on PBDA's website, and through other means to be determined.

- 2.4.13** Describe how the Eligible Entity will ensure any prospective sub-grantee 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 sub-grantee 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 sub-grantees 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.
 - b. Detail how the Eligible Entity will require prospective sub-grantees 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 sub-grant, 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.

All applicants will be required to submit certification to PBDA that they are technically qualified to complete and operate the project and that they can carry out the funded activities in a competent manner, including that they will use an appropriately skilled and credentialed workforce.

Within the application, as described in Section 2.4.1 (Final Application Process, Application Elements), applicants must submit a network design, diagram, project costs, build-out timeline, milestones for project implementation, and a capital investment schedule evidencing complete build-out and the initiation of service within four years of the date in which the entity receives the sub-grant. All documents must be certified by a professional engineer, stating that the proposed network can deliver broadband services that meet the requisite performance requirements to all locations served by the project. These are found within Section 2.4.1 (Final Application Process, Application Elements) and listed below:

- Attachment One – Project Proforma
- Attachment Four – Project Timeline Gantt Chart with Project Milestones
- Attachment Five – Network Design Diagram
- Attachment Six – Details Cost Estimate
- Attachment Seven – Capital Investment Schedule with Implementation
- Attachment Eleven – Engineers Certification Statement

PBDA will not approve any grant for deployment or upgrading of network facilities unless it determines that the materials submitted to it demonstrate the applicant's technical capability with respect to the proposed project.

As required by PA Act 96 of 2021, applicants must submit an affidavit (Section 2.4.1 – Final Application Process, Application Elements, Attachment Ten) stating that the applicant will ensure that a contractor or sub-contractor performing construction, reconstruction, demolition, repair, or maintenance work on a high-speed broadband service infrastructure project funded through this program meets all the following requirements:

- a. Maintains all valid licenses, registrations or certificates required by the Federal Government, the Commonwealth or a local government entity that are necessary to do business or perform applicable work.
- b. Maintains compliance with the act of June 2, 1915 (P.L.736, No.338), known as the Workers' Compensation Act, the act of December 5, 1936 (2nd Sp.Sess., 1937 P.L.2897, No.1), known as the Unemployment Compensation Law, and bonding and liability insurance requirements as specified in the contract for the project.
- c. Has not defaulted on a project, declared bankruptcy, been debarred, or suspended on a project by the Federal Government, the Commonwealth, or a local government entity within the previous three years.
- d. Has not been convicted of a misdemeanor or felony relating to the performance or operation of the business of the contractor or subcontractor within the previous 10 years.
- e. Has completed a minimum of the United States Occupational Safety and Health Administration's 10-hour safety training course or similar training sufficient to prepare workers for any hazards that may be encountered during their work on the high-speed broadband service infrastructure.

This information will be included in program guidelines, which will be posted on PBDA's website for at least 30 days prior to the application opening date. Additionally, details will be outlined in program webinars, a Frequently Asked Questions page on PBDA's website, and through other means to be determined.

2.4.14 Describe how the Eligible Entity will ensure any prospective sub-grantee 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 sub-grantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

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

PBDA will require all applicants to demonstrate that they can carry out funded activities in a competent manner in compliance with all applicable Federal, State, Territorial, and local laws. To ensure that sub-grantees comply with occupational safety and health requirements, sub-grantees must permit workers to create worker-led health and safety committees that management will meet with upon reasonable request.

Requirements should be met through the completion of Attachment Eight (Workforce Health and Safety Committee Commitment Affidavit), which will be provided to the applicant as a template, available within the Single Application for Assistance. The affidavit will state the following:

- That the applicant currently does, and will continue to, meet, or exceed the minimum qualifications for compliance with all applicable Federal, State, Territorial, and local labor safety laws.
- That the applicant currently does, and will continue to, meet, or exceed the minimum qualifications for compliance with all applicable Federal, State, Territorial, and local procurement laws.

PBDA's competitive grant selection process recognizes applicable Federal, State, Territorial, and local laws. The Commonwealth has a long-standing history of compliance with federal laws related to federal infrastructure funding and it is understood that current state laws accommodate these regulations. As a result, new policies will not need to be developed.

As is outlined within Section 2.4.1 of this document (Preliminary Screening and Final Application), PBDA will gather and assess prospective sub-grantees' submission of:

- Network design
- Diagram, project costs
- Build-out timeline and milestones for project implementation
- Capital investment schedule evidencing complete build-out
- Initiation of service within four years of the date on which the entity receives the subgrant.

Section 2.7 of this document details PBDA's expectations for permitting workers to create work-led health and safety committees.

PBDA has detailed that it expects eligible applicants to engage the services of a professional engineer. If necessary, PBDA will provide eligible entities with resources that will aid them in connecting a professional engineer within the Commonwealth through the State Licensing Board.

PBDA will host a webinar for eligible applicants that will review and explain the critical components related to procurement, as well as other legally-binding regulations and agency-specific policies. This information will be included in program guidelines, which will be posted on PBDA's website for at least 30 days prior to the application opening date. Additionally, details will be outlined in program webinars, a Frequently Asked Questions page on PBDA's website, and through other means to be determined.

Additionally, PBDA will make readily available relevant information for applicants to leverage, such as [information from Pennsylvania's Labor & Industry website](#), which includes information on workplace safety committee certification resources.

2.4.15 Describe how the Eligible Entity will ensure any prospective sub-grantee 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 sub-grantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

- Detail how the Eligible Entity will require prospective sub-grantees to certify that they possess the operational capability to qualify to complete and operate the Project.
- Detail how the Eligible Entity will require prospective sub-grantees 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 sub-grantee or its parent company has been operating.
- Detail how the Eligible Entity will require prospective sub-grantees 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.
- Detail how the Eligible Entity will require prospective sub-grantees 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.
- In reference to new entrants to the broadband market, detail how the Eligible Entity will require prospective sub-grantees to provide evidence sufficient to demonstrate that the newly formed entity has obtained, through internal or external resources, sufficient operational capabilities.

PBDA will require applicants seeking to deploy network facilities certify that they possess the operational capability to qualify to complete and operate a BEAD-funded project. An applicant that has provided a voice, broadband, and/or electric transmission or distribution service for a least two consecutive years prior to the date of its application submission or that it is a wholly owned subsidiary of such an entity, must submit a certification that attests to these facts and specifies the number of years the applicant or its parent company has been operating.

If the applicant has provided a voice and/or broadband service it must 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. Alternatively, an applicant should explain any pending or completed enforcement action, civil litigation, or other matter in which it failed to comply or was alleged to have failed to comply with Commission rules or regulations.

If the applicant has operated only an electric transmission or distribution service, it must 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.

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

PBDA will not approve any grant for the deployment or upgrading of network facilities unless it determines that the documents submitted to it demonstrate the applicant's operational capability with respect to the proposed project.

This information will be included in program guidelines, which will be posted on PBDA's website for at least 30 days prior to the application opening date. Additionally, details will be outlined in program webinars, a Frequently Asked Questions page on PBDA's website, and through other means to be determined.

2.4.16 Describe how the Eligible Entity will ensure that any prospective sub-grantee 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 sub-grantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

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

PBDA will require each applicant to provide ownership information consistent with the requirements set forth in 47 C.F.R. § 1.2112(a)(1)-(7), as highlighted in the BEAD NOFO and demonstrated below:

1. List the real party or parties in interest in the applicant 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 applicant;
2. List the name, address, and citizenship of any party holding 10 percent or more of stock in the 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 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 applicant is 10 percent or greater;
6. List all parties holding indirect ownership interests in the 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 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; and
7. List any FCC-regulated entity or applicant for an FCC license, in which the applicant or any of the parties identified in [paragraphs \(a\)\(1\) 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 applicant (e.g., Company A owns 10 percent of Company B (the 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 applicant). (b) Designated entity status. In addition to the information required under [paragraph \(a\)](#) of this section, each applicant claiming eligibility for small business provisions or a rural service provider bidding credit shall disclose the following: (1) On its application to participate in competitive bidding (i.e., short-form application (see [47 CFR 1.2105](#))):

- (i) List the names, addresses, and citizenship of all officers, directors, affiliates, and other controlling interests of the 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;
- (ii) List any FCC-regulated entity or applicant for an FCC license, in which any controlling interest of the 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 applicant;
- (iii) List all parties with which the applicant has entered into agreements or arrangements for the use of any of the spectrum capacity of any of the applicant's spectrum;
- (iv) List separately and in the aggregate the gross revenues, computed in accordance with [§ 1.2110](#), for each of the following: The 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;
- (v) If claiming eligibility for a rural service provider bidding credit, provide all information to demonstrate that the applicant meets the criteria for such credit as set forth in [§ 1.2110\(f\)\(4\)](#); and
- (vi) 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. (2) As an exhibit to its application for a license, authorization, assignment, or transfer of control:
 - (i) List the names, addresses, and citizenship of all officers, directors, and other controlling interests of the applicant, as described in [§ 1.2110](#);
 - (ii) List any FCC-regulated entity or applicant for an FCC license, in which any controlling interest of the 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 applicant;
 - (iii) List and summarize all agreements or instruments (with appropriate references to specific provisions in the text of such agreements and instruments) that support the 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 letters of intent), oral or written;
 - (iv) 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;
 - (v) List separately and in the aggregate the gross revenues, computed in accordance with [§ 1.2110](#), for each of the following: the applicant, its affiliates, its controlling interests, and affiliates of its controlling interests; and if a consortium of small businesses, the members comprising the consortium;

- (vi) 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\(b\)\(4\)\(iii\)\(A\)](#).
- (vii) List and summarize any agreements in which the applicant has entered into arrangements for the use of any of the spectrum capacity of the license that is the subject of the application; and
- (viii) If claiming eligibility for a rural service provider bidding credit, provide all information to demonstrate that the applicant meets the criteria for such credit as set forth in [§ 1.2110\(f\)\(4\)](#).

The data listed above will be submitted directly into the Single Application for Assistance.

This information will be included in program guidelines, which will be posted on PBDA’s website for at least 30 days prior to the application opening date. Additionally, details will be outlined in program webinars, a Frequently Asked Questions page on PBDA’s website, and through other means to be determined.

2.4.17 Describe how the Eligible Entity will ensure any prospective sub-grantee 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 sub-grantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

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

PBDA will require that applicants 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.

PBDA will require applicants to disclose, for itself and for its affiliates, any application the sub-grantee or its affiliates have submitted or plan to submit, and every broadband deployment project that the sub-grantee 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:

- The Families First Coronavirus Response Act (Public Law 116-127; 134 Stat. 178); the CARES Act (Public Law 116-136; 134 Stat. 281).
- The Consolidated Appropriations Act, 2021 (Public Law 116-260; 134 Stat. 1182).
- The American Rescue Plan of 2021 (Public Law 117-2; 135 Stat. 4).
- Any federal Universal Service Fund high-cost program (e.g., RDOF, CAF).
- Any Eligible Entity or local universal service or broadband deployment funding program.

At a minimum, PBDA will require the disclosure, for each broadband deployment project, of:

- The speed and 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 sub-grantee or its affiliates.

This information will be included in program guidelines, which will be posted on PBDA's website for at least 30 days prior to the application opening date. Additionally, details will be outlined in program webinars, a Frequently Asked Questions page on PBDA's website, and through other means to be determined.

2.5 Non-Deployment Sub-Grantee Selection (Requirement 9)

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

Pennsylvania does not intend to sub-grant for non-deployment activities. Based on data-driven evaluations of the cost per passing data provided by NTIA, PBDA determined that implementation of BSL-level broadband access will utilize its full allocation and no funds will be available for non-deployment activities. Additionally, PBDA foresees the need to deploy multiple types of technology to reach full internet access in Pennsylvania. In making this determination, PBDA took into consideration cost factors such as prevailing wage rates (or Federal Davis Bacon rates), inflation, and/or challenges made by providers that could result in increased costs.

Therefore, to meet the NTIA mandate of internet for all, the Commonwealth must, per NTIA's guidelines, allocate all funds toward deployment.

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;
- b. How the non-deployment initiatives will address the needs of residents within the jurisdiction;
- c. The ways in which engagement with localities and stakeholders will inform the selection of eligible non-deployment activities;
- 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.

Not applicable.

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.

Not applicable.

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

Not applicable.

2.6 Eligible Entity Implementation Activities (Requirement 10)

2.6.1 Describe any initiatives the Eligible Entity proposes to implement without making a sub-grant, and why it proposes that approach.

PBDA does not intend to carry out non-deployment activities as a recipient (see section 2.5) but does intend to engage in several initiatives prior to funding sub-grant awards. These initiatives may include:

- Administrative activities
- Implementing an intensive Mapping and Data collection/validation program
- Implementing a challenge process consistent with NTIA BEAD guidelines
- Implementing a sub-grantee selection process.

PBDA recognizes that these activities are crucial to conducting a competitive sub-granting process but should be acknowledged as separate in nature from deployment projects and the sub-granting process. Administrative expenses, including staff salaries, will maintain PBDA's consistency and capacity. Mapping and data collection are pre-existing and ongoing projects, which PBDA must continue in the lead-up to the application period and the implementation of BEAD projects. Per NTIA BEAD guidelines, PBDA will conduct a transparent, evidence-based, fair, and expeditious challenge process. This initiative will utilize an online challenge portal obtained in accordance with Commonwealth procurement laws. The sub-grantee selection process is also required by NTIA and crucial to BEAD implementation.

PBDA utilizes in-house mapping and geographic information systems (GIS) resources, including GIS professionals, software, and data. Primary mapping activities include analyzing FCC and CostQuest Associates location fabric, submitting fabric, service availability, and other challenges to the fabric, updating locally stored data with the most recent Broadband Data Collection information, and more.

Additionally, PBDA collects geospatial and tabular data for use in mapping applications from a variety of sources including, but not limited to, the federal government, state and local authorities, and private entities. Per NTIA BEAD guidelines, PBDA will conduct a transparent, evidence-based, fair, and expeditious challenge process. This initiative will utilize an online challenge portal obtained in accordance with Commonwealth procurement laws.

2.7 Labor Standards and Protection (Requirement 11)

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

- Prospective sub-grantees' 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;
 - ii. Should include a certification from an Officer/Director-level employee (or equivalent) of the prospective sub-grantee evidencing consistent past compliance with federal labor and employment laws by the sub-grantee, as well as all contractors and sub-contractors; and
 - iii. Should include written confirmation that the prospective sub-grantee discloses any instances in which it or its contractors or sub-contractors 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.
- Prospective sub-grantees' plans for ensuring compliance with federal labor and employment laws, which must address the following:
 - i. How the prospective sub-grantee will ensure compliance in its own labor and employment practices, as well as that of its contractors and subcontractors, including:
 - 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
 - How the sub-grantee 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.

PBDA is committed to compliance with labor standards and protections that solidify a foundation for a safe and healthy workforce. Compliance with federal labor and employment laws includes:

- Sub-grantee adherence to all labor and employment practices;
- Compliance with applicable wage scales and overtime payment practices for each class of employees expected to be involved directly in the physical construction of the broadband network;
- Applicant compliance with implementation of workplace safety committees that are authorized to raise health and safety concerns in connection with the delivery of deployment projects.

PBDA will consider prospective sub-grantees with a demonstrated record of compliance with federal labor and employment laws on high-speed internet deployment projects for the last three years or more. Subsequently, sub-grantees are responsible for providing the same information related to other contractors and sub-contractors employed by the sub-grantee. Sub-grantees that meet these criteria will be required to provide a plan to maintain ongoing compliance for the duration of the project. Therefore, prospective sub-grantees are required to complete an affidavit indicating adherence and provide a narrative to the following:

1. A description of the applicant's record of past compliance with federal labor and employment laws, which demonstrates the following:
 - i. Compliance with federal labor and employment laws on broadband deployment projects in the last three years.
 - ii. Certification from an Officer/Director-level employee (or equivalent) of the applicant evidencing consistent past compliance with federal labor and employment laws by the sub-grantee and all contractors and sub-contractors.
 - iii. By signing the affidavit, the applicant agrees to disclose any instances in which it or its contractors or sub-contractors 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.

If disclosure of any violations of contractors or sub-contractors occurred in the last three years, the applicant will provide the mitigation and resolution practices utilized during the project's life. Prospective sub-grantees should consider industry standards and best practices for reporting. Revisions to current mitigation and resolution practices may need to occur prior to submission. If the prospective sub-grantee has had no violations in the preceding three years, a written letter of confirmation indicating no violations must be provided with the application.

Pennsylvania Prevailing Wage Act

PBDA requires that projects are carried out in ways that produce high-quality infrastructure, avert costly delays, and promote efficiency. Projects funded through BEAD funds must comply with all applicable federal laws and regulations and with all requirements for state and local laws and ordinances to the extent that such requirements do not conflict with federal laws.

PBDA, in its discretion, has determined that the Pennsylvania Prevailing Wage Act (43 P.S. § 165-1 et seq.; 34 Pa. Code § 9.101 et seq.) applies to BEAD projects. Prevailing Wage requirements are applicable to Commonwealth grant contracts for projects that are publicly funded; when projects involve construction, demolition, reconstruction, alteration, repair work, renovations, build-out, and installation of machinery and equipment; for projects that have an estimated cost in excess of \$25,000; or when the project activity is performed under a contract. Compliance with Fair Labor Practices will account for 15% of an applicant's composite score for both Priority and Other Last-Mile Broadband Development Projects.

The sub-grantee will be responsible for including prevailing wage rates in all bid documents, specifications, and construction contracts pertaining to the project. The Pennsylvania Department of Labor and Industry (L&I) has the final authority to determine the applicability of prevailing wage.

Additional reporting requirements will apply to projects of \$5 million or more. For projects receiving \$5 million or more in funding (based on expected total cost), PBDA will require the following:

NTIA advises that an applicant may provide a certification that, for the relevant project, all laborers and mechanics employed by contractors and sub-contractors 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 sub-chapter 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 Pennsylvania, or by the Pennsylvania Department of Labor & Industry pursuant to the Pennsylvania State Prevailing Wage Act (442 of 1961). If such certification is not provided, a sub-grantee must provide a project employment and local impact report detailing:

- The number of contractors and sub-contractors working on the project.
- The number of employees 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.

Sub-grantees must maintain sufficient records to substantiate this information upon request.

PBDA requires prospective sub-grantees to submit comprehensive workforce development plans that ensure ongoing plans for compliance with its own labor and employment practices. A descriptive plan of compliance must include a detailed plan that describes the implementation strategies and timelines for workforce safety committees authorized to raise any health and safety concerns for the workers or project site.

Within the plan, the prospective sub-grantee must explain how workers will be permitted to create worker-led health and safety committees that meet with management upon reasonable request to address occupational safety and health requirements.

Prospective sub-grantees can refer to already established labor unions' report processes or other health and safety protocols in place that provide a communication platform to mitigate health and safety concerns. Sub-grantees should consider a description of the process that outlines a timeline and expected resolution of any health and safety concerns reported by the worker-led committees.

An applicant may provide a certification that a project includes a project labor agreement, meaning a pre-hire collective bargaining agreement consistent with section 8(f) of the National Labor Relations Act (29 U.S.C. 158(f)). If the sub-grantee does not provide such certification, the sub-grantee must provide a project workforce continuity plan detailing:

- How the applicant will ensure the project has ready access to a sufficient supply of appropriately skilled and unskilled labor to ensure high-quality construction throughout the life of the project, including a description of any required professional certifications and/or in-house training, registered apprenticeships, or labor-management partnership training programs, and partnerships like unions, community colleges, or community-based groups.
- How will the applicant minimize risks of labor disputes and disruptions that would jeopardize the timeliness and cost-effectiveness of the project?
- How the applicant will provide 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).

- Whether workers on the project will receive wages and benefits that will secure an appropriately skilled workforce in the context of the local or regional labor market.
- Whether the project has completed a project labor agreement.
- Whether the project prioritizes local hires and
- Whether the project has a Community Benefit Agreement. Applicants will be required to provide a description of any such agreement.

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

- Using a directly employed workforce, as opposed to a subcontracted workforce;
- 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;
- 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);
- Use of local hire provisions;
- Commitments to union neutrality;
- Use of labor peace agreements;
- 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);
- Use of an appropriately credentialed workforce (i.e., satisfying requirements for appropriate and relevant pre-existing occupational training, certification, and licensure); and
- Taking steps to prevent the misclassification of workers.

Sub-grantees must demonstrate that they have a direct investment in worker protections to support the terms and conditions of employment of all workers on the project site. Sub-grantees can demonstrate their investment in worker protection by establishing one or more of the following:

- All applicants are required to complete and submit a Worker Protection and Investment Certification Form (BOP-2201), pursuant to Executive Order 2021-06, *Worker Protection and Investment* (October 21, 2021).
- Project Labor Agreements to include pre-hire collective bargaining agreements between unions or community organizations and contractors. Pennsylvania is an employment-first state that believes in the ongoing collaboration and strengthening of the workforce.
- Establish and transparently demonstrate local hiring provisions that prioritize local job applicants from the area or locale in which the project is being executed. Utilizing local talent can reduce unemployment rates while creating a local and sustainable telecommunications workforce with transferable skills, which can be used for future maintenance of the networks.

An applicant may provide a certification that a project includes a project labor agreement, meaning a pre-hire collective bargaining agreement consistent with section 8(f) of the National Labor Relations Act (29 U.S.C. 158(f)). If the sub-grantee does not provide such certification, the sub-grantee must provide a project workforce continuity plan, as outlined in section 2.7.1, above.

All sub-grantees are required to use an appropriately skilled and credentialed workforce. Sub-grantees must provide evidence of training or certifications required by the industry, including completion of on-the-job training, professional certificates, credentials, and or licensure that satisfy industry requirements.

As a best practice for developing a compliant and equitable work environment, PBDA strongly encourages that all sub-grantees (including contractors and subcontractors) to directly employ a percentage of the local and regional workforces as opposed to sub-contracting workers. PBDA also encourages sub-grantees to diversify their workforce by hiring at least 15% of their employees from the awarded broadband service locations. Sub-grantees can employ the use of local hiring provisions, the use of labor peace agreements, and can take steps to prevent the misclassification of workers.

The mandatory provisions outlined above will be included in the contractual agreement between PBDA and the sub-grantee.

2.8 Workforce Readiness (Requirement 12)

2.8.1 Describe how the Eligible Entity and their sub-grantees 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 sub-grantees support the development and use of a highly skilled workforce capable of carrying out work in a manner that is safe and effective.
- 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;
- 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; and
- 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.

A. PBDA understands the importance of a highly skilled workforce that is capable of implementing the buildout of BEAD-funded infrastructure. Applicants will be required to submit and adhere to the following:

Applicants must provide a comprehensive workforce development plan that details their considerations for cultivating and sustaining an equitable workforce within the Commonwealth of Pennsylvania. Applicants are not limited in their engagement and recruitment efforts. A comprehensive workforce development plan must include the following to support a highly skilled workforce capable of carrying out work in a safe and effective manner. All Applicants will be required to provide a description and certify that they will ensure compliance with industry-specific regulations and utilize best practices to include but not limited to:

- I. Complete and submit a Worker Protection and Investment Certification Form (BOP-2201), pursuant to Executive Order 2021-06, *Worker Protection and Investment* (October 21, 2021); the Commonwealth is responsible for ensuring that every worker in Pennsylvania has a safe and healthy work environment and the protections afforded them through labor laws. To that end, contractors and grantees of the Commonwealth must certify that they compliance adhere with Pennsylvania’s Unemployment Compensation Law, Workers’ Compensation Law, and all applicable Pennsylvania state labor and workforce safety laws including, but not limited to:
 - Construction Workplace Misclassification Act
 - Employment of Minors Child Labor Act
 - Minimum Wage Act
 - Prevailing Wage Act
 - Equal Pay Law

- Employer to Pay Employment Medical Examination Fee Act
- Seasonal Farm Labor Act
- Wage Payment and Collection Law
- Industrial Homework Law
- Construction Industry Employee Verification Act
- Act 102: Prohibition on Excessive Overtime in Healthcare
- Apprenticeship and Training Act
- Inspection of Employment Records Law

II. Applicants must include implementation plans and strategies to ensure that Health, Safety, and Effective practices are utilized at the worksite.

B. **Development of Highly Skilled Workforce and Training Opportunities:** PBDA believes that to cultivate and sustain an equitable workforce, current tools, resources, and new partnerships are leveraged to create a BEAD ecosystem to deliver quality employment. Specific actions and activities will support the development of a fair and just workforce to build the broadband infrastructure, including but not limited to:

I. PBDA will lead by example by establishing memorandums of understanding with public and private partnerships to outline ongoing commitments to increase and expand the resources and training necessary to elevate the workforce to build out the broadband infrastructure effectively and efficiently. Public and private partnerships may include:

- PA Department of Labor and Industry
- PA Department of Transportation
- PA Department of Human Services
- PA Department of Education
- Community Colleges and Career Technical Educational Programs
- Local Workforce Development Boards
- School District and Intermediate Units

II. PBDA will foster and unify workforce development priorities based on the unserved areas and allocation of funding to subgrantees available to work in priority areas.

A. PBDA is committed to servicing all 67 Counties in which there are 280,093 unserved areas and 23 Local Workforce Development Boards. PBDA has identified each area mandated to receive BEAD funding as a priority area and will begin to develop local broadband workforce teams.

B. Local Workforce Teams may be comprised of, but not limited:

- Local Workforce Development Board and Partners
- PA CareerLinks ®
- Local union and worker organizations
- School Districts and Intermediate Units
- Career and Technical Education programs
- Small and Medium-sized industry focused employer

- III. PBDA strongly encourages private and public partnerships that create wraparound services to address barriers (i.e., childcare, transportation, reasonable accommodations, etc.) that affect workers' access and completion of training:
 - A. PBDA will prioritize applicants who demonstrate that they have developed and/or are committed to private and public partnerships that will provide wraparound services (i.e., childcare, transportation, reasonable accommodations, etc.) to address challenges affecting workers' access to training and job opportunities. These criteria will be evaluated and scored by PBDA within the "Equitable Workforce and Job Quality" component of the application scoring rubric.
 - B. Applicants can meet requirements by demonstrating one or more of the following:
 - A letter of intent from a private or public partnership that indicates the type of wraparound services that will be available to the applicant's workforce.
 - A description of current wraparound services offered by the applicant to address challenges that affect work access and training completion. Applicants can provide a PDF copy or link to wraparound services if published.
 - A description of how the applicant will develop new or enhance current wraparound services available to the workers hired by the applicant.
 - C. **PBDA is uniquely positioned to create equitable on-ramps to broadband-related jobs.** PBDA will bridge the connection between sub-grantees' public and private resources to support diverse and inclusive hiring practices that include access to training and registered apprenticeship programs focused on targeting unserved and underserved populations. By developing Broadband Workforce Development, PBDA can leverage and cultivate the following tools and resources specific to the geographic location and needs of the residents:
 - I. **Employer focused engagement:**
 - A. Local and Regional Meetings to engage and leverage local partnerships to prepare and support employer connection with workforce development resources.
 - B. Regional and Statewide communications to local workforce boards to support local workforce efforts and training opportunities beneficial to employers and residents.
 - C. Encourage private and public partnerships that create wraparound services to address barriers (i.e., childcare, transportation, reasonable accommodations, etc.) that affect workers' access and completion of training.
 - II. **Registered Apprenticeships** are innovative training programs that allow employers to develop and prepare their future workforce while providing individuals with a learn-while-you-earn approach to career development. Apprenticeships include:
 - A. Paid Job – Apprentices are paid employees who produce high-quality work while they learn skills that enhance their employers' needs.
 - B. On-the-Job Learning – Develops skilled workers through structured learning in a work setting.
 - C. Classroom Learning – Improves job-related skills through education in a classroom setting (virtual or in-person).
 - D. Mentorship – Provides apprentices with the support of a skilled worker to assist and enhance critical hands-on learning.
 - E. Credentials – Offers a portable, nationally recognized credential to be issued after the program.

III. **On-the-job training** helps the employer by reimbursing them for a portion of the wage while they are being trained on the job. This is an incentive for an employer to hire someone who is not trained or fully trained in all aspects of the job.

D. **Promoting Diversity in BEAD Projects:** To create an equitable opportunity for all workers to access broadband-related jobs, PBDA will foster partnerships with high-quality training providers and employers seeking a diverse talent pool, which may include cultivating opportunities for higher education and career and technical education students to engage with employers before graduation or consideration for programs that promotes upskilling of the current workforce through Incumbent Worker Training programs, other industry-led programs and partnerships.

In instances where sub-grantees require support to promote diversity in hiring practices related to access to training and apprenticeship programs focused on targeting unserved and underserved populations, PBDA is committed to developing partnerships with minority-serving institutions to create a pipeline of workforce candidates by continuing stakeholder and community engagement to include internal and external partnerships.

PBDA expects sub-grantees to foster partnerships with one or more of the following entities or initiatives within the Commonwealth of PA.

- PBDA's ongoing collaboration and consultation with Governor Shapiro's six advisory commissions and councils focuses on African Americans, Asian Americans, Pacific Islanders, Latinos, LGBTQ, Women, Next Generation Engagement Affairs, and Veteran Services. The Governor's Advisory Commissions recommend policies and legislation that impact the Commonwealth and help ensure the communities they represent have a voice in state government.³
- Collaborate and leverage partnerships with Pennsylvania's 23 local workforce development boards (LWDBs), which are integral parts of the public workforce system- ecosystem providers and programs that empower local and regional economic development and the education and training of Pennsylvania's workforce.⁴
- Collaborate and leverage partnerships with PA CareerLink(s) offices across the state and local workforce regions.

PBDA remains committed to creating a diverse workforce to implement the BEAD program and other programs. PBDA will strategically connect sub-grantees with internal and external training resources to facilitate the development of a highly skilled workforce by conducting webinars and /or meet-and-greet opportunities. PBDA's 5-year state plan is mission-focused and vision-driven, with values that promote strategic partnerships and leverage critical community anchor institutions. PBDA expects each sub-grantee to participate or engage with one or more of the following training opportunities or programs:

- **Partnerships for Regional Economic Performance (PREP)** is a Department of Community and Economic Development administered and funded network of hundreds of experienced experts across ten regions who can offer assistance and resources to businesses and communities. PREP's one-on-one counseling, specialized workshops, online training, and financial incentives make it one of the nation's most coordinated and respected networks. It is explicitly designed to meet grant recipients' needs, including minorities, women, and men, who will diversify the growth of businesses in Pennsylvania.

³ <https://www.governor.pa.gov/newsroom/governor-shapiro-signs-executive-orders-reestablishing-five-governors-advisory-commissions-establishing-new-commission-on-next-generation-engagement/>

⁴ <https://www.dli.pa.gov/Businesses/Workforce-Development/Pages/lwdb.aspx>

The PREP program is designed to integrate the delivery system historically served by the following core service providers: Industrial Development Organizations, Local Development Districts (LDDs), and Small Business Development Centers (SBDCs). PBDA has a strong partnership with the Pennsylvania Department of Labor & Industry (L&I), which will inform PBDA on developing new and existing registered apprenticeships and high-quality training models to support sub-grantees. As a result, sub-grantees can be connected with state and local programs that promote a diverse, equitable, and inclusive approach to hiring in the Commonwealth.

- **The Bureau of Workforce Partnerships and Operations** specializes in connecting employers to business service teams that can liaise with sub-grantees to form a partnership with training facilities and other workforce-related programs. Additional resources are available through local Pennsylvania CareerLink centers, which offer various free career development services to help individuals succeed in all stages of workforce development.
- **The Apprenticeship and Training Office (ATO)** partners with employers to create registered apprenticeships for high-priority and industry-specific occupations.
- **The Office of Vocational Rehabilitation** provides opportunities for individuals with disabilities to be skilled and obtain job opportunities in various fields.
- **Educational Partnerships** will be key in enhancing opportunities for apprenticeships and credentialing programs, particularly through key partnerships with education providers such as trade schools, two-year institutions, and four-year institutions. Such partnerships will ensure the workforce is sufficiently trained, as both tradespeople and individuals with four-year degrees (such as engineers) have a role to play in infrastructure deployment.

Governor's Executive Order: Commonwealth Workforce Transformation Program

The Commonwealth Workforce Transformation Program (CWTP) has been designed to amplify project funding provided through NTIA under BEAD. Each deployment funded through the BEAD program offers an opportunity to train new workers, promote prevailing wages, and encourage local hiring preferences. CWTP is designed to help achieve each of those objectives. The proposed allocation for CWTP programs will tie specific workforce opportunities and requirements to projects designated for eligible organizations that have been awarded BEAD funding through the competitive bidding process.

The need for flexibility in capital allocation must be similarly reflected in how workforce programs are integrated into the Commonwealth's program efforts. The Governor's executive order requires each Commonwealth agency to contemplate up to 3% of aggregate funding be allocated to the workforce, meaning that approximately \$33 million would be set aside to amplify workforce efforts within projects. Yet as the Executive Order indicates, that allocation does not require that all of those funds will actually be spent on workforce programs; the goal has been established, but funds will only be expended in alignment with the program guidelines published by the Commonwealth and only to the extent that those funds do not place undue restrictions on the overall objective of obtaining full penetration of broadband access as per the objectives of the BEAD program.

Within that context, the workforce dollars proposed for allocation within the BEAD program are a crucial part of the first phase of capital deployment. CWTP's objective is to accelerate the deployment of infrastructure projects such as those contemplated in the BEAD program. That objective asset can only be achieved by ramping up access to the human capital required for future deployments.

PBDA has determined that the best focal point for workforce programs should be on the small and medium-sized businesses and contractors that might serve as the performers under these awards. PBDA proposes to establish a requirement that all workforce dollars within the BEAD program be allocated only to those eligible entities (meaning a prime contractor receiving an award or subcontractor of that prime contractor) that:

- Meet the definition of a Small Business, defined as less than \$40 million in revenue as per the Small Business Administration (SBA);
- Qualify and have obtained a certification from the SBA as a Minority Business Enterprise (MBE), Woman and Veteran owned business;
- Qualify and have obtained a certification from the SBA under the 8(a) Business Development Program.

As an illustration of how Workforce dollars might be allocated under CTWP, PBDA assumes the following:

- For each of the 200 projected awards, PBDA assumes an additional universe of three subcontractors for each award, for trades that include trenching, road work, construction, fiber and electrical requirements, yielding a universe of 600 potential Eligible Organizations.
- Of those 600, potentially only 10% will meet the qualifications outlined above, yielding a universe of 60 potential workforce development programs for CWTP.
- In each of those projects, PBDA assumes 50% adoption with 30 eligible organizations identify 300 “New Employees” that are hired and trained in accordance with the program requirements.
- Assuming that all Eligible Organizations are reimbursed up to the maximum extent available under CWTP of \$40,000 per person, a total of \$24 million would be reimbursed.

That amount is only one-third of the total wage/investment gap in Pennsylvania as derived from the NTIA’s data. The State Workforce Research Findings: Pennsylvania document administered by NTIA shows that in 2026 (at the peak of Broadband Deployment), there will be a cross-industry deficit of 54,600 FTEs, meaning that Pennsylvania “lacks the necessary workforce to deploy BEAD funding,” and that approximately 2,200 positions from that deficit should be in Pennsylvania. If each of those individuals obtained a prevailing wage opportunity relating to BEAD projects, and the average compensation (including salary, benefits, and other fully burdened costs) for each individual averages \$100,000 per person, Pennsylvania faces a wage/investment gap of approximately \$220,000,000 (vacancies times average compensation) per year to ensure timely completion of the projects emerging from the BEAD program, indicating a total wage/investment gap of more than \$1.1 billion over the five-year lifecycle of the funding.

BEAD could add 300 individuals to the universe of local, trained human resources that can be allocated to projects in subsequent years. Assuming these 300 individuals are trained in the first two years, approximately 15% of that deficit will be eliminated in the first year by allocating an amount equal to 2.1% (\$24 million) of the total wage investment gap (\$1.1 billion) that NTIA identified as the portion pertaining to Pennsylvania in its report. The Return on Investment through CWTP offers a tremendous power to amplify resources for further years, ensuring an expanded workforce and robust local communities that can contribute to the capital investments needed.

Perhaps most importantly, these individuals will be available to the providers as the trained workforce that can maintain and operate the assets efficiently and effectively, delivering service to Pennsylvania’s most challenged communities and helping to transition the next generation of workers into the industry.

Intentional Access and Availability of Job Opportunities

To ensure the intentional access and availability of job opportunities to a diverse workforce, PBDA, and the Governor's Office have aligned to the workforce values set forth by NTIA, which requires that prospective sub-grantees must have a plan for ensuring that the project workforce will be an appropriately skilled and credentialed workforce. CWTP is intentionally designed to take a holistic approach to addressing workforce barriers that prevent new employees from being trained and other situations that would ultimately impede the ability to execute BEAD-funded projects.

CWTP's design creates a centralized entity that works with sub-grantees to meet these requirements by directly tying Registered Apprenticeships, pre-apprenticeships, and on-the-job training programs to project work pursuant to a CWTP award. CWTP creates opportunities for good jobs by assisting eligible organizations in achieving these employment standards.

Therefore, each individual BEAD project will become an incubator for the next generation of Pennsylvania's broadband workforce through CWTP. CWTP eligibility criteria provide requirements for the employees hired under this program to become new employees who may not otherwise be hired by an eligible organization because the cost of hiring and training new employees with limited industry skills or experience increases the financial risk.

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

- a. The ways in which the prospective sub-grantee 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 sub-grantee plans to contract and subcontract with in carrying out the proposed work.

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

- f. 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;
- g. 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.

PBDA will require sub-grantees to develop and outline a comprehensive workforce development plan that includes but is not limited to the following:

A comprehensive workforce development plan (As determined by federal, state, and local requirements, all sections must be included in the plan):

1. Sub-grantees are required to explain how they will ensure an appropriately skilled and credentialed workforce by explaining the following:
 - a. A current recruitment plan for a diverse and sustainable workforce.
 - b. Current and future partnerships with registered or pre-apprenticeship and other industry-recognized labor training programs. *(If a sub-grantee has yet to establish partnerships, a description of how partnership and industry-recognized credentials will be considered and a timeline for implementation prior to start of the BEAD project is required).*
 - c. Identify and explain the process to ensure appropriate credentials and specific training to ensure compliance with industry and occupational standards.
2. Indicate whether the workforce is fully unionized, partially, or not unionized at all. If the project workforce is not unionized, additional requirements will be required including:
 - a. A description of job titles and the size of the workforce for the sub-grantee, contractors, and sub-contractors that are required to conduct.
 - b. A description of the contractors and/or subcontractors that will employ each portion of the workforce.
 - c. For each job title a description of the following is required:
 - i. Safety training, certification, and/or licensure requirements (e.g., OSHA 10, OSHA 30, etc.).
 - ii. Confined space, traffic control, or other training as relevant depending on title and work).
 - iii. The sub-grantee should discuss whether there is a robust in-house training program with established requirements tied to certifications, titles, etc.
 - iv. Information on the professional certifications and/or in-house training in place to ensure that deployment is done at a high-quality standard.
 - d. A description of the plan if the sub-grantee intends to contract and/or subcontract out any portions of the proposed project.
 - e. Indicate what percentage of the workforce that will be employed by the following: (A justification is required if 40% or more of a subcontracted workforce will be utilized by the sub-grantee).
 - i. Directly by the sub-grantee
 - ii. Sub-contracted workforce

2.9 Minority Business Enterprises (MBEs), Women’s Business Enterprises (WBEs), Labor Surplus Area 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.

To encourage advancement and reduce disparities of Small Disadvantaged Businesses (SDB) in the Commonwealth, PBDA is committed to providing the necessary resources to encourage providers involved in BEAD programs to work with underrepresented enterprises. As defined by the Federal Small Business Administration (SBA), a SDB qualifies when:

- The firm is **owned⁵** and **controlled⁶** by 51% or more of one or more disadvantaged persons.
- The disadvantaged person or persons must be socially and economically disadvantaged.
- The firm must be small, according to SBA’s size **standards.⁷**

Where possible, PBDA will encourage SDBs to register for additional programs that can provide technical assistance and resources. Additional programs may include:

- The [8\(a\) Business Development program](#), which provides managerial, technical, and contractual assistance to Small Disadvantaged Businesses to ready the firm and its owners for success in the private industry. Eligibility of the 8(a) program relies in part on criteria for Small Disadvantaged Businesses but has additional requirements related to the business itself.
- The [HUBZone program](#) helps small businesses in urban and rural communities gain preferential access to federal procurement opportunities. These preferences go to small businesses that obtain HUBZone certification in part by employing staff who live in a HUBZone. The company must also maintain a "principal office" in one of these specially designated areas.
- The [Women-Owned Small Business Federal contracting program](#) authorizes contracting officers to set aside certain federal contracts for eligible women-owned small businesses.
- The [Service-Disabled Veteran-Owned Small Business program](#) provides procuring agencies with the authority to set acquisitions aside for exclusive competition among service-disabled veteran-owned small business concerns.

This includes assuring that these groups have an equitable opportunity to apply for grants. PBDA will adhere to relevant Federal Guidelines, such as 2 C.F.R. § 200.321, to enable this collaboration and drive economic and workforce development. PBDA will act in accordance with the PA Prevailing Wage Act of 1961.

⁵ [eCFR :: 13 CFR 124.105 -- What does it mean to be unconditionally owned by one or more disadvantaged individuals?](#)

⁶ [eCFR :: 13 CFR 124.106 -- When do disadvantaged individuals control an applicant or Participant?](#)

⁷ [Size standards | U.S. Small Business Administration \(sba.gov\)](#)

To promote recruitment of SDBs, PBDA will work closely with the Pennsylvania Department of Labor and Industry (L&I) to develop a solicitation list of entities that meet these classifications within the Commonwealth. This resource will be made available to potential applicants. When they are potential sources, PBDA assures that small and minority businesses and women’s business enterprises are solicited. Delivery schedules will be established that encourage participation by small and minority businesses and women’s business enterprises. PBDA will also enable this by 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.

Additionally, PBDA will collaborate with the Pennsylvania Department of General Services’ (DGS) [Small Diverse Business Program for Construction and Procurement](#) within the DGS Bureau of Diversity, inclusion, and Small Business Opportunities. This program encourages and ensures open and equitable contracting practices that are used by prime contractors in soliciting and contracting with MBEs, WBEs, LGBT Business Enterprises, Disability-Owned Business Enterprises, and Service-Disabled Veteran Business Enterprises. Similarly, PBDA will utilize Federal resources, as appropriate, such as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce, as well as the Women-Owned Small Business Federal Contract program.

To track progress related to the requirement to promote the services and assistance of minority business enterprises, PBDA will collaborate with state agencies, particularly L&I and DGS, to build on existing systems, as well as the tracking system established through the Commonwealth Workforce Transformation Program (CWTP), established through an Executive Order by Governor Shapiro in July.

Sub-grantees will be required to take these affirmative steps as they relate to sub-contractors. This information will be shared with applicants through direct communication via messaging to PBDA’s email distribution list, monthly newsletters, PBDA website updates, press releases, and informational webinars. This information will also be included in grant agreements and through sub-grantee grant monitoring and evaluation program requirements.

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.

PBDA certifies that it is committed to taking all necessary affirmative steps to ensure minority businesses, women’s business enterprises, and labor surplus are firms are used to the extent possible, including the following outlined on pages 88-89 of the BEAD NOFO:

- Placing qualified small and minority businesses and women’s business enterprises on solicitation lists.
- Assuring that small and minority businesses, and women’s business enterprises are solicited whenever they are potential sources.
- 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.
- Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women’s business enterprises.
- 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.
- Requiring sub-grantees to take the affirmative steps listed above as it relates to its sub-contractors.

PBDA will establish MBE and WBE utilization plans consistent with its Initial and Final Proposals.

2.10 Cost and Barrier Reduction (Requirement 14)

2.10.1 Identify steps to reduce costs and barriers to deployment.

To reduce costs and barriers to deployment, PBDA will enact the following measures:

Use of Existing Infrastructure

To avoid overbuild and promote efficient and cost-effective broadband infrastructure investment and development within the Commonwealth of Pennsylvania, PBDA will develop guidelines that promote use of existing broadband-relevant linear and vertical assets and other existing infrastructure. Additionally, PBDA will promote inclusion of open access concepts for new and existing middle mile infrastructure that may be converted to open access. These concepts could include the opportunity for enhanced scoring and subsequent funding to upgrade existing middle mile infrastructure to enhance BSL connectivity, as well as conversion of middle mile to open access.

Municipal Coordination

PBDA is committed to ongoing coordination with utility companies as well as municipal and county governments to engage in dig-once policies. Pennsylvania uses a Dillon's Rule governmental structure which strengthens local municipal governments. The Commonwealth contains 2,560 local governmental entities (93 Townships of the First Class, 1,454 Townships of the Second Class, 956 Boroughs, 56 Cities, and one Town across 67 counties). To streamline the coordination process, PBDA will develop a "Broadband Ready Communities" program that aims to minimize barriers to broadband development and investment at the local government level. This program has been designed to reduce negative impacts to local governments by encouraging construction coordination. The Broadband Ready Communities program will provide the designation of "Broadband Ready" to communities that undergo a series of actions to encourage broadband infrastructure investment within their jurisdiction. These actions include the development of a designated point of contact for broadband infrastructure development, revision of street cut ordinances, and enhanced utility coordination for future projects.

Permitting

Pennsylvania's [Governor's Office of Transformation and Opportunity \(OTO\)](#) has been instrumental in establishing a consortium of permitting agencies to coordinate with different governmental bodies on permitting issues. The OTO functions to coordinate across state agencies, strengthen Pennsylvania's competitiveness, and develop a strategy to nurture innovative industries to drive growth. PBDA is in the process of establishing a working group that will meet regularly to discuss matters relevant to streamlining grant processes. As needed, processes may be developed to address the efficiency and effectiveness of permitting processes. An example of potential guidelines set by the working group includes a payback program where permit fees may be reclaimed if permits are not approved within a set timeline.

Other incentives for efficiency will be considered. PBDA will encourage local governments and permitting authorities to incorporate permitting timeline guidance into local ordinances to ensure timely approvals. PBDA will also develop webinars and educational materials to promote understanding of the unique permitting processes in place within the Commonwealth.

Rights Of Way

The Pennsylvania Public Utility Commission (PUC) has jurisdiction over utility rights-of-way (ROW) within the Commonwealth, and subsequent access to ROWs for use by entities classified as public utilities for the purposes of infrastructure installation and access. PBDA's collaboration with the OTO, as well as the establishment of the permitting working group will enable coordination across state agencies including the Pennsylvania Game Commission, the Pennsylvania Department of Conservation and Natural Resources, the Pennsylvania Department of Transportation, and the Pennsylvania Department of Environmental Protection, among others.

Collaboration between various agencies will materialize through development of the previously discussed statewide permitting working group.

2.11 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 of the BEAD NOFO:

- 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;
- 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;
- c. Characterize any weather and climate risks to new infrastructure deployed using BEAD Program funds for the 20 years following deployment;
- d. Identify how the proposed plan will avoid and/or mitigate weather and climate risks identified; and
- 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.

Severe weather events and natural hazards currently affect the human health, the environment, infrastructure, and the economy of the Commonwealth of Pennsylvania. Changing climate patterns are increasing the impacts of these severe weather events and will likely continue to increase in intensity over the next 20 years. PBDA is committed to complying with the NTIA requirement that Eligible Entities must address and mitigate climate-related impacts on broadband infrastructure and networks.

The Pennsylvania Emergency Management Agency (PEMA) creates and implements Hazard Mitigation Plans (HMPs) in accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) and the Disaster Mitigation Act of 2000. The provisions within the Stafford Act and the Disaster Mitigation Act of 2000 require entities to identify and assess the risks of natural hazards and human-made disasters on infrastructure and the built environment. Additionally, PBDA will utilize additional resources provided by NTIA in a supplemental manner to the Pennsylvania Statewide Hazard Mitigation Plan.

Pennsylvania will face major weather- and climate-related risks in the next 20 years, which will affect areas where BEAD-funded broadband network projects will be constructed. The geography and climate of Pennsylvania contribute to a wide variety of natural hazards that affect various regions of the state. The entire Commonwealth of Pennsylvania is subject to some level of risk from natural hazards and therefore will be included in hazard assessments. Hazard mitigation plans are based on 5-year planning cycles but do have planning requirements for annual updates to maintain a current plan. To maintain planning consistency with other statewide agencies, PBDA will coordinate with PEMA in conducting hazard assessments to the Commonwealth.

Types of Weather Threats

The State HMP has identified natural and human-caused hazards that may also adversely affect broadband infrastructure, and they have been noted below.

High Or Medium Risk Hazards identified in the 2023 Pennsylvania State Hazard Mitigation Plan:

- Flood, Flash Flood, Ice Jam
- Winter Storm
- Extreme Temperatures
- Hurricane, Tropical Storm, Nor'easter
- Utility Interruption
- Coastal Erosion
- Landslide
- Tornado, Windstorm
- Urban Fire and Explosion
- Wildfire

Over the last century, temperatures within the Commonwealth have risen by almost 2 degrees Fahrenheit, and historically unprecedented warming is projected during the next century¹. Pennsylvania is also getting wetter. According to the Pennsylvania Department of Environmental Protection (DEP), between 2000 and 2020, Pennsylvania experienced an increase in annual precipitation of approximately 4.6 inches compared to the 1971-2000 period.⁸

Like many northeastern states, Pennsylvania's rural and urban areas will experience varying climate-induced challenges in the years to come. Urban centers can expect impacts on infrastructure, disruption to local economies, and strains on communities. Conditions in urban centers are particularly harsh for people and animals due to abundance of concrete and asphalt and lack of vegetation, causing even higher temperatures. Additionally, poor air quality results from higher high concentrations of urban air pollutants. Low air quality and increased temperatures pose major health risks, particularly to vulnerable groups.⁹

In rural areas, increasingly cold, snowy winters and warm, hot, and humid summers will cause industries and livelihoods to suffer and will result in impacts on forests, wildlife, and rivers and streams.¹⁰ Rural Pennsylvania depends largely on agriculture, logging, and other natural resource-dependent sectors, including outdoor recreation. While some large cities and urban areas have taken steps to reduce climate-related disruptions to economies and infrastructure, it is less likely that small boroughs and municipalities in rural areas have the government capacity or financial means to create climate adaptation strategies. These communities are often more dependent on county or state-level programs and expertise.

⁸ depgreenport.state.pa.us/elibrary/GetDocument?docId=3667348&DocName=PENNSYLVANIA CLIMATE IMPACTS ASSESSMENT 2021.PDF [%28NEW%29](#) 4/30/2023 DEP PA Climate Impacts Assessment

⁹ <https://statesummaries.ncics.org/>

¹⁰ <https://statesummaries.ncics.org/chapter/pa/>

Both PEMA and DEP have predicted that increased precipitation will be the most dangerous and frequent weather-related challenge facing Pennsylvania in the next 20 years. DEP notes that in the coming years, precipitation patterns will increase in magnitude, frequency, and intensity across the Commonwealth, but that this is a difficult phenomenon to model, limiting the ability to project extreme precipitation locations and levels. It is known that most increases in precipitation will likely occur in the winter and spring months.¹¹ This will happen state-wide but is expected to be particularly common in the southeastern region of the Commonwealth. While Pennsylvania will likely see more rainfall, it is projected to occur in more spaced-out heavy rain events. Thus, consecutive dry days are projected to increase as well, potentially leading to drought.

Threats to Infrastructure

Broadband equipment is susceptible to damage from flooding, particularly ground-mounted equipment. Utility poles or buried fiber can be impacted as well due to saturated ground conditions, river washouts, or corrosion caused from prolonged water exposure. Winter storms, also increasingly common in Pennsylvania, can lead to heavy ice buildup on overhead lines and other equipment. This can also occur on trees, potentially leading to lines breaking or branches falling into lines, resulting in structural failure and/or power failures. Wind, tornadoes, and hurricanes and the resulting heavy winds, rain, and flooding can cause damage to broadband equipment such as utility poles, cables, ground-mounted equipment, and wireless infrastructure.¹² Wildfire will also be a hazard that negatively impacts broadband infrastructure within the Commonwealth. This will be exacerbated by more frequent drought conditions.

PBDA understands that differing climate issues require varied mitigation strategies during construction of networks, which should be tailored to the specific risks. Keeping this in mind, in assessing climate risk presented through BEAD funding applications, PBDA will ensure that proposals include strategies to mitigate disaster risk. Potential sub-grantees will be required to include an emergency response plan with their application to ensure a structured response occurs in the face of extreme weather events.

Once awards have been granted, PBDA will prioritize field and compliance checks of funded infrastructure in disaster-prone areas to ensure that construction best practices are followed. Additional mitigation measures not listed in this section may be required by PBDA, pending changing weather patterns.

2.11.1 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.

In addition to the tools and resources recommended by NTIA, PBDA will utilize the following resources to determine the quality of disaster risk mitigation strategies in project applications:

1. The [Center on Rural Innovation's Broadband Climate Risk Mitigation Tool](#), which calculates a risk score at the county level using national percentile ranks derived from Expected Annual Building Loss estimates from the Federal Emergency Management Agency (FEMA)'s [National Risk Index](#).
2. [PEMA's Commonwealth of Pennsylvania 2023 Hazard Mitigation Plan](#). From 2022-2023, PEMA led 65 state agencies and 60 Pennsylvania counties to develop 96 actions to help local and regional agencies plan for potential hazards.
3. [PennDOT's Extreme Weather Vulnerability Study](#).

¹¹ dep.greenport.state.pa.us/elibrary/GetDocument?docId=3667348&DocName=PENNSYLVANIA CLIMATE IMPACTS ASSESSMENT 2021.PDF [%28NEW%29](#) 4/30/2023 DEP PA Climate Impacts Assessment

¹² [Understanding disaster resiliency factors for broadband deployments](#) - Center on Rural Innovation Center on Rural Innovation, [Understanding Disaster Resiliency Factors for Broadband Deployments](#)

2.12 Low-Cost Broadband Service Option (Requirement 16)

2.12.1 Describe the low-cost broadband service option(s) that must be offered by sub-grantees 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.

To ensure that all residents within the Commonwealth of Pennsylvania have access to affordable broadband service options, Pennsylvania will offer a low-cost broadband service option.

- a. To ensure the economic feasibility of a low-cost option, PBDA will adopt the following formulaic cost methodology directly related to ACP eligibility requirements. PBDA will update this threshold annually as new federal poverty guidelines are released. Those awarded through the BEAD program will be notified when the cost threshold changes so their low-cost plans can be adjusted accordingly.
- b. The costs listed here were calculated using the Affordable Connectivity Program (ACP) subsidy. In the event that ACP is not reauthorized at the federal level, the customer will be responsible for paying the additional \$30 per month.
- c. Applicants will detail their low-cost plans, with costs equal to or less than 2% of the maximum eligible annual income, outlined by ACP with a household of one, divided by 12. In 2023, ACP’s maximum eligible annual income for a household of one is \$29,160. Divided by 12, the monthly income is \$2,430. The maximum monthly charge for a low-cost plan is 2% of \$2,430, or \$48.60.
- d. The Low-cost plan is not subject to data caps, surcharges, or usage-based throttling. The plan must be subject only to at least the same, if not more, acceptable-use policies to which subscribers to all other broadband internet access service plans offer to home subscribers. The price identified via the cost methodology above, as well as the provisions listed above, will be a contractual requirement of sub-grantees for the useful life of the network as determined by NTIA.
- e. The plan provides either 100/20 Mbps, or 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.
- f. The plan provides typical latency measurements of no more than 100 milliseconds.
- g. The subscriber may apply the ACP subsidy to the service price.
- h. The price identified, as well as the provisions listed above, will be a contractual requirement of sub-grantees for the useful life of the network as determined by NTIA

- i. In the event the provider later offers a low-cost plan with higher speeds downstream and/or upstream, the proposed broadband service option permits Eligible Subscribers that are subscribed to a low-cost broadband service option to upgrade to the new low-cost offering at no cost.
- j. In the absence of ACP or an ACP-replacement program, the provider must continue to offer the low-cost plan unsubsidized as outlined but without the requirement to apply the ACP benefit. In such an instance, the low-cost plan must also adhere to federal poverty guidelines, as outlined above.

2.12.2 Certify that all sub-grantees will be required to participate in the Affordable Connectivity Program or any successor Program.

Sub-grantees to Pennsylvania’s BEAD grant program will be required to participate in the Affordable Connectivity Program (ACP) or any successor program if ACP ends. Subscribers that are eligible for a broadband service subsidy can apply the subsidy to the proposed service option.

2.13 Middle Class Affordability Plans (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.

PBDA will require all sub-grantees receiving BEAD funds to offer low-cost, high-speed affordable service options to all middle-class households using the BEAD-funded network. In the grant application, prospective sub-grantees will be required to include a robust affordability plan detailing such, as well as a sustainability plan that ensures affordability is maintained for at least five years following project completion. To enable providers to offer affordable service options, PBDA will strive to eliminate barriers to entry, promote open access to multi-dwelling units, and will encourage alternative technology options.

To establish this requirement, PBDA has determined “middle-class” households to be those with an income between 201 and 400% of the poverty level. Applying this standard in Pennsylvania, a total of 1,119,667 (36% of rural and 64% of urban) households are considered “middle-class”. Nine percent of those households currently lack internet access.¹³

Throughout the grant implementation process, PBDA is committed to continued monitoring and public reporting to ensure that high-speed internet connections are affordable for middle-class households in Pennsylvania. Additionally, PBDA will ensure that sub-grantees comply with middle-class affordability standards by incorporating such standards into the scoring criteria established in this Initial Proposal. Affordability will comprise 25% of the scoring criteria used by PBDA to evaluate BEAD grant proposals.

PBDA worked with the Center for Rural Pennsylvania (the Center), a legislative research agency within the Pennsylvania General Assembly, which identified households with an income-to-poverty ratio between 201 percent to 400 percent. These ratios, calculated by the Census Bureau, were based on the household’s income and the number of people in the household. Households that met these criteria were labeled Middle-Income Households.

Next, the cost-burden was identified. For all ACP-Qualified Households, the Center calculated the median annual household income. Next, it calculated the annual value of the ACP benefit: \$360 (\$30 per month for 12 months). Then, the ratio of benefit to income was calculated by dividing the annual benefit (\$360) by the median annual household income. For example, in 2021, the median household income for ACP Qualified Households was \$28,838. The ratio of benefit to income was calculated by dividing the annual benefit (\$360) by the median annual household income. The product ratio was 1.25 percent. 

¹³ 2021, 1-year Average, American Community Survey, Public Use micro Data Sample, U.S. Census Bureau, via the Center for Rural Pennsylvania.

The 1.25 percent ratio was then applied to the median household income for the Middle-Income Group (\$51,496 * 0.0125). The product was \$643 or 53.57 per month. The same process was applied to the Upper-Income Group (\$127,917 * 0.0125). The product was \$1,597 or \$133 per month. This approach was taken for various reasons. First, all income groups share the same cost-burden ration. Also, the model is simple and easy to calculate. Finally, the model should not be unique to most Pennsylvania residents since it is similar to the state's income tax, which is a flat tax.

Recommended Service Plan

PBDA will encourage sub-grantees receiving BEAD funds to adopt the following affordable service option to ensure that BEAD funds are used in a manner that increases the affordability of broadband services for middle-class households. It is important to note the price point listed below is a recommendation based upon the joint analysis conducted by the Center and PBDA. Providers are not required by PBDA or any other state or federal agency to offer specific rates. Their rates should be reflective of the costs to build out an affordable but sustainable high speed broadband network.

The affordable service option should meet, at a minimum, the following criteria:

- Costs of \$643 annually or \$54 per month or less, inclusive of all taxes, fees, equipment, and charges billed to the customer.
- Offer consistent and reliable download speeds of at least 100 Mbps and upload speeds of at least 20 Mbps.
- Latency less than or equal to 100 milliseconds.
- No data caps, surcharges, or usage-based throttling may be applied. The plan must be subject only to the same policies and procedures which subscribers to all other broadband internet access service plans offer to home subscribers.
- The affordable service option must be made available to all locations within the sub-grantee's proposed project area. Sub-grantees will be encouraged to make the option available across its entire service territory.
- Sub-grantees will be required to submit a description of their plan to advertise the affordable service option to customers.

2.14 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.

PBDA requests that 100% of funding be made available to Pennsylvania under the BEAD allocation, totaling \$1,156,778,272.41, upon approval of the Initial Proposal. In addition to the \$5 million in planning funds already received, PBDA does not intend to use deployment funds between acceptance of the initial proposal and prior to submission of the final proposal to NTIA. However, to ensure budget certainty, PBDA’s internal grant process preference is to receive all federal funds that have been allocated for sub-grant purposes prior to awarding sub-grants and finalizing contracts.

The designated two percent of funds will go toward administrative purposes, including staff salaries. Additional funds will be used to support a BEAD challenge portal and will be used to extend broadband networks to all unserved and underserved locations, as well as unserved community anchor institutions.

This proposed use of funds achieves the statutory objective of the program as stated in the BEAD NOFO.

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

PBDA requests the amount of \$1,156,778,272.41, as allocated through the Infrastructure Investment and Jobs Act to the Commonwealth of Pennsylvania on June 26, 2023.

2.14.3 Certify that the Eligible Entity will adhere to BEAD Program requirements regarding Initial Proposal funds usage.

PBDA certifies that it will adhere to BEAD Program requirements regarding use of Initial Proposal funds.

2.15 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.

In accordance with the Infrastructure Investment and Jobs Act of 2021, and pursuant to Section IV (C) (1) (a) of the BEAD Notice of Funding Opportunity (“Consider All Provider Types”), PBDA commits, to the fullest extent of the law, not to exclude cooperatives, nonprofit organizations, public-private partnerships, private companies, public or private utilities, public utility districts, or local governments from eligibility for grant funds.

PBDA asserts that there are no Commonwealth of Pennsylvania laws that either (a) preclude certain public sector providers from participation in the sub-grant 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.

PBDA understands the concerns raised by its stakeholders about compliance with both Commonwealth and federal law, specifically relating to 66 Pa. C.S. § 3014(h)(2). However, PBDA does not view this provision as conflicting with its commitment not to exclude cooperatives, nonprofit organizations, public-private partnerships, private companies, public or private utilities, public utility districts, or local governments from eligibility for grant funds.

In fact, PBDA views this as an opportunity to partner with sub-grantees to navigate the necessary Commonwealth processes and achieve compliance with both Commonwealth and federal laws.

PBDA interprets 66 Pa. C.S. § 3014(h)(2) as necessitating the following process:

1. A political sub-division must first provide a written request for the deployment of such service to the local exchange telecommunications company serving the area before the political subdivision may offer advanced or broadband services.
2. The local exchange telecommunications company or one of its affiliates has two months from the date the written request is received to agree to provide the data speeds requested from the political subdivision.
3. If the local exchange telecommunications company or one of its affiliates agrees to provide the data speeds requested, then it must do so within 14 months of receipt of the request.

4. If, after agreeing to provide data speeds requested by the political subdivision, the local exchange telecommunications company or one of its affiliates does not provide the data speeds requested within 14 months of receipt of the written request, the political subdivision may offer advanced or broadband services in the area.
5. If the local exchange telecommunications company or one of its affiliates does not agree within two months to provide the data speeds requested, the political subdivision may offer advanced or broadband services.

PBDA envisions forming active partnerships with both political subdivisions and local exchange telecommunications companies to facilitate this process. In furtherance of its reputation as the “one-stop-shop for all things broadband” in the Commonwealth, PBDA commits to providing clear, accessible and transparent guidance to all parties that engage with this important process.

2.15.1.1 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.

Not applicable.

2.16 Certification of Compliance with BEAD Requirements (Requirement 19)

2.16.1 Certification of the Eligible Entity’s intent to comply with all applicable requirements of the BEAD Program, Including the reporting requirements.

PBDA will comply with all applicable requirements of the Program, including the reporting requirements.

2.16.2 Describe sub-grantee 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 sub-grantees for, at a minimum, all deployment projects on a reimbursable basis (which would allow the Eligible Entity to withhold funds if the sub-grantee fails to take the actions the funds are meant to subsidize);
 - b. The inclusion of clawback provisions (i.e., provisions allowing recoupment of funds previously disbursed) in agreements between the Eligible Entity and any sub-grantee;
 - c. Timely sub-grantee reporting mandates; and
 - d. Robust sub-grantee monitoring practices.
- A. PBDA will distribute funds to sub-grantees through a reimbursement process. In the event that a sub-grantee fails to take the actions the funds are meant to subsidize, PBDA reserves the right to withhold funds. For all projects, 10% of funds will be withheld until all contract obligations have been met and the sub-grantee submits a final report to PBDA.
- B. If the sub-grantee fails to meet at least 90% of all deliverables outlined in the grant contract, PBDA will require the submission of a Corrective Action Plan. PBDA reserves the right to recoup funds from the sub-grantee. Such payments would be due from the sub-grantee within 30 days of the notice to recoup funds. If any repayment due is not made by the sub-grantee by the required date, PBDA may determine that further collection action is required and may refer the matter to the Office of the Attorney General (OAG) for collection.
- C. PBDA will hold the ability to inspect all work, invoices, materials, and other relevant records at reasonable times and places. Upon request, sub-grantees will be required to furnish all data, reports, contracts, documents, and other information relevant to the BEAD project. In addition to the final project report, sub-grantees will be required to submit quarterly and annual progress reports regularly until the completion of the funded project. Failure to comply with reporting requirements could result in project expense reimbursements being withheld. The following is a non-exhaustive list of activities that will be monitored and used to measure performance of sub-grantees:
- Data related to projects Review of expenses and requests for reimbursement Field audits to verify capital project construction progress, completeness, and quality
 - Mapping updates
 - Affordability compliance
 - Fair Labor and Civil Rights Compliance
 - Equity indicators
 - Sustainability indicators and means of verification

- Stakeholder and community engagement efforts
- Programmatic data such as geospatial data for infrastructure projects
- Other measures as determined by PBDA

Compliance reviews will take place regularly to ensure that the funded project complies with applicable state and federal guidance and policies. Compliance reviews could include site visits, desk reviews, internal compliance reviews, and financial reviews.

2.16.3 Certification that the Eligible Entity will account for and satisfy authorities relating to civil rights and nondiscrimination in the selection of sub-grantees.

PBDA certifies that its selection of sub-grantees will account for and satisfy each of the following authorities:

- Parts I & II of Executive Order 11246, Equal Employment Opportunity
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency
- Executive Order 13798, Promoting Free Speech and Religious Liberty

PBDA will require that sub-grantees agree, by contract or other binding commitment, to abide by the non-discrimination requirements set forth in the following legal authorities, to the extent applicable, and to acknowledge that failure to do so may result in cancellation of any award and/or recoupment of funds already disbursed:

- Title VI of the Civil Rights Act
- Title IX of the Education Amendments of 1972
- The Americans with Disabilities Act of 1990
- Section 504 of the Rehabilitation Act of 1973
- The Age Discrimination Act of 1975
- Any other applicable non-discrimination law(s)

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

Cybersecurity

1. The prospective sub-grantee has a cybersecurity risk management plan (the plan) in place that is either: (a) operational, if the prospective sub-grantee is providing service prior to the award of the grant; or (b) ready to be operationalized upon providing service, if the prospective sub-grantee is not yet providing service prior to the grant award;
2. 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;
3. The plan will be reevaluated and updated on a periodic basis and as events warrant; and
4. The plan will be submitted to the Eligible Entity prior to the allocation of funds. If the sub-grantee makes any substantive changes to the plan, a new version will be submitted to the Eligible Entity within 30 days.

Supply Chain Risk Management (SCRM)

1. The prospective sub-grantee has a SCRM plan in place that is either: (a) operational, if the prospective sub-grantee is already providing service at the time of the grant; or (b) ready to be operationalized, if the prospective sub-grantee is not yet providing service at the time of grant award;
2. 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;
3. The plan will be reevaluated and updated on a periodic basis and as events warrant; and
4. The plan will be submitted to the Eligible Entity prior to the allocation of funds. If the sub-grantee makes any substantive changes to the plan, a new version will be submitted to the Eligible Entity within 30 days. The Eligible Entity must provide a sub-grantee's plan to NTIA upon NTIA's request.

PBDA certifies that it will take all necessary steps to ensure compliance with the cyber security and supply chain risk management requirements on pages 70-71 of the BEAD NOFO. Sub-grantees must attest that:

Cybersecurity

- The application includes a cybersecurity risk management plan (the plan) in place that is either: (a) operational, if the prospective sub-grantee is providing service prior to the award of the grant; or (b) ready to be operationalized upon providing service, if the prospective sub-grantee 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 PBDA prior to the allocation of funds. If the sub-grantee makes any substantive changes to the plan, a new version will be submitted to PBDA within 30 days.

Supply Chain Risk Management (SCRM)

- The prospective sub-grantee has a SCRM plan in place that is either: (a) operational, if the prospective sub-grantee is already providing service at the time of the grant; or (b) ready to be operationalized, if the prospective sub-grantee 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 PBDA prior to the allocation of funds. If the sub-grantee makes any substantive changes to the plan, a new version will be submitted to PBDA within 30 days. PBDA must provide a sub-grantee's plan to NTIA upon NTIA's request.

2.17 Volume II Public Comment

2.17.1 Describe the public comment period and provide a high-level summary of the comments received during the Volume II public comment period and how they were addressed. The response must demonstrate:

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

- A. The Initial Proposal Volume II public comment period was open from October 16, 2023 through November 14, 2023, a total of 30 days.
- B. PBDA managed the public comment period for Volume II of the Initial Proposal through various outlets. Public responses were collected using Microsoft Forms. The accompanying comment form included the following:
 1. Name*
 2. Email address*
 3. Zip code*
 4. Organization (if applicable)
 5. Job title (if applicable)
 6. Comments on Requirement 1: “Objectives”
 7. Comments on Requirement 2: “Local, Tribal, and Regional Broadband Planning Processes”
 8. Comments on Requirement 4: “Local Coordination”
 9. Comments on Requirement 8: “Deployment Sub-grantee Selection”
 10. Comments on Requirement 9: “Non-Deployment Sub-grantee Selection”
 11. Comments on Requirement 10: “Eligible Entity Implementation Activities”
 12. Comments on Requirement 11: “Labor Standards and Protection”
 13. Comments on Requirement 12: “Workforce Readiness”
 14. Comments on Requirement 13: “Minority Business Enterprises, Women’s Business Enterprise/Labor Surplus Area Firms Inclusion”
 15. Comments on Requirement 14: “Cost and Barrier Reduction”
 16. Comments on Requirement 16: “Low-Cost Broadband Service Option”
 17. Comments on Requirement 20: “Middle Class Affordability Plans”
 18. Comments on Requirement 17: “Use of 20 Percent of Funding”
 19. Comments on Requirement 18: “Eligible Entity Regulatory Approach”
 20. Comments on Requirement 19: “Certification of Compliance with BEAD Requirements”
 21. Additional comments on Volume II

* = required question

An announcement about the comment period was distributed via email to PBDA’s distribution list, which includes more than 3,500 contacts from the following industries:

- Local Development District administrators
- County and Local Governments
- Association partners
- Service Providers
- Economic and Community Development organizations
- Consulting groups
- State and Federal Legislators
- Digital Equity advocates
- Commonwealth of Pennsylvania employees
- Other Non-Profit and Non-Governmental Institution representatives

In conjunction with the announcement of the public comment period for Volume II, PBDA conducted a webinar on October 17, 2023, to explain the NTIA and Commonwealth requirements that informed how the document was drafted, to provide an outline of the document, and to offer justification for how procedures were determined. Additionally, during the public comment period, on November 8, 2023, PBDA held two listening sessions to give an opportunity to various stakeholder associations representing digital equity, local government, industry, and workforce development to raise questions about the document and engage directly with PBDA staff. The sessions were held in person with a virtual option.

The comment period was advertised through PBDA’s four sub-committees and the various digital equity coalitions that PBDA interacts with regularly, such as the Pennsylvania Statewide Digital Equity Coalition, the National Digital Inclusion Alliance, and the PA Workforce Development Board Interagency Workgroup.

PBDA received Volume II feedback from a total of 96 stakeholders, including constituents, internet service providers, digital equity advocates, elected officials, and others. While several comments were not relevant to NTIA’s requirements for Volume II, the majority of the comments were viable, and all were reviewed in detail by PBDA. The following themes were captured in the public comments:

- **Local Coordination and Local Government Input**
 - PBDA received feedback from public comments calling for input from local government officials to be included and considered in the scoring process. As a result, PBDA included “local government coordination” as a scoring category, worth up to four points in the composite scoring criteria. PBDA will outline procedures for collecting local government and taxing entity input in BEAD program guidelines.
- **Asset Management**
 - To assure sustainable affordability beyond initial BEAD investments, PBDA will attach conditions related to maintaining affordability standards to the asset, addressing a concern that was raised through public comments. To safe-guard against the potential that a BEAD-funded project is financially acquired, or the sub-grantee chooses to sell assets, PBDA will tie all sub-grantee requirements to the asset through the period of performance and reporting. Sub-grantees will be required to notify PBDA if an asset is sold. This information was added to the “Claw-back Provision” explanation in section 2.4.1.

- **Broadband Ready Communities**
 - Commenters had concerns over requirements to participate in PBDA’s “Broadband Ready Community” program (referenced in sections 2.4.2 and 2.10.1). PBDA has updated the document to clarify that the program is voluntary in nature, meant to identify a local government’s willingness to engage in broadband development. It is also non-regulatory and there are no mandates, related to scoring or otherwise, tied to participation.

- **Affordability**
 - There was considerable concern from stakeholders regarding PBDA’s approach to affordability pricing and requirements in Volume II of the Initial Proposal. Comments ranged from those who considered the approach that was detailed in the document to be financially impractical from a profit perspective to those who were concerned that PBDA’s recommended middle-class rate of \$54 a month (from section 2.13) was not affordable for consumers. As a result, PBDA updated low-cost affordability to include adoption of a formulaic cost methodology that is directly related to ACP eligibility requirements.
 - PBDA initially intended to adopt NTIA’s example for the low-cost broadband service option, as outlined in the BEAD NOFO. Through public feedback, PBDA determined that for Pennsylvania, the model posed a cost-related sustainability risk. PBDA drafted an approach that was determined to be more balanced and relevant to the state’s unique factors, tying the low-cost service option to ACP and the federal poverty level. This update is reflected in section 2.12.1.
 - Language was also added requiring that applicants detail their low-cost plans, with costs equal to or less than 2% of the maximum eligible annual income outlined by ACP with a household of one, divided by 12. By 2023 standards, this would bring the average monthly price point for low-income affordability plans to \$48.60. More information can be found in section 2.12.
 - Three primary changes were made to the affordability scoring section:
 - First, an additional speed tier was added for both priority and other deployment projects. For priority projects the speed tiers consist of 100/20 Mbps and 1000/1000 Mbps, whereas for other deployment projects the speed tiers consist of 100/20 Mbps and 1,000/200 Mbps. These ranges were determined based on the likely technology to be deployed and realistic speeds achievable. It was determined that limiting the evaluation of affordability to the minimum speed may be limiting for future adoption and capacity demand.
 - Second, the scoring between these two tiers, within both project levels, was split 50/50 at 12.5 points per tier to evenly weight the two speeds and encourage competition among applicants.
 - Third, the prices, binding to the period of performance, are now to be indexed to inflation utilizing the Consumer Price Index (CPI), Philadelphia-Camden-Wilmington. Rates will be allowed to adjust annually to reflect changes in inflation.

- **Speed to Deployment Scoring Weight**
 - A basic change was made to speed to deployment scoring criteria, reducing the overall point value of this element. This was done to increase the priority of other scored elements, as well as develop an additional scoring element, Local Government Coordination. Upon review of public comment and collaboration with PBDA’s partners and stakeholders, it was determined that the speed to deployment would be more heavily influenced by other scored elements being successfully completed, such as local government coordination, rather than scoring speed to deployment itself. Therefore, additional points were distributed throughout the scoring criteria to reflect these new priorities.

- **Regulatory Approach**
 - In section 2.15.1, PBDA added clarifying information about its regulatory approach, particularly to address concerns raised by stakeholders about compliance with both Commonwealth and federal law, specifically relating to 66 Pa. C.S. § 3014(h)(2).
- **Reimbursement of Project Costs**
 - In section 2.4.1, PBDA clarified that reimbursements will be issued on an incremental basis, based on the evaluation and validation of expense reports related to any one of three criteria (including equipment, personnel, and materials).
- **Webinar Attendance**
 - Based on public feedback, attendance in a sub-grantee grant application webinar will no longer be included as a scoring criterion.
- **Scoring Criteria for Equitable Workforce Development**
 - The required Equitable Workforce Development scoring criteria was shifted from encouraging that 40% of an applicant’s workforce be comprised of a local workforce to 15%.
 - Guarantee at least 15% of its workforce be either directly employed from local or regional areas of Pennsylvania
 - Employees that have completed a registered apprenticeship or pre-apprenticeship employees hired because of joint labor management partnerships with a local union or industry group in Pennsylvania.
 - On-the-job training opportunities to recruit new employees.
 - High-quality, industry-recognized credentialing and training for new employees.
 - More information on this scoring component can be found in section 2.4.2.
- **Defining Project Areas**
 - Many commenters suggested that requiring universal service from any given project applicant in a project area would lead to inflated costs due to the difficulty of reaching certain high-cost locations. Therefore, PBDA will allow applicants to propose serving a floor of 95% of the locations in any given project area. Identified high-cost locations will then be served through a second round, or with another technology.
 - PBDA expanded its definition of project areas to include Census Block Groups that can be aggregated into contiguous project areas. These aggregated project areas will be the primary mechanism used to determine projects in the first application period, and will be used as a basis for consideration of project areas within the second-round application period.
- **Prevailing Wage Clarification**
 - Based on questions raised through public comments, PBDA clarified that Pennsylvania’s Prevailing Wage Act stands in regard to BEAD sub-grants. More information about this can be found in section 2.7.1.



Commonwealth of Pennsylvania