



Government of Puerto Rico
Office of Management and Budget

BEAD Initial Proposal

Volume 2

Draft for Public Comment

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Introduction

The Puerto Rico Broadband Program is tasked with the deployment of local and federal broadband funds, including \$334.6 million in federal Broadband Equity, Access, and Deployment (BEAD) funding for Puerto Rico through the Infrastructure Investment and Jobs Act (IIJA). This historic investment in broadband infrastructure and related digital inclusion efforts will support Puerto Rico’s vision for universal broadband access:

All residents, regardless of their background or location, will have access to the resources and opportunities necessary to thrive in the digital world and fully participate in modern society.

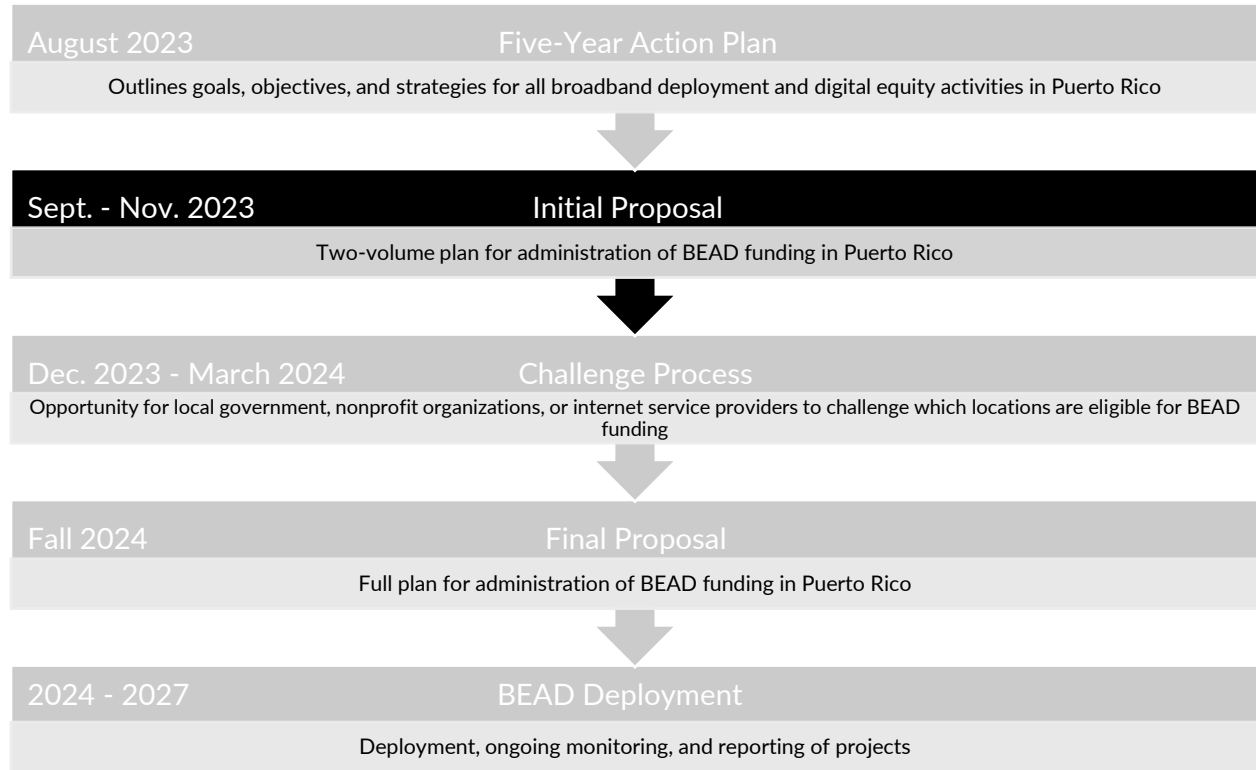
Building upon the strategies outlined in Puerto Rico’s BEAD Five-Year Action Plan and the Initial Proposal Volume 1, this Initial Proposal Volume 2 includes the following 16 requirements, outlined in Figure 1 below. The Puerto Rico Broadband Program has followed the structure of National Telecommunications and Information Administration (NTIA) guidance and responded to submission text boxes throughout the proposal for ease of review.

Figure 1: Initial Proposal Volume 2 Requirements

Objectives	Local and Regional Broadband Planning	Minority Business Enterprises/Women's Business Enterprises/Labor Surplus Area Firms Inclusion	Cost and Barrier Reduction
Local Coordination	Deployment Subgrantee Selection	Climate Assessment	Low-Cost Broadband Service Option
Non-Deployment Subgrantee Selection	Eligible Entity Implementation Activities	Use of 20 Percent of Funding	Eligible Entity Regulatory Approach
Labor Standards and Protection	Workforce Readiness	Certification of Compliance with BEAD Requirements	Middle Class Affordability Plans

This Initial Proposal Volume 2, paired with the four requirements met in the previous Initial Proposal Volume 1, will serve as Puerto Rico’s draft plan for deployment of BEAD funding and for providing reliable, affordable high-speed internet to all residents. **Error! Reference source not found.** below provides an overview of BEAD deployment in Puerto Rico.

Figure 2: BEAD Deployment Process in Puerto Rico



Req. 1. Objectives

2.1.1 Text Box: 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.

The Puerto Rico Broadband Program was created in response to Puerto Rico's need for a resilient, equitably distributed broadband internet infrastructure and the social support necessary to access the internet knowledgeably, effectively, and safely. The Puerto Rico Broadband Program complements and supplements existing Federal programs that responded to the 2017 – 2020 environmental disasters that leveled the existing infrastructure.

The Puerto Rico Broadband Program collaborated with Federal and Local Government agencies, community organizations, and industry partners to develop a comprehensive vision and established broad, short-term, and long-term goals for broadband deployment and digital equity in Puerto Rico. These goals describe achievable outcomes supporting residents and fulfilling Puerto Rico's vision for all residents and businesses to thrive in the digital world and fully participate in modern society.

The goals described below are supported by specific and obtainable objectives. These measurable, time-based objectives will help the Puerto Rico Broadband Program evaluate progress and follow a clear path to reliable, highspeed connectivity and broadband adoption for all residents and businesses, aligned with the Puerto Rico Broadband Program's four pillars: **connectivity and resilience, quality and speed, accessibility, and knowledge.**

Connectivity and Resilience

Puerto Rico's priorities will be to create resilient infrastructure along key routes that connect community anchor institutions while providing access to hardened infrastructure for multiple use cases, including middle mile networks, last mile networks, utility communications, and wireless backhaul.

Past broadband deployment in Puerto Rico has been significantly impacted by storms and deterioration.¹ Puerto Rico will be prioritizing efforts to ensure that all new infrastructure is strategically planned, and all existing infrastructure is made more resilient through additional hardening to withstand the test of time, while also adopting scalable technologies. To achieve connectivity and resilience for all, the Puerto Rico Broadband Program will focus on the following goals and objectives:

GOAL 1: Resilient Broadband Infrastructure Island Wide

Objectives:

Within four years:

- All municipalities will have resilient fiber optic cable along key routes, supplemented by resilient microwave routes where required by complexities in topography, available for multiple uses including middle mile networks, last mile networks, utility communications,

¹ For more information on the current state of broadband infrastructure in Puerto Rico, see the Five-Year Action Plan.

government and emergency communications, community anchor institutions, and wireless backhaul.

- Key infrastructure points such as wireless towers, points of presence, and major equipment shelters will be resilient against expected environmental challenges and power failures. This includes appropriate structural reinforcement, back-up power, and redundant connections to other network infrastructure.
- Puerto Rico will have multiple, geographically diverse undersea fiber optic cable landing stations, including on the north and south coasts of Puerto Rico.

GOAL 2: Address barriers for building new broadband infrastructure

Objective:

- The Puerto Rico Broadband Program will work closely with government agencies, municipalities, and other key stakeholders to ensure clear, consistent, and expeditious processes for utility pole and conduit access, environmental requirements, “dig once” regulations, and access to public rights-of-way.

GOAL 3: Promote competition among internet service providers, including small and medium enterprises.

Objective:

- Throughout the implementation of the IJJA funding, new government funded infrastructure will be available for use by multiple service providers. Whenever feasible, all projects will include mechanisms for the participation of small and medium enterprises based in Puerto Rico. The government’s efforts to promote competition and improve the quality of broadband internet service are essential to Puerto Rico’s economic development. Broadband internet is a key driver of economic growth, and by promoting competition and improving the quality of broadband internet service, the government is helping to create a more competitive and prosperous economy in Puerto Rico.

GOAL 4: Sustain a skilled broadband workforce to meet deployment needs.

Objectives:

- All broadband industry partners will convene to coordinate deployment needs by 2024.
- Industry-driven training programs with work-based learning opportunities will be planned for implementation between 2024 and 2025.
- The Puerto Rico Broadband Program will create career exploration opportunities for K-12 students to support long-term talent development as well as community colleges and university opportunities.
- The Puerto Rico Broadband Program will develop the local workforce by training workers in other similar industries who can be quickly certified in new roles related to broadband.

Quality and Speed

All residents must be able to rely on high-speed, quality service regardless of where they access the internet in Puerto Rico. By monitoring service offerings and the residential broadband consumer demographic, the Puerto Rico Broadband Program aims to improve the availability of information for consumers and the public regarding their broadband services. Additionally, the standardized QoS metrics will assist ISPs in identifying areas for improvement, while providing

consumers with a basis for selecting reliable and reputable service providers. Ultimately, this initiative seeks to promote accountability, transparency, and equitable access to high-quality telecommunications services throughout Puerto Rico.

Quality high-speed internet is critical for remote working, distance learning, and telehealth—only some of the many opportunities in the digital world made available with a reliable internet connection. Highspeed, reliable internet eliminates problems like buffering, failed uploads, poor-quality video calls, and a host of other poor connectivity issues. Resilient, storm-hardened infrastructure suited to the various geographies of Puerto Rico will support quality and speedy connections for homes, businesses, offices, and more. The Puerto Rico Broadband Program will consider additional efforts that support and upgrade all broadband infrastructure to the highest possible speeds. To ensure all residents have fast and quality service, the Puerto Rico Broadband Program will focus on the following goals and objectives:

GOAL 1: Access to low-latency broadband at speeds of 100/20 Mbps or more.

Objectives:

- All Broadband Serviceable Locations in Puerto Rico will have access to broadband at speeds of 100/20 Mbps or more and latency of 100 milliseconds or less by 2027.
- Over time, Puerto Rico programs for new or upgraded broadband infrastructure will require or prefer projects capable of 1000/500 Mbps service or greater and service via fiber optic technology wherever feasible.

GOAL 2: Community anchor institutions will have access to symmetrical gigabit service.

Objectives:

- Throughout the BEAD deployment time frame, routes for fiber optic cable will prioritize connection to community anchor institutions and will retain high-speed service for their essential community work.
- In addition to administrative offices, classrooms and other areas of schools will be connected to high-speed internet and Wi-Fi enabled to support online educational services for every student.
- Coverage will be made available to public housing buildings and within units.

Accessibility

The Puerto Rico Broadband Program is committed to making high-speed internet accessible and affordable to all, especially residents for whom the cost of internet has been a significant burden or barrier.

Pervasive barriers for low-income households include high-cost broadband subscriptions and expensive devices. Opportunities that require reliable internet remain inaccessible for low-income households when cost continues to be the primary limitation. Most low-income households do not find it necessary to connect their household to Broadband service since they have it already available in their mobile devices. Affordability is a top priority informing infrastructure planning and collaboration with internet service providers in Puerto Rico. To ensure all residents can access the internet and devices at an affordable price, the Puerto Rico Broadband Program will focus on the following goals and objectives:

GOAL 1: Broadband subscriptions will be accessible at affordable prices.

Objectives:

- Relationships with internet service providers will support the development of affordable options for low-income households and facilitate sharing of adoption rate data.
- Service affordability measures will be integrated into infrastructure planning.
- Enrollment in the Federal Communications Commission's (FCC) Affordable Connectivity Program (ACP) will increase throughout Puerto Rico in alignment with the targets outlined in the Digital Equity Plan.
- Whenever feasible, affordability programs will include mechanisms for the participation of small and medium enterprises based in Puerto Rico.

GOAL 2: Internet-enabled devices will be accessible and affordable.

Objectives:

- The Puerto Rico Broadband Program will support device distribution through partnerships with device refurbishment organizations.
- By 2025, all Puerto Ricans will have access to affordable devices that meet their individual needs and technical support for maintenance and repair.
- By 2025, affordable adaptive accessories will be available for covered populations and residents with special needs.

GOAL 3: Online public resources will be inclusive and accessible to all Puerto Ricans, regardless of ability.

Objective:

- By 2025, online government services for agencies supporting vulnerable populations will be fully inclusive and accessible.

Knowledge

For all residents to access online health care, school, work, and public services safely and effectively, the Puerto Rico Broadband Program will work to increase the number of digitally literate residents in Puerto Rico.²

Even with an affordable connection and internet-enabled device, many people require additional support to access the internet and participate fully in online opportunities. As residents gain access to affordable high-speed service and digital devices, the Puerto Rico Broadband Program will support programming for digital literacy that provides individuals of various skill levels with the knowledge and training they need to take advantage of the digital world's possibilities. To

² According to the National Digital Inclusion Alliance, a digitally literate person: Possesses the variety of skills – technical and cognitive – required to find, understand, evaluate, create, and communicate digital information in a wide variety of formats; Is able to use diverse technologies appropriately and effectively to retrieve information, interpret results, and judge the quality of that information; Understands the relationship between technology, life-long learning, personal privacy, and stewardship of information; Uses these skills and the appropriate technology to communicate and collaborate with peers, colleagues, family, and on occasion, the general public; and Uses these skills to actively participate in civic society and contribute to a vibrant, informed, and engaged community.

National Digital Inclusion Alliance, "The State Digital Equity Plan Toolkit," <https://www.digitalinclusion.org/state-digital-equity-plan-toolkit>.

ensure all residents are empowered to utilize technology, the Puerto Rico Broadband Program will focus on the following goals and objectives:

GOAL 1: Support digital literacy and digital skills for all residents.

Objective:

- Continual updates will be made to the existing digital literacy programs and best practices inventory.
- The Puerto Rico Broadband Program will support the development of a commonwealth-wide, culturally relevant digital navigator program through partnership with local government agencies, non-profits, libraries and schools to incorporate any existing programs or resources.

GOAL 2: Promote the importance of online security and privacy.

Objective:

- The Puerto Rico Broadband Program will collaborate with the Puerto Rico Innovation & Technology Service (PRITS) and across other government agencies and community organizations to create educational information about online scams, online phishing, and other cybersecurity threats.

GOAL 3: The Puerto Rico Broadband Program will make outreach efforts to communicate all advances in Connectivity in Puerto Rico

Objective:

- The Puerto Rico Broadband Program will partner with the Tourism Company, Invest Puerto Rico, and the Destination Marketing Organization to promote abroad all advances in Telecommunications and Connectivity in Puerto Rico.

In addition to improving the quality of life for residents and businesses, better connectivity and resources will attract the Puerto Rican diaspora to return to Puerto Rico for educational, business, and professional opportunities. By showcasing advancements in technology and infrastructure, broadband efforts can entice skilled professionals and entrepreneurs to establish themselves in Puerto Rico, ultimately contributing to the growth of the local economy. With access to high-quality education and a thriving business environment, returning Puerto Ricans can help to create a self-sustaining and prosperous community. These initiatives have the potential to serve as a beacon of progress and a source of pride for the people of Puerto Rico, inspiring others to invest in Puerto Rico's future.

Req. 2. Local and Regional Broadband Planning Process

2.2.1 Text Box: 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.

The Puerto Rico Broadband Program began the development of new program strategies with an inventory of existing infrastructure programs to align, complement, and inform its new initiatives in infrastructure and digital equity.

Following Hurricanes Irma and Maria in 2017 and the major earthquakes in 2020 that devastated Puerto Rico's existing infrastructure, projects administered by the Federal Government in recent years have focused on supporting Puerto Rico's disaster recovery, providing resilient infrastructure options, and utilizing fiber-to-the-premises technology. The Puerto Rico Broadband Program has taken a similar approach in awards from local funds to provide resilient infrastructure and create opportunities for residents to access free Wi-Fi in public spaces.

There are six funding sources currently available in various stages from planning to launch.

Figure 3: Currently Available Funds

Source	Purpose	Total
Uniando a Puerto Rico (FCC)	Enhance resiliency and redundancy in telecom networks, restore gains destroyed by Hurricanes Irma and Maria in 2017.	\$51.2M (Stage I) \$127.1M (Stage II) \$233.9M (Stage II added)
ReConnect (USDA)	Bring high speed broadband to rural areas. The project will connect 1,200 homes and 7 public schools using FTTP network.	\$8.7M
Disaster Recovery (FEMA)	<ul style="list-style-type: none"> Disaster Recovery for infrastructure, public utilities, aqueduct/sewer, buildings, roads, bridges, parks, and recreation Infrastructure resilience through risk mitigation of natural disasters, development emergency systems, and community resilience 	\$8.8M Road to Recovery \$2.4M Road to Resilience
Puerto Rico Broadband Infrastructure Fund (PRBIF)	Support expansion efforts in unserved and underserved areas, supporting communities. Complements Federal broadband programs, e.g., public Wi-Fi, resilient power and hardening, submarine cable resiliency, off-island submarine cable connectivity, support underground fiber program, support to Federal Communications Commission (FCC) Affordable Connectivity Program Outreach, communications and educational campaigns, Quality of Service monitoring, Quality of Service for government agencies, carrier neutral landing stations, multipurpose community technology centers	\$400M (PR Certified FY 2020-2021 budget)
Capital Projects Fund (Treasury)	Expansion and upgrades of broadband infrastructure	\$158.3M
Affordable Connectivity Program Outreach Grant (FCC)	Increase enrollment in the Affordable Connectivity Program	\$740K

Steps to Support Regional and Local Efforts

The Puerto Rico Broadband Program has and continues to collaborate with a range of stakeholders, bringing together Federal partners, the Governor's Office, all 78 municipalities, public institutions, private sector, and nonprofit organizations on behalf of the people of Puerto Rico. This holistic practice has the benefit of harnessing expertise with field experience to best serve all residents' needs for connectivity, quality, accessibility, and knowledge to thrive in modern society. Regional and local efforts to support broadband infrastructure began at the planning stage and continue through implementation as the Puerto Rico Broadband Program plans and implements programs. For more information on local coordination conducted by the Puerto Rico Broadband Program, see Requirement 4.

Req. 4. Local Coordination

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

Puerto Ricans in every municipality, community leaders, government agencies, and internet service providers have had the opportunity to inform infrastructure planning throughout development of the Five-Year Action Plan, Digital Equity Plan, Initial Proposal Volume 1, and this draft Initial Proposal Volume 2.

The Puerto Rico Broadband Program will continue to coordinate with all communities within Puerto Rico, including underrepresented populations, and a range of stakeholders for the Initial Proposal and Final Proposal phases of the BEAD program. Figure 4 outlines the five BEAD NOFO criteria the Puerto Rico Broadband Program has met and will continue to address in all local coordination efforts. Each of these criteria are outlined in the following sections.

Figure 4: Coordination of Evaluation Criteria



Source: NTIA

The Puerto Rico Broadband Program has engaged with dozens of entities across Puerto Rico during planning and is prioritizing further data collection and coordination during implementation of proposed activities. Leveraging existing relationships throughout the Government of Puerto Rico and the private sector, the Puerto Rico Broadband Program is combining efforts for high-speed internet deployment and digital equity affordable access and knowledge, ensuring BEAD and Digital Equity Act plans are integrated for impactful broadband expansion and digital equity outcomes for all Puerto Ricans.

Geographic Coverage

The Puerto Rico Broadband Program recognizes the importance of full participation within Puerto Rico and has engaged with stakeholders in every municipality on high-speed internet deployment and digital equity plans. The Puerto Rico Broadband Program engaged all 78

municipalities early in planning, requesting each municipality participate in an inventory of infrastructure and current plans. Each mayor was also asked to inform planning in their areas by providing optimal locations for the Puerto Rico Broadband Program's Public Wi-Fi Infrastructure Program.³ The Puerto Rico Broadband Program held regional listening sessions and additional municipality meetings during development of the Five-Year Action and Digital Equity Plans.

The Puerto Rico Broadband Program and its partners also launched three surveys of residents and community leaders throughout Puerto Rico to complement listening session findings:

- A Digital Inclusion Survey of key organizations,
- A Digital Equity Phone Dial Survey of unserved and underserved residents, and
- A Connectivity Survey with an optional speed test for Puerto Ricans to share their service experiences and device use.

Respondents from every area of Puerto Rico offered their experiences on service affordability, workforce needs, and organizational missions. Residents and community leaders will continue to inform planning in follow-up meetings throughout implementation, additional regional listening sessions, and coordination with community anchor institutions across Puerto Rico during development of the Final Proposal.

Diverse Stakeholder Groups

The Puerto Rico Broadband Program has coordinated with public service, private sector, and community-serving stakeholders throughout planning and in development of this Initial Proposal. At the Smart Island Summit, the Puerto Rico Broadband Program convened over 300 stakeholders from municipalities, the telecommunications industry, academia, community advocacy, and government to inform strategies for high-speed internet deployment and digital equity.

The Puerto Rico Broadband Program established regular meeting schedules for three committees that will continue to provide valuable insights and connect broadband planning to other initiatives throughout Puerto Rico. The **Broadband Executive Committee** and the **Broadband Advisory Council** review strategies and progress on infrastructure and digital equity to ensure all efforts advance the goals set forth in the Five-Year Action Plan. The Puerto Rico Broadband Program is also convening the **Digital Equity Advisory Subcommittee** to support Puerto Rico's participation in digital equity interventions for members of covered populations and to discuss broadband workforce strategies. Figure 5 below lists each committee's representatives.

³ For more information on the Public Wi-Fi Infrastructure Program, see the Five-Year Action Plan.

Figure 5: Puerto Rico Broadband Program Committees

Broadband Executive Committee	Broadband Advisory Council	Digital Equity Advisory Subcommittee
<ul style="list-style-type: none"> • PR Telecommunications Bureau • PR Office of Management and Budget • PR Department of Treasury • PR Secretary of the Government for Innovation, Information, Data and Technology • PR Government's Chief Innovation and Information Executive 	<ul style="list-style-type: none"> • PR Aqueduct and Sewers Authority • PR Association of Mayors • PR Telecommunications Alliance • PR Highway and Transportation Authority • PR Federation of Mayors • PR Department of Public Safety • PR Fiscal Agency and Financial Advisory Authority • PR Permit Management Office 	<ul style="list-style-type: none"> • Patient Advocate Office (OPP) • Elder Advocate Office (OPPEA) • Veteran Advocate Office (OPV) • Defender of the People with Disabilities (DPI) • Universities Representatives • Community Leader Representatives • Union Representatives • Health Associations • Non-Profit representatives • Department of Corrections and Rehabilitation • Covered Population Representatives

In partnership with committee members, the Puerto Rico Broadband Program continues to meet with stakeholders, including the public, to solicit feedback on the proposed programs. The Puerto Rico Broadband Program will describe the major funding programs, subgrantee selection, and other key plans outlined in this proposal to multiple stakeholder groups, including municipalities and workforce contacts, for feedback.

The Puerto Rico Broadband Program will ensure ongoing coordination with diverse stakeholders following submission of this Initial Proposal, including in subgrantee program scoring criteria that will prioritize coordination between internet service providers, local governments, and underrepresented communities. See Requirement 8 for additional information about local coordination scoring criteria for the deployment subgrantee.

Multiple Awareness and Participation Mechanisms

Materials shared at in-person meetings and events are regularly posted on the Puerto Rico Broadband Program website: smartisland.pr.gov. The program's site describes the funds available for broadband and related initiatives in Puerto Rico, access to ongoing surveys, and information about the Affordable Connectivity Program subsidy. Residents can access the program's contact information to speak with a staff member by phone or reach them by email. Continuous updates include past and upcoming events, recent news, and open Requests for Proposals to partner with the Puerto Rico Broadband Program.

A combination of traditional and social media has supported the Puerto Rico Broadband Program's awareness efforts. The Puerto Rico Broadband Program has frequently shared updates in newsletters, social media, radio, and in newspapers. To receive public comments, the Puerto Rico Broadband Program has posted public comment drafts online and announced comment

periods through official press release, social media, and newsletters. The Puerto Rico Broadband Program has accepted feedback through online comment form, by mail, during listening sessions, and in meetings with stakeholders.

Partner community organizations have supported efforts to reach residents by distributing information to the communities they work with daily. Government agencies, including the Department of the Family (ADSEF), and community organizations, such as Puerto Rico's AARP chapters, have shared feedback from residents for use in planning. The Puerto Rico Broadband Program is continuing to work with local organizations to distribute information on planned programs, further described below in Underrepresented Engagement.

Transparency

The Puerto Rico Broadband Program has developed clear procedures to promote transparency throughout implementation of BEAD funding.

The Puerto Rico Broadband Program notifies residents through press release of upcoming feedback periods and maintains updated information on its website and social media platforms. At smartisland.pr.gov, residents can access all submissions to NTIA, a history of requests for proposals, past and upcoming events, newsletters, contact information, and additional plan materials. The Puerto Rico Broadband Program will develop brief reports on broadband efforts to accompany NTIA submissions, including reports on the outcomes of public comment periods and their impact on the Puerto Rico Broadband Program's planning.

In addition to the transparency reports described above, the Puerto Rico Broadband Program will continue to involve a diverse set of stakeholders in planning through ongoing public meetings, social media and newsletters, email outreach, collaboration with nonprofits and community organizations, and recurring committee meetings such as the monthly convening of the Digital Equity Advisory Subcommittee.

Underrepresented Engagement

Building from efforts during the Five-Year Action and Digital Equity Plans, the Puerto Rico Broadband Program has continued to engage with underrepresented communities. The Puerto Rico Broadband Program incorporates information from meetings with community organizations and data collection focused on the needs of residents in underrepresented communities. Figure 6 below describes four activities conducted by the Puerto Rico Broadband Program during planning that have outlined needs of underrepresented residents and plans for addressing those needs.

Figure 6: Data Collection for Underrepresented Communities

Activity	Purpose	Key Takeaways
Covered Population and Underrepresented Community Interviews	Interview series with organizations representing all 8 covered populations, unserved and underserved communities ⁴	Digital equity barriers and service options in rural areas of Puerto Rico
Survey of Key Organizations on Existing Digital Inclusion Initiatives	Online form and email distribution to government agencies, higher education, nonprofits, philanthropy, service providers, private entities	Needs for workforce strategies, affordability programs, and support for increased use of online resources that does not burden nonprofit organizations
Digital Equity Survey for Unserved and Underserved Residents	Phone dial survey of residents unreachable through online distribution	Assessment of device and internet use, privacy, and cybersecurity practices
Connectivity Survey and Speed Test	Online service survey and optional speed test administered at public service events and shared through email newsletters, social media, and the PRBP website	Information on provider choices, available speeds, service costs, and technology use of residents across Puerto Rico

As described above, the Puerto Rico Broadband Program relies on regular input from stakeholders. The Puerto Rico Broadband Program continues to convene the Digital Equity Advisory Subcommittee on a monthly basis to evaluate digital equity efforts and plan deployment programs that focus on connecting underrepresented communities.

2.3.1.1 Attachment: 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.

The Puerto Rico Broadband Program is developing a complete list of local coordination with community organizations, unions and work organizations, and other groups.

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

Not applicable.

⁴ Puerto Rico’s unique demographics in the context of the rest of the United States mean that nearly all Puerto Ricans (99.8%) are considered part of the Digital Equity Act’s “covered populations.” In response, the Puerto Rico Broadband Program has pursued full geographic coverage to engage as many residents as possible and engaged covered populations that have specific needs in Puerto Rico, including individuals in households below the poverty level, older adults, incarcerated individuals, veterans, people with disabilities, people with low literacy and limited English proficiency, and rural individuals.

Req. 8. Deployment Subgrantee Selection

Deployment Subgrantee Selection Process & Scoring Approach

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

Existing commitments for deployment of last mile broadband service in Puerto Rico have shaped the Puerto Rico Broadband Program's approach to BEAD implementation. Two internet service providers, Claro and Liberty, are mandated to build and deliver universal service by 2028 with \$127.1 million in fixed broadband support through the Federal Communications Commission's (FCC) Uniendo a Puerto Rico program.⁵ Acknowledging existing commitments, the Puerto Rico Broadband Program will not award BEAD subgrants for the deployment of last-mile service.

The Puerto Rico Broadband Program will complement, rather than duplicate, Uniendo obligations by investing in Puerto Rico's backhaul infrastructure and establishing paths for long-term, resilient connections for all residents. See Requirement 9 for the Puerto Rico Broadband Program's plan for a fair, open, and competitive selection process for an island-wide conduit system.

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

In lieu of last-mile deployment projects, the Puerto Rico Broadband Program will be assessing bids for the development and management of a conduit route throughout Puerto Rico. The Puerto Rico Broadband Program has maintained BEAD NOFO priorities for subgrantee selection as applicable to the conduit deployment project. For more information on the subgrantee selection process for the conduit system, see Requirement 9.

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

The Puerto Rico Broadband Program will not conduct a subgrantee selection process for last-mile deployment projects. See Requirement 9 and Appendix A for the conduit system description and scoring rubric.

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

Due to the commitments established by the FCC Uniendo funding for Claro and Liberty to cover all BSL's in Puerto Rico by 2028, for purposes of BEAD funding, Puerto Rico has no unserved or underserved locations.

⁵ Uniendo a Puerto Rico Fund and the Connect USVI Fund, Order, WC Docket Nos. 18-143, 10-90, 14-58, 34 FCC Rcd 9109 (Sept. 30, 2019) (PR-USVI Stage 2 Order).
https://docs.fcc.gov/public/attachments/FCC-19-95A1_Rcd.pdf.

Puerto Rico's BEAD subgrantee selection process will complement these federal commitments by investing in resilient infrastructure throughout Puerto Rico. The FCC's Uniendo program did not require providers to install buried fiber.⁶ Though the Uniendo commitments will deliver service, Puerto Rico needs a more long-term network that promotes resilient, buried infrastructure without additional pole attachments. The Puerto Rico Broadband Program's conduit system will promote sustained coverage in Puerto Rico.

The conduit system described in Requirement 9 will enable a variety of users to support more resilient and scalable last-mile, middle-mile, and backhaul services throughout Puerto Rico. While designing the conduit project, the Puerto Rico Broadband Program and its partners will plan a core route that enables gigabit connections for community anchor institutions while providing access points for other areas that lack the connections needed for high-speed service. The Puerto Rico Broadband Program will select a conduit developer and manager committed to carrier neutrality and capable of efficient deployment of the full route.

2.4.4 Text Box: 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."

The Puerto Rico Broadband Program will provide funding for an island-wide conduit system, devices, and digital literacy training non-deployment activities, as described in Requirement 9, prior to deployment of services to eligible community anchor institutions. Existing commitments will ensure universal service to all broadband serviceable locations, and the proposed conduit system will enable long-term, resilient access to previously unserved areas throughout Puerto Rico, facilitating high-quality service for community anchor institutions. Efficient design of the conduit system will allow the Puerto Rico Broadband Program to prioritize critical non-deployment projects that will support connecting all residents to affordable, high-speed internet and technology.

With the proposed conduit system, the Puerto Rico Broadband Program is prioritizing the resiliency and future scalability of fiber service availability, including to community anchor institutions. Most of Puerto Rico is subject to fiber-to-the-end user build out requirements under the Federal Communications Commission's (FCC) Uniendo program. While the existing commitments do not require Claro and Liberty to provide symmetrical gigabit service to community anchor institutions, fiber operators are very likely to be able to provide community anchor institutions gigabit service by 2028. In the limited locations without existing fiber commitments, the Puerto Rico Broadband Program will ensure the conduit route passes community anchor institutions in those areas.

To support connection of community anchor institutions following development of the conduit system, the Puerto Rico Broadband Program will utilize the Puerto Rico Broadband Infrastructure Fund to target deployment of fiber-based services in the resilient conduit to community anchor institution locations.

⁶ Uniendo a Puerto Rico Fund and the Connect USVI Fund, Order, WC Docket Nos. 18-143, 10-90, 14-58, 34 FCC Rcd 9109 (Sept. 30, 2019) (PR-USVI Stage 2 Order). https://docs.fcc.gov/public/attachments/FCC-19-95A1_Rcd.pdf.

Through data collection for the Digital Equity and Five-Year Action Plans, the Puerto Rico Broadband Program identified significant needs in Puerto Rico and some of the largest digital equity gaps in the United States.⁷ These gaps require substantial funding and must be addressed prior to service deployments to support use of the services by the Puerto Ricans who need it most. See Requirement 9 for proposed BEAD non-deployment activities in Puerto Rico.

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

Though the conduit system is considered part of non-deployment subgrantee selection, the Puerto Rico Broadband Program will require Environmental and Historic Preservation (EHP) and Build America Buy America Act (BABA) compliance and communicate those requirements to each prospective conduit subgrantee through compliance guidance on the smartisland.pr.gov website, webinars, and in-person meetings.⁸

The Puerto Rico Broadband Program will require from prospective subgrantees a description of how the applicant plans to comply with all applicable federal and Puerto Rico environmental laws in application materials provided to each applicant.

After a subgrantee is selected, the Puerto Rico Broadband Program will require the subgrantee to download and complete an additional environmental questionnaire as well as a Floodplain Status certification, as applicable, prior to requesting a Notice to Proceed with pre-construction activities. Once the notice is issued by the Puerto Rico Broadband Program, the subgrantee can then begin pre-construction activities, which involve expenditures on “soft cost” items such as engineering functions, permit applications, right-of-way practices, and associated logistical efforts.

The Puerto Rico Broadband Program will emphasize minimizing adverse environmental impacts at every stage of the project. In published compliance materials and outreach to prospective subgrantees, the Puerto Rico Broadband Program will communicate that all prospective subgrantees must have the ability to obtain all applicable federal and local government permits and approvals needed for the project, should they be selected. All prospective subgrantees must have a plan for complying with all applicable environmental and National Historic Preservation Act (NHPA) requirements. The Puerto Rico Broadband Program will develop questions in the application materials that will guide prospective subgrantee descriptions for compliance with EHP and Build America Buy America (BABA) requirements. The Puerto Rico Broadband Program

⁷ See the Digital Equity and Five-Year Action Plans for more information on the current state of digital equity in Puerto Rico.

⁸ The Puerto Rico Broadband Program considers NTIA’s “deployment” subgrantee selection to concern last-mile service projects. As such, Puerto Rico will only select “non-deployment” subgrantees for development and operation of the conduit system, affordable device, and digital navigator programs.

will ask each prospective subgrantee to describe how it will comply with applicable environmental and national historical preservation requirements.

At the grant agreement stage, the Puerto Rico Broadband Program will require the selected subgrantee to complete an environmental law applicability checklist regarding various environmental laws. Submission and approval of the environmental checklist, among other exhibits to the grant agreement, will be a mandatory precondition to obtain a Notice to Proceed with Pre-Construction Activities as part of the grant administration process.

Within the grant agreement, the Puerto Rico Broadband Program will specify certain environmental provisions including but not limited to:

- The Clean Air Act,
- Federal Water Pollution Control Act, and
- Dig Once Policy.

In addition, the grant agreement will also require the subgrantee to refrain from undertaking any construction activities until the subgrantee or its contractors/subcontractors have submitted all applicable permits and clearances to the Puerto Rico Broadband Program and have received a Notice to Proceed following review of such permits and clearances. This requirement will apply to all parties in the development process, including public or non-profit subgrantees and any of their contractors.

The Puerto Rico Broadband Program will require the subgrantee to provide all available environmental information about the project and respond to any requests for information on environmental reviews. The subgrantee will be required to provide timely notice to the Puerto Rico Broadband Program of the following:

- Any proposed changes in project scope or changes in environmental conditions;
- Changes in the nature, extent, magnitude, scope, or location of the project;
- The addition of new activities not anticipated in the original scope of projects;
- The selection of an alternative not in the original application or environmental review; and
- New circumstances or environmental conditions which may affect the project or have bearing on its impact, such as concealed or unexpected conditions discovered during project implementation.

For National Environmental Policy Act (NEPA) compliance, each prospective subgrantee will be required to cooperate with any information requests from the Puerto Rico Broadband Program related to construction projects and/or ground disturbing activities. Following the award, the selected subgrantee will be required to obtain all necessary federal and local governmental permits and approvals necessary for the proposed work to be conducted. The Puerto Rico Broadband Program will support prospective subgrantees by communicating all requirements throughout the subgrantee selection process.

Local Environmental Permitting

In addition to compliance with the applicable federal environmental compliance and permitting requirements above, the subgrantee must also comply with local rules and regulations. The

Puerto Rico Broadband Program will work with the subgrantee to ensure that it is in compliance with the unified permitting process in Puerto Rico established by the Permit Management Office (OGPE, by its acronym in Spanish).⁹ Utilizing the Joint Regulations, the local permitting process is a unified process in Puerto Rico, which is a “one-stop” process for compliance with local permitting.¹⁰ The subgrantee will be required to permit the broadband construction/engineering project through the OGPE by complying with the Joint Regulations.

The local permitting requirements that will apply to a particular subgrantee’s project will depend on the specific type of activity to be permitted and the location of the activity. The subgrantee will be required to identify the parcel upon which the proposed activity will take place using the Puerto Rico Planning Board’s (Junta de Planificación, in Spanish) online GIS resource.¹¹ Depending on the location selected, this resource lists the applicable codes for the project that must be consulted.

Once the subgrantee has developed its high-level design for a proposed project, it will be submitted to the Permit Management Office (OGPE, by its acronym in Spanish) for review. It should be noted that even if the U.S. Army Corps of engineers has jurisdiction over a project, the OGPE shall still be required to be consulted above for the local permitting requirements in accordance with the Joint Regulations and the local permitting requirements depending on the type of activity and location of the project.

Build America Buy America Act

For Build America Buy America Act (BABA) compliance, the Puerto Rico Broadband Program will emphasize the following requirements in its outreach efforts and subgrantee materials:

- **Iron and Steel Products:** That all iron and steel products utilized by the subgrantee or any contractors and subcontractors in its proposed project have undergone all manufacturing processes, from the initial melting state through the application of coatings, in the U.S. unless a waiver is granted;
- **Manufactured Products:** That all manufactured products used in its BEAD funded project are manufactured in the U.S. In determining whether a product is produced in America, the subgrantee must comply with the definitions included in Section 70912 of BABA, 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 manufactures 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;

⁹ Government of Puerto Rico, “Development.” <https://www.permisos.ddec.pr.gov/>.

¹⁰ Government of Puerto Rico, “Junta de Planificacion.” https://gis.jp.pr.gov/Externo_Econ/Datos%20JP/Reglamento%20Conjunto%202020%20-Vigencia%20%20Enero%202021.pdf.

¹¹ Government of Puerto Rico, “Mapa Interactivo de Puerto Rico,” October 26, 2023, https://gis.jp.pr.gov/mipr/?_ga=2.211718037.1286566824.1670594078-.399807784.1661448601&_gl=1*1tnbdfj*_ga*Mzk5ODA3Nzg0LjE2NjE0NDg2MDE.*_ga_Z7MEG30P8C*MTY3MDU5NDA3Ny44LjEuMTY3MDU5NDI2NC4wLjAuMA.

- Construction Materials: For construction materials, the subgrantee and its contractors must certify that construction materials including but not limited to non-ferrous metals; plastic and polymer-based products (including polymers used in fiber optic cables); glass (including optic glass); lumber; and drywall used by the subgrantee and any contractors and subcontractors have undergone all manufacturing processes domestically;
- In addition to the provisions above, the subgrantee may not use BEAD funding to purchase or support any covered telecommunications equipment or service, as defined in Section 9 of the Secure and Trusted Communications Network Act of 2019 (47 U.S.C. § 1608); and
- The Infrastructure Act expressly prohibits the subgrantee from using BEAD funding to purchase or support fiber optic cable and optical transmission equipment manufactured in the People’s Republic of China unless a waiver of this requirement is received from the Assistant Secretary of Commerce for Communications and Information.

The Puerto Rico Broadband Program will also include language relating to subgrantee requirements relative to BABA within the grant agreement. This BABA section of the grant agreement shall outline the BABA requirements as applicable to the project and outline the limited scenarios/conditions under which a waiver of BABA requirements may be obtained.

The Puerto Rico Broadband Program will communicate federal environmental law and Build America Buy America (BABA) compliance requirements throughout the subgrantee selection process, including in discussion with prospective subgrantees, compliance materials, and post-award meetings with the selected subgrantee. The subgrantee compliance materials developed by the Puerto Rico Broadband Program will include guidance based on the BEAD NOFO and reference underlying regulations, such as the as the Federal Uniform Guidance for federal awards (2 CFR 200). All compliance materials will be published on the smartisland.pr.gov website for prospective subgrantees.

It should be noted with regard to compliance with 2 CFR 200, that the Uniform Guidance expressly provides that agencies may adjust or provide exceptions to requirements under certain scenarios, one of which is in the event of fixed amount awards.¹² Relying on this, the Department of the Treasury, in its Supplementary Broadband Guidance, provided exceptions from certain requirements for subrecipients of fixed amount subawards.¹³

In keeping with the above 2023 guidance from the U.S. Treasury concerning the administration of funding for broadband projects under the American Rescue Plan Act, the Puerto Rico Broadband Program will make subawards that provide for a maximum payment amount that is calculated based on a reasonable estimate of actual cost (see 2 CFR 200.201(b)(1)). These will be considered fixed amount subawards even if the subaward agreement also provides that payments to the subrecipient will be limited to actual costs after review of evidence of costs.¹⁴

Like Treasury’s guidance, NTIA is proposing exceptions to certain provisions of the Uniform Guidance that would apply to the BEAD Program, including the above flexibility for Eligible

¹² See 2 CFR 200.102(c).

¹³ United States Treasury, “SLFRF and CPF Supplementary Broadband Guidance” May 17, 2023, <https://home.treasury.gov/system/files/136/SLFRF-and-CPF-Supplementary-Broadband-Guidance.pdf>.

¹⁴ United States Treasury, “SLFRF and CPF Supplementary Broadband Guidance.”

Entities to issue fixed amount subawards.¹⁵ NTIA has advised Eligible Entities to proceed with issuing fixed amount subawards, and that exceptions or adjustments will apply to these subawards.¹⁶ As such, the Puerto Rico Broadband Program wishes to avail its subrecipients of the 2 CFR Par 200 exceptions and adjustments that NTIA applies in the BEAD Program. Should any revisions to this Initial Proposal be needed to accomplish this, the Puerto Rico Broadband Program would like an opportunity to make those revisions.

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

Puerto Rico's approach is to complement, rather than duplicate, the obligations that carriers Claro and Liberty have through the Federal Communications Commission (FCC) under the Uniendo program to extend broadband service universally across Puerto Rico.¹⁷ Recognizing these commitments, the Puerto Rico Broadband Program will not deploy last-mile broadband with BEAD funding but will instead accept applications for the development and management of an open access conduit network. This network will be island-wide, covering all geographic areas of Puerto Rico. The Puerto Rico Broadband Program will ensure through development with all bidders, engineering, and stakeholder partners that the conduit route is designed for universal coverage, including rural locations, and that any prospective subgrantees are prepared to deliver the complete route. Specific project routes will be identified through the engineering process prior to the competitive bids, and will reflect the following factors:

- Ability to interconnect with and complement existing resilient conduit and dark fiber facilities available on reasonable and carrier-neutral terms;
- Interconnection with colocation facilities and landing stations, especially those to be created through the Puerto Rico Broadband Program's complementary Capital Projects Fund ARPA projects;
- Creation of resilient routes that connect more rural communities with more densely developed parts of Puerto Rico; and
- Ability to pass close to eligible community anchor institutions.

See Requirement 9 for more information on conduit route selection. Puerto Rico Broadband Program

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

¹⁵ Department of Commerce, "Tailoring the Application of the Uniform Guidance to the BEAD Program; Request for Comments, July 5, 2023, 88 FR 42918. <https://www.govinfo.gov/content/pkg/FR-2023-07-05/pdf/2023-14114.pdf>

¹⁶ PowerPoint, NTIA SBLN Meeting: Proposed Exceptions to Uniform Guidance for BEAD, October Meeting #1, Oct. 10, 2023.

¹⁷ For more information on federal Uniendo deployment obligations, see the Five-Year Action Plan.

The Puerto Rico Broadband Program and its engineering partners will design a conduit route that covers all regions of Puerto Rico, sufficient for multiple users to serve a variety of purposes, including resilient last-mile service, institutional connections, and wireless backhaul. Prospective subgrantees will be expected to construct and manage the complete route, according to the terms of the subgrant agreement. The scoring criteria in Requirement 9 provide additional detail on how the Puerto Rico Broadband Program is ensuring all prospective subgrantees have the information to build competitive bids for the island-wide conduit system and will have the capacity to deliver if selected.

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

Puerto Rico has no federally recognized tribal lands.

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

Puerto Rico will not select BEAD subgrantees for last-mile broadband deployment projects but will instead select a single subgrantee to develop and manage an island-wide conduit route. In place of an Extremely High Cost Per Location Threshold, the Puerto Rico Broadband Program will use an estimated cost developed by a contracted engineer to set a benchmark grant cost for the conduit network. For more information on the engineering services that will support BEAD deployment in Puerto Rico, see Requirement 9.

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

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

As the Puerto Rico Broadband Program will not fund last-mile deployment with BEAD, this does not apply to Puerto Rico. Because Puerto Rico is subject to the last mile commitments made under Uniendo, the proposed conduit system will focus on making deployments of fiber infrastructure more resilient and therefore reliable through use of underground conduit.

Deployment Subgrantee Qualifications

2.4.11 Text Box: Describe how the Eligible Entity will ensure prospective subgrantees deploying network facilities meet the minimum qualifications for financial capability as outlined on pages

72-73 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

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

See Requirement 9 for how the Puerto Rico Broadband Program will ensure prospective subgrantees for the conduit system, device program, and digital navigator program meet financial capability qualifications.

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).

Though the proposed conduit system is considered a BEAD “non-deployment” project, the Puerto Rico Broadband Program will require each prospective subgrantee for the conduit system to comply with the Letter of Credit requirement outlined in the BEAD NOFO. Alternatively, the Puerto Rico Broadband Program proposes to allow its conduit system subgrantee to use one of the four options for a conditional programmatic waiver of the letter of credit obligation recently offered by NTIA.

The Puerto Rico Broadband Program will provide applicants with a model letter of credit for use in the conduit system competitive bidding process. The model letter of credit will be substantially similar to that established by the Federal Communications Commission (FCC) in connection with the Rural Digital Opportunity Fund (RDOF).¹⁸ As part of the conduit competitive bidding process, the Puerto Rico Broadband Program will require applicants obtain and submit a letter from an eligible bank, defined below, committing to issue an irrevocable standby letter of credit in the required form to the prospective subgrantee. The letter shall at a minimum provide the dollar amount of the letter of credit and the issuing bank’s agreement to follow the terms and conditions of the model letter established by the Puerto Rico Broadband Program.

Prior to entering a subgrant agreement, the prospective subgrantee shall obtain this irrevocable standby letter of credit and in a value of no less than 25% of the subaward amount. At the grant agreement stage, the subgrantee must obtain an actual letter of credit in place of any previous commitment from a bank to issue a letter of credit.

The prospective subgrantee will also be required to provide with its letter of credit an opinion letter from legal counsel clearly stating, subject only to customary assumptions, limitations, and

¹⁸ Per BEAD NOFO, p. 72, citing *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 773-77, Appx. C. See Appendix C of the RDOF Report and Order (Jan. 30, 2020) for the example model letter of credit: <https://docs.fcc.gov/public/attachments/FCC-20-5A1.pdf>.

qualifications, that in a proceeding under Title 11 of the United States Code, 11 U.S.C. § 101 et seq. (the “Bankruptcy Code”), the bankruptcy court will not treat the letter of credit or proceeds of the letter of credit as property of the winning subgrantee’s bankruptcy estate under Section 541 of the Bankruptcy Code.

The Puerto Rico Broadband Program proposes to permit letters of credit issued from the following banks:

- Any U.S. bank that:
 - is insured by the Federal Deposit Insurance Corporation (FDIC) and
 - has a Weiss bank safety rating of B- or higher;
- CoBank, so long as it maintains assets that place it among the 100 largest United States Banks, determined on basis of total assets as of the calendar year immediately preceding the issuance of the letter of credit and it has a long-term unsecured credit rating issued by Standard & Poor’s of BBB- or better (or an equivalent rating from another nationally recognized credit rating agency);
- The National Rural Utilities Cooperative Finance Corporation, so long as it maintains assets that place it among the 100 largest United States Banks, determined on basis of total assets as of the calendar year immediately preceding the issuance of the letter of credit and it has a long-term unsecured credit rating issued by Standard & Poor’s of BBB- or better (or an equivalent rating from another nationally recognized credit rating agency); or
- Any non-U.S. bank that:
 - is among the 100 largest non-U.S. banks in the world (determined on the basis of total assets as of the end of the calendar year immediately preceding the issuance of the letter of credit, determined on a U.S. dollar equivalent basis as of such date);
 - has a branch in the District of Columbia or other agreed-upon location in the United States;
 - has a long-term unsecured credit rating issued by a widely-recognized credit rating agency that is equivalent to a BBB- or better rating by Standard & Poor’s; and
 - issues the letter of credit payable in United States dollars.

The Puerto Rico Broadband Program requests NTIA grant a waiver of the District of Columbia branch office requirement in favor of a branch in Puerto Rico.

To ensure robust participation in the BEAD subgrantee selection process for the resilient conduit system, the Puerto Rico Broadband Program will also adopt the NTIA’s BEAD Letter of Credit Waiver, a conditional programmatic waiver of the letter of credit obligation. The Letter of Credit requirement will be waived only to the extent to and as described below.

Subgrantee Option to Use Credit Unions

That portion of the LOC Requirement that requires the use of a bank that meets the eligibility requirements of 47 C.F.R. § 54.804(c)(2) is waived where the subgrantee otherwise meets the LOC Requirement using any United States credit union that:

- is insured by the National Credit Union Administration;¹⁹ and
- has a credit union safety rating issued by Weiss of B- or better.²⁰

Subgrantee Option to Use Performance Bonds

That the LOC Requirement is waived where:

- During the application process, prospective subgrantees are required to submit a letter from a company holding a certificate of authority as an acceptable surety on federal bonds as identified in the Department of Treasury Circular 570 committing to issue a performance bond to the prospective subgrantee.²¹The letter shall at a minimum provide the dollar amount of the performance bond.
- Prior to entering into any subgrantee agreement, the prospective subgrantee obtains a performance bond, acceptable in all respects to the Eligible Entity and in a value of no less than 100 percent of the subaward amount.

Where a subgrantee chooses to exercise the option to obtain a performance bond under this waiver, the requirement that the subgrantee “provide with its letter of credit an opinion letter from legal counsel clearly stating, subject only to customary assumptions, limitations, and qualifications, that in a proceeding under Title 11 of the United States Code, 11 U.S.C. § 101 et seq. (the “Bankruptcy Code”), the bankruptcy court would not treat the letter of credit or proceeds of the letter of credit as property of the winning subgrantee’s bankruptcy estate under Section 541 of the Bankruptcy Code” is waived.

Reduction of LOC/Performance Bonds Upon Completion of Milestones

The requirement that “In no event, however, shall the letter of credit have a value of less than 25 percent of the subaward amount” is waived, conditioned on the requirement that the subgrantee obtain a new a letter of credit in a reduced amount upon achievement of specific milestones that are publicly specified by the Puerto Rico Broadband Program. Where a subgrantee chooses to utilize a performance bond in lieu of a letter of credit under section 2.2 above, Eligible Entities shall also have the option to reduce the amount of the performance bond by a commensurate amount as the subgrantee meets the same service milestones.

A subgrantee may obtain a new letter of credit or renew its existing letter of credit to reduce its value in accordance with the following limitations:

¹⁹ NCUA is the “independent federal agency that insures deposits at federally insured credit unions, protects the members who own credit unions, and charters and regulates federal credit unions.” <https://ncua.gov/about>.

²⁰ See <https://weissratings.com/en/credit-unions> for more information.

²¹ See <https://www.fiscal.treasury.gov/surety-bonds/list-certified-companies.html> for more information.

- Upon demonstrating to the satisfaction of the Puerto Rico Broadband Program that it has completed the buildout of 40 percent of the conduit system route, a subgrantee may obtain a new letter of credit or renew its existing letter of credit so that it is valued at no less than 20 percent of the award amount.
- Upon demonstrating to the satisfaction of the Puerto Rico Broadband Program that it has completed the buildout of 60 percent of the conduit system route, a subgrantee may obtain a new letter of credit or renew its existing letter of credit so that it is valued at no less than 15 percent of the award amount.
- Upon demonstrating to the satisfaction of the Puerto Rico Broadband Program that it has completed the buildout of 80 percent of the conduit system route a subgrantee may obtain a new letter of credit or renew its existing letter of credit so that it is valued at no less than 10 percent of the award amount.
- Upon demonstrating to the satisfaction of the Puerto Rico Broadband Program that it has completed the buildout of 100 percent of the conduit system route, a subgrantee may terminate its letter of credit under the terms set forth therein.

Subgrantee Option for Alternative Initial LOC or Performance Bond Percentage

The requirement that the initial letter of credit be for 25% of the subaward amount, or in the case where a subgrantee chooses to utilize a performance bond consistent with section 2.2 above, allow the initial amount of the performance bond to be lower than 100% of the subaward amount, where:

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

Should the subgrantee of the conduit system be granted an alternative letter of credit or performance bond percentage, the Puerto Rico Broadband Program will not permit the subgrantee to also reduce the letter of credit or performance bond upon completion of milestones.

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

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

See Requirement 9 for how the Puerto Rico Broadband Program will ensure each prospective subgrantee for the conduit system submits audited financial statements and business plans to substantiate the sustainability of the project.

2.4.12 Text Box: Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for managerial capability as

outlined on pages 73 – 74 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

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

See Requirement 9 for how the Puerto Rico Broadband Program will ensure prospective subgrantees for the conduit system program meet managerial capability qualifications.

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

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

See Requirement 9 for how the Puerto Rico Broadband Program will ensure prospective subgrantees for the conduit system program meet technical capability qualifications.

2.4.13Text Box (cont.): b. Detail how the Eligible Entity will require prospective subgrantees to submit a network design, diagram, project costs, build-out timeline and milestones for project implementation, and a capital investment schedule evidencing complete build-out and the initiation of service within four years of the date on which the entity receives the subgrant, all certified by a professional engineer, stating that the proposed network can deliver broadband service that meets the requisite performance requirements to all locations served by the Project.

See Requirement 9 for conduit system implementation details and materials the Puerto Rico Broadband Program will require to ensure technical capability of the selected subgrantee.

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

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

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

See Requirement 9 for how the Puerto Rico Broadband Program will ensure all prospective subgrantees for the conduit system, device program, and digital navigator program comply with applicable laws.

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

- a. Detail how the Eligible Entity will require prospective subgrantees to certify that they possess the operational capability to qualify to complete and operate the Project.**
- b. Detail how the Eligible Entity will require prospective subgrantees to submit a certification that have provided a voice, broadband, and/or electric transmission or distribution service for at least two (2) consecutive years prior to the date of its application submission or that it is a wholly owned subsidiary of such an entity, attests to and specify the number of years the prospective subgrantee or its parent company has been operating.**
- c. Detail how the Eligible Entity will require prospective subgrantees that have provided a voice and/or broadband service, to certify that it has timely filed Commission Form 477s and the Broadband DATA Act submission, if applicable, as required during this time period, and otherwise has complied with the Commission's rules and regulations.**
- d. Detail how the Eligible Entity will require prospective subgrantees that have operated only an electric transmission or distribution service, to submit qualified operating or financial reports, that it has filed with the relevant financial institution for the relevant time period along with a certification that the submission is a true and accurate copy of the reports that were provided to the relevant financial institution.**
- e. In reference to new entrants to the broadband market, detail how the Eligible Entity will require prospective subgrantees to provide evidence sufficient to demonstrate that the newly formed entity has obtained, through internal or external resources, sufficient operational capabilities.**

As Puerto Rico will not be making subgrants for last-mile broadband service with BEAD funds, prospective subgrantees will instead be required to submit reports that demonstrate their qualifications to construct and operate an island-wide conduit system. See Requirement 9 for how the Puerto Rico Broadband Program will ensure the selected subgrantee for the conduit system has sufficient operational capability.

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

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

Though the proposed conduit system is considered a BEAD “non-deployment” project, the Puerto Rico Broadband Program will ensure that applicants provide information on ownership that is consistent with 47 C.F.R. § 1.2112(a)(1)-(7). During the competitive bidding process for the conduit system, the Puerto Rico Broadband Program will require that applicants provide information consistent with this portion of the Code of Federal Regulations. Each applicant will be required to provide the information outlined 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% or more of the applicant, except that if the ownership percentage for an interest in any link in the chain exceeds 50% or represents actual control, it shall be treated and reported as if it were a 100% interest
7. List any Federal Communications Commission-regulated (FCC) 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)

Applicants must also provide the following disclosures.

1. 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
2. List any Federal Communications Commission-regulated (FCC) 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

3. 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
4. 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
5. 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

Applicants must also provide the information below as exhibits.

1. List the names, addresses, and citizenship of all officers, directors, and other controlling interests of the applicant, as described in § 1.2110
2. List any Federal Communications Commission-regulated (FCC) 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
3. 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
4. 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
5. 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
6. 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

2.4.17 Text Box: Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for providing information on other public funding as outlined on pages 75 – 76 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

- a. **Detail how it will require prospective subgrantees to disclose for itself and for its affiliates, any application the subgrantee or its affiliates have submitted or plan to submit, and every broadband deployment project that the subgrantee or its affiliates are undertaking or have committed to undertake at the time of the application using public funds.**
- b. **At a minimum, the Eligible Entity shall require the disclosure, for each broadband deployment project, of: (a) the speed and latency of the broadband service to be provided (as measured and/or reported under the applicable rules), (b) the geographic area to be covered, (c) the number of unserved and underserved locations committed to serve (or, if the commitment is to serve a percentage of locations within the specified geographic area, the relevant percentage), (d) the amount of public funding to be used, (e) the cost of service to the consumer, and (f) the matching commitment, if any, provided by the subgrantee or its affiliates.**

While the Puerto Rico Broadband Program will not be making any subgrants for broadband service with BEAD funds, prospective subgrantees for the conduit system will be required to disclose prior applications and commitments for related projects. During the competitive bidding process, the Puerto Rico Broadband Program will require each prospective subgrantee to disclose, for itself and for its affiliates, any application the prospective subgrantee or its affiliates have submitted or plan to submit, and every related project that the prospective subgrantee 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); or 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), or any Puerto Rico infrastructure deployment funding program.

The Puerto Rico Broadband Program will require the disclosure of:

- The amount of public funding to be used;
- The matching commitment provided by the subgrantee or its affiliates;
- The geographic area to be covered; and
- The project description and rules as related to the proposed conduit project.

For more information on measures to assess the prospective subgrantee qualifications for the conduit developer, see Requirement 9 and Appendix A for the scoring rubric.

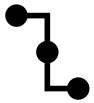
Req. 9. Non-Deployment Subgrantee Selection

Non-Deployment Subgrantee Selection Process

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

As the Puerto Rico Broadband Program will not utilize BEAD funds for last-mile service, all BEAD subgrantees in Puerto Rico will be considered “non-deployment” subgrantees. Non-deployment activities in Puerto Rico will support long-term, resilient infrastructure, increase digital equity, provide opportunity for Puerto Ricans, and strengthen the economy through technical skills.

The Puerto Rico Broadband Program will invest BEAD funds into the following non-deployment subgrantee programs:



Conduit System



Affordable Device Program



Digital Navigator and Literacy Program

The following subsections describe each of these funding uses and how the Puerto Rico Broadband Program will select a single subgrantee to develop and operate each activity.

Conduit System

Though existing broadband service commitments in Puerto Rico are for universal service to every broadband serviceable location, the Puerto Rico Broadband Program recognizes an outstanding need for reliable, climate-resilient infrastructure and a system that supports participation by multiple users. The Puerto Rico Broadband Program will issue a Notice of Funding Availability (NOFA) with BEAD non-deployment funding to select a single subgrantee for the development and management of an open access underground conduit route throughout Puerto Rico.

Underground conduit will supply the reach and diversity of routes needed to ensure critical connection points and community anchor institutions can access reliable service through long-term, resilient infrastructure. As noted in Requirement 8, the Puerto Rico Broadband Program will limit pole attachments and instead transform the island’s telecommunications infrastructure with

BEAD funding by installing buried, open access conduit. The conduit system will provide all of Puerto Rico scalable infrastructure with the ability to upgrade over time, facilitating long-term access to service for all residents. Further, the underground conduit will have the resiliency needed for adverse weather conditions. Investment of BEAD funding into an open access conduit system will provide decades of deployment throughout Puerto Rico.

The Puerto Rico Broadband Program is facilitating the creation of multiple resilient paths for service throughout Puerto Rico, beginning with this strategically designed conduit route. In parallel efforts through the Treasury’s Capital Projects Fund and the Puerto Rico Broadband Infrastructure Fund, the Puerto Rico Broadband Program will develop programs to fund dark fiber and lit services that will ensure participation in the non-exclusive, BEAD-funded conduit system.

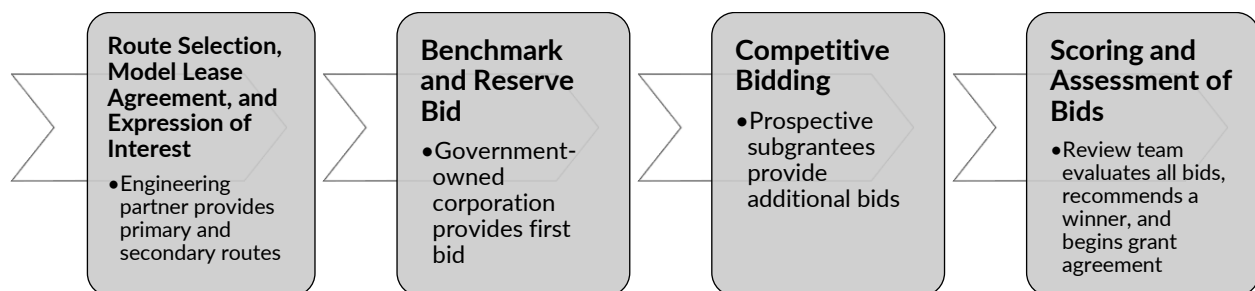
The Puerto Rico Broadband Program proposes to utilize BEAD non-deployment funds for this conduit as a principal investment in resilient infrastructure that will not only enable reliable service to community anchor institutions located along the route but will expand opportunities for a variety of industries to harden their infrastructure throughout Puerto Rico. The conduit system will allow multiple users and smaller carriers, including internet service providers, institutional users, utilities, and electric grid management, to collaborate with equal access. Using a “dig-once design,” additional capacity will be built into the conduit system to enable future expansion. From planning through execution, the system will promote a cooperative approach amongst entities for access to new routes.

The Puerto Rico Broadband Program will conduct a competitive award process for a single subgrantee to develop and manage the underground conduit. Meeting all requirements set forth by NTIA and the Puerto Rico Broadband Program in the criteria below, the single subgrantee will be positioned to develop a complete network throughout Puerto Rico in one project. One subgrantee managing the network, committed to the requirements of the Puerto Rico Broadband Program, will allow for the following:

- An open access conduit system with one manager, critical for tenants to supply service more quickly in areas previously left unconnected or with only one access point and
- An interconnected network, enabling tenants to use the conduit from one region of to another without coordinating between multiple entities for access to the complete route.

The Puerto Rico Broadband Program will ensure the subgrantee selection process for the proposed conduit system project is fair, open, and competitive. The subgrantee selection process will include the following phases, summarized in Figure 7 and detailed below:

Figure 7: Conduit Subgrantee Selection Process



Route Selection, Model Lease Agreement, and Expression of Interest

In-Kind Contribution: Engineering Services

For network design support and review of applications for the conduit system, the Puerto Rico Broadband Program will contract engineering services through the Puerto Rico Broadband Infrastructure Fund. The professional engineering firm will provide:

- A conduit network design and diagram;
- Estimated project costs;
- Proposed build-out timeline; and
- Review of applications.

These engineering services are integral and necessary for successful implementation of BEAD funding at every phase of the award and will be considered an in-kind match contribution by the Puerto Rico Broadband Program. It recognizes that the engineering services described above must meet all criteria listed in the Uniform Administrative Requirements for Federal Awards.²² In-kind contributions, such as the contracted engineering services, will:

- Be verifiable from the Puerto Rico Broadband Program's records;
- Not be included as contributions for any other Federal award;
- Be necessary and reasonable for accomplishment of the project or program objectives;
- Be allowable under Subpart E of the Federal Uniform Administrative Requirements;²³
- Not be paid by the Federal Government under another Federal award, except where the Federal statute authorizing a program specifically provides that Federal funds made available for such program can be applied to matching or cost sharing requirements of other Federal programs;
- Be provided for in the approved budget when required by the Federal awarding agency; and
- Conform to other provisions of 2 CFR 200, as applicable.

In addition, the Uniform Administrative Requirements require that rates for third-party volunteer services must be consistent with those paid for similar work.²⁴ Further, rates must be consistent with those paid for similar work in the labor market for the kind of services involved. Regardless, paid fringe benefits that are reasonable, necessary, allocable, and otherwise allowable may be included in the valuation. When a third-party organization furnishes the services of an employee, these services will be valued at that employee's regular rate of pay plus an amount of fringe benefits that is reasonable, necessary, allocable, and otherwise allowable. Indirect costs must be valued at either the third party organization's approved federally-negotiated indirect cost rate, or a rate in accordance with 2 CFR 200.414(d), provided that these services employ the same skill(s)

²² Uniform Administrative Requirements for Federal Awards, "2 CFR 200.306(b)," Code of Federal Regulations, October 11, 2023, <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200/subpart-D/section-200.306>.

²³ Uniform Administrative Requirements for Federal Awards, "2 CFR 200.400(e)," Code of Federal Regulations, October 11, 2023, <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200/subpart-E>.

²⁴ Uniform Administrative Requirements for Federal Awards, "2 CFR 200.306(e)," Code of Federal Regulations, October 11, 2023, <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200/subpart-D/section-200.306>.

for which the employee is normally paid.²⁵ Where donated services are treated as indirect costs, indirect cost rates will separate the value of the donated services so that reimbursement for the donated services will not be made. Lastly, regarding third party in-kind contributions, the fair market value of goods and services must be documented and to the extent feasible supported by the same methods used internally by the Puerto Rico Broadband Program.²⁶

Route Selection

The professional engineering firm will develop a high-level design and cost estimate for the conduit system that prioritizes the creation of resilient routes. Prior to opening the competitive bidding process, the Puerto Rico Broadband Program and its partners will collaborate with the engineering firm to ensure resiliency is the focus of the design and cost estimate. The design shared with prospective subgrantees will support the goals for broadband infrastructure in Puerto Rico described in the Five-Year Action Plan, including connectivity, resilience, quality, and speed for demanding use.²⁷

Route selection will be based on data collected throughout BEAD planning and community anchor institution locations throughout Puerto Rico.²⁸ A core primary route will cover areas most in need of paths to more resilient service, especially those regions traditionally considered too rural for development. The engineering firm will also provide a secondary route of access points that bidders may elect to include in their application.

The Puerto Rico Broadband Program, in partnership with contracted engineering services, will identify a set of targeted routes with an expected grant cost higher than the BEAD funding to be allocated to the project. Prior to opening the competitive bidding process, it will prioritize routes, emphasizing those routes on which other proposed routes most depend. The Puerto Rico Broadband Program will identify the subset of targeted routes which would be built under the initial benchmark and reserve bid, described below. The Puerto Rico Broadband Program will require other bidders to at least match the proposed set of routes in the benchmark and reserve bid, but other bidders may propose additional targeted routes for the same grant amount requested as part of a demonstration of value superior to the benchmark and reserve bid.

Model Lease Agreement

To ensure the conduit system remains open access and affordable, the Puerto Rico Broadband Program will also provide a model lease agreement for the conduit system competitive bidding process. The Puerto Rico Broadband Program and its partners will conduct a benchmark assessment of the market and competitive landscape to establish standardized pricing models for access to the conduit. The model will include non-discriminatory policies to guarantee that all qualified service providers, regardless of size or tenure, have equal participation opportunities.

²⁵ Uniform Administrative Requirements for Federal Awards, “2 CFR 200.306(f),” Code of Federal Regulations, October 11, 2023, <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200/subpart-D/section-200.306>.

²⁶ Uniform Administrative Requirements for Federal Awards, “2 CFR 200.306(j),” Code of Federal Regulations, October 11, 2023, <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200/subpart-D/section-200.306>.

²⁷ For more information on deployment goals in Puerto Rico, see the Five-Year Action Plan.

²⁸ For more information on categories of community anchor institutions in Puerto Rico, see the Initial Proposal Volume 1.

Applicants will adopt the model lease agreement or provide additional measures to ensure competitive and affordable rates in competitive bids. Through this process, the Puerto Rico Broadband Program aims to prevent monopolistic practices and encourage competitive pricing among service providers utilizing the conduit system.

Expression of Interest

To support efficient use of BEAD funding for the conduit system, the Puerto Rico Broadband Program will also open an Expression of Interest data collection phase during project development. The Expression of Interest will solicit interest from prospective tenants of the conduit system, including last-mile and middle-mile broadband service providers, utilities, and institutional users. It will also solicit interest from entities with available resilient conduit and dark fiber that they are willing to make available via swaps, trades, sales, or long-term leases, and that could complement or eliminate the need to build new facilities along identified routes. Information from these responses will be made available to all bidders.

While only one bidder will ultimately be selected to construct the conduit system, many prospective users of various types will have the opportunity to share their experiences and make requests for access points in the conduit system to support last-mile, middle-mile, and backhaul services throughout Puerto Rico. The Puerto Rico Broadband Program is committed to ensuring that the conduit system design supports as many tenants as possible and is transformative as a system informed by coordination with prospective users.

Benchmark and Reserve Bid

The Puerto Rico Broadband Program will begin the bidding process by selecting a benchmark and reserve bidder to develop the first bid for the conduit system project. Through the Puerto Rico Broadband Infrastructure Fund, the Puerto Rico Broadband Program will enter into an agreement with a single entity to serve as the benchmark and reserve bidder.²⁹

Use of the benchmark and reserve bidder will ensure the Puerto Rico Broadband Program receives at least one strong bid for this complex project. Planning for this open access conduit system requires an informed, comprehensive approach to designing a route and workplan that includes access to data collected by the Puerto Rico Broadband Program and its partners from government agencies, internet service providers, and other stakeholders in the telecommunications industry. Through competitively neutral and transparent procedures described below, the Puerto Rico Broadband Program will ensure all bidders have visibility into all information provided to and produced by the benchmark and reserve bidder. The Puerto Rico Broadband Program intends for every additional bid for the conduit system to build upon the strengths of the benchmark and reserve bid and provide even more competitive options for the conduit system developer.

To support successful development of a competitive benchmark and reserve bid, the benchmark and reserve bidder will be a government-owned corporation with the capacity to develop a detailed bid, including an estimated grant price ceiling for the conduit system and a floor score from the criteria described below. Through a government-owned corporation, the Puerto Rico

²⁹ For more information on funding sources available to the Puerto Rico Broadband Program, see the Five-Year Action Plan.

Broadband Program is better positioned to ensure the participation of the benchmark bidder throughout the complete bidding process, and thereby ensure at least one bidder meets program objectives. A corporation owned by the government will also be more likely to support the transparency of its bid, required of the bidder in this role. It will also have the familiarity and experience in Puerto Rico needed to produce a benchmark bid that will encourage competitors to propose strong responses. Partnering with a government-owned corporation, the Puerto Rico Broadband Program can ensure all elements of the bid development process are transparently provided to other bidders, support the goals of the project, and fully reflect the public interest.

After selection, the benchmark and reserve bidder will work with the Puerto Rico Broadband Program and its partners to develop the conduit project. The benchmark and reserve bidder will develop a bid with information from the Puerto Rico Broadband Program and its partners, ensuring the bidding process begins from data collected throughout BEAD planning.

The initial benchmark and reserve bid will ensure every prospective subgrantee benefits from previous planning to produce the most competitive bid for the proposed conduit project. Utilizing an initial benchmark and reserve bid, the first bid will be guided by collaborative data collection efforts and will benefit from the input of many sources, rather than what one bidder could produce on its own. All bidders will then be able to participate in the application process with as much information as possible and competitively bid for the most robust, efficient plan for installing this transformative conduit system.

Competitive Bidding

Upon receipt of the initial benchmark and reserve bid, the Puerto Rico Broadband Program will open the competitive bidding process and post all information previously made available to the benchmark bidder alongside all application materials. All prospective subgrantees will have access to the same information from the Puerto Rico Broadband Program, including:

- Primary and secondary routes for the conduit network design;
- Cost estimates;
- A model letter of credit; and
- The complete benchmark and reserve bid, including conduit lease agreement and rate schedule.

The Puerto Rico Broadband Program will announce the application window on the program's website smartisland.pr.gov, through press release, and through coordination activities with internet service providers, government agencies, and other stakeholders. Applicants will have 60 business days from the date of posting to submit their bids.

The benchmark and reserve bidder and all additional bidders will be required to submit two sets of materials, described in Figures 8 and 9 below:

- General Information to assess overall qualifications, including basic company details, eligibility materials, and compliance with fair labor, environmental, and financial standards and
- Bid Materials that describe the specific bid, including the proposed grant amount, estimated timeline, and demonstration of the bidder's plan to provide carrier-neutral open access to the conduit system.

Figure 8: Required General Information

Purpose	Requested Material
Company Information	Name of company, address, etc.
Contact Information	Contact information of individual authorized to liaise with the Puerto Rico Broadband Program, including name, position/title, phone number, and email
Eligibility Check	Company history; Certificate of good standing in Puerto Rico
Capacity Check	Company financial information; Capital available for deployment in Puerto Rico; Letter of Credit or alternative performance bond; Managerial and operational capacity
Other Publicly Funded Projects	Information on any application or planned application for relevant projects using public funds

Figure 9: Required Bid Materials

Category	Requested Material
Minimal BEAD Program Outlay	Proposed conduit network design with mileage estimate; Sum total of estimated costs to deploy network; BEAD program subgrant amount to complete the project; Percentage of total cost covered by BEAD program Binding commitment for maximum total grant cost, net all fees, costs, and taxes
Affordability	Pro forma financial statements with estimated cost per tenant
Fair Labor Practices	Certification and record of past compliance with federal labor and employment laws; Past performance of contracting and subcontracting arrangements; Violation disclosures; Compliance plan for applicable wage scales, overtime, and authorization of workplace safety committees
Open Access	Demonstration of carrier neutrality; Letters of intent from prospective users; Proposed conduit lease agreement; Open sharing agreements with existing buried conduit owners
Experience	Summaries of past projects, including original cost and time estimates compared to completion dates and final variance costs
Speed to Deployment	Estimated time to deployment of complete route; Project milestones
Local Coordination	Demonstration of previous coordination with internet service providers, municipalities, and other stakeholders; Strategic plan for community engagement, local government collaboration, and measures to mitigate environmental impact in communities
Workforce Development and Job Quality	Commitment to participate in the Puerto Rico Broadband Program's workforce development initiative (detailed in Requirement 12)

Other Technical Capabilities	Narrative of capacity for advanced engineering and construction techniques; Strategic plan for optimal deployment of fiber optic cables and integration of smart infrastructure
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The Puerto Rico Broadband Program will continue to develop the final list of requested materials in advance of opening the competitive bidding process. All applicants will be required to supply their bid details and requested materials to be considered. Failure to provide any of these materials in the required form can result in disqualification. The Puerto Rico Broadband Program, at its own discretion, may provide applicants the opportunity to amend a portion of their applications within a specified amount of time to satisfy these requirements. The sections below describe how each application will be scored and required subgrantee qualifications.

Review Team

A review team of Puerto Rico Broadband Program staff, a contracted engineering firm, and a consulting grants administration contractor with appropriate professional qualifications will evaluate each prospective subgrantee’s bid, including the initial benchmark and reserve bid. The Puerto Rico Broadband Program and its partners will develop key forms and worksheets that structure responses from applicants for more efficient and consistent reviews. These standards will ensure that prospective subgrantees adhere to BEAD requirements and applicable regulations.

The conduit system subgrantee application review and scoring process will be meticulously organized into three specialized subject-matter groups: technical, financial, and programmatic, all overseen by a principal consultant for a holistic view. These expert groups will be guided by experienced team leads with a proven track record of conducting similar reviews for federal grant programs and within Puerto Rico, as available. To ensure the efficiency and punctuality of the process, a project manager and senior consultant will oversee the entire operation.

To safeguard against collusion and conflicts of interest, the Puerto Rico Broadband Program and its partners will confirm all members of the review team are free of conflicts of interest and will not enter business or actions that result in conflicts of interest. The Puerto Rico Broadband Program will disqualify an application if applicants or any of their representatives attempt to inappropriately influence the grant process or collude in any way.

Expertise and Past Experience

The Puerto Rico Broadband Program has experience drafting program rules and structuring the information required to evaluate a project. While developing the project application materials, the Puerto Rico Broadband Program will consider past project barriers in Puerto Rico, including diverse topography, slow permitting processes, labor shortages, and disruptions and cost variations for imported materials.³⁰

³⁰ For more information on obstacles for deployment in Puerto Rico, see the Five-Year Action Plan.

As described above, the Puerto Rico Broadband Program will contract an engineering firm to first design the conduit route and subsequently support technical review of applications. The team of **technical reviewers** will be drawn from the engineering firm selected by the Puerto Rico Broadband Program. The review team of engineers, having designed the primary and secondary conduit routes in the application materials, will provide detailed reviews of proposed builds from applicants and ensure the responses align with industry standards, program priorities, and any existing broadband infrastructure.

The **financial reviewers** will conduct high-level reviews of project cost reasonableness, budget, financial sustainability, and the adequacy of proposed capital sources. During these reviews, financial reviewers will identify risks and vulnerabilities for the proposed models.

The **programmatic reviewers** will evaluate additional criteria of submitted bids, including labor practices, open access plans, experience, local coordination, and workforce development commitments.

To ensure the financial and programmatic reviewers have extensive background in reviewing project financials and designs, the Puerto Rico Broadband Program will contract a consulting partner that has experience with federal and state broadband infrastructure grants, development of public-private partnerships, and project selection advising for broadband offices. This consulting contractor will also operate as the BEAD grant manager, ensuring subgrantee selection, review, and monitoring are integrated with this proposal, BEAD goals, and commitments of the Puerto Rico Broadband Program. See Requirement 10 for additional information on this consulting contractor.

Review Staffing

The Puerto Rico Broadband Program anticipates a small number of applications for the conduit system with robust detail. As such, the review process will require a small team of reviewers to critically review large proposals to ultimately select a single subgrantee for development and management of the conduit system. The Puerto Rico Broadband Program estimates the following number of human resources to execute conduit system bid reviews, distributed across the technical, financial, and programmatic domains. Figure 10 details staffing levels assuming the receipt of four bids, including the benchmark and reserve bid. Staffing may need to be adjusted up or down based on the volume of bids received.

Figure 10: Review Staffing

Review Team	Size	Staffing	Source
Technical	8	4 primary reviewers; 2 technicians	Engineering Contractor
		1 geographic information system (GIS) reviewer; 1 supervising reviewer	Consulting Contractor
Financial	3	2 primary reviewers; 1 supervising reviewer	Consulting Contractor

Programmatic	3	2 primary reviewers; 1 supervising reviewer	Consulting Contractor
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This review process assumes teams of two primary reviewers, each responsible for review of all bids, with a supervising reviewer in each area to ensure consistency of work. For technical review of four bids, two teams of primary reviewers will each evaluate two. Assistant reviewers will support the primary reviewers with analysis tasks but not perform scoring.

The Puerto Rico Broadband Program estimates reviewers to spend the following amount of time reviewing each conduit system application, on average. The following hours are per application across all reviewers, regardless of level:

- **Technical:** 160 hours of technical review + 40 hours of GIS review,
- **Financial:** 90 hours, and
- **Programmatic:** 90 hours.

The Project Manager and Senior Consultant will also be available throughout an estimated six-week review process to direct and be responsible for requests for additional information and clarifications, and requests to cure minor defects in the bids directed to the bidders during the review process, with the input of the reviewers. They will prepare an overall scoring review and award recommendation report.

Evaluation Standards

To ensure uniformity and fairness, all reviewers will reference the same set of materials while conducting their evaluations. Evaluation materials will include the program procedures, the BEAD NOFO, and a scoring guide with prompts to evaluate each application.

Reviewers will use a scoring guide to score sections relevant to their industry experience for quality insight. Prior to processing submitted applications, the Puerto Rico Broadband Program and its partners will develop several resources to facilitate this application review:

- An application completeness and scoring guide as an initial screening tool and application summary;
- A set of technical, financial, and programmatic review standards to guide consistent reviews;
- An application review workflow and expected timeline, incorporating steps and decision points for stakeholders and decision-makers; and
- A communications protocol and documentation process for questions and supplemental information requests for applicants post-submission.

For consistency of evaluation standards, two primary reviewers will be assigned to each application and an average score used. Reviewers will assign a score for each criterion using the standardized scoring guide. This guide will include sections for reviewers to record their assessments and identify potential areas for remediation. The content of the scoring guide will match the eligibility criteria and scoring rubric outlined in this proposal, aligned with NOFO

requirements. Recognizing the overlap in expertise required to assign scores, financial, technical, and programmatic reviewers assigned to a specific application will collaborate closely to detect any inconsistencies.

Supervising reviewers will oversee all reviews with the authority to adjust as needed for consistency, and a Senior Consultant will provide feedback across the functional domains. The Puerto Rico Broadband Program and its partners will utilize evaluation tools from other federal program evaluations as available, including financial tools designed to standardize scores for categories such as project cost-efficiency and matching funds contributions. Thorough preparation in advance of the review process will ensure the Puerto Rico Broadband Program and its partners make a timely funding decision for the most competitive conduit system bid with confidence.

Reviewer Training and Collaboration

All members of the review team will be required to attend an orientation session led by the Puerto Rico Broadband Program and its consulting partner. The orientation will ensure a shared understanding of review standards, as well as provide the reviewers with the essential internal tools, including project management software, score standardization tools, and scoring guides. Reviewers will be instructed to maintain comprehensive, factual notes in the internal review scoring guide for objective evaluations.

Subject matter leads for each of the three review teams will also hold meetings with their respective teams to ensure consistency in reviews and adherence to standards. Subject matter leads will communicate application priorities and reiterate scoring standards.

The Puerto Rico Broadband Program and its partners, including the project manager, principal consultant, and subject matter leads, will convene to organize the materials submitted by applicants. A completeness check and initial screening will be conducted to identify applications missing essential materials and initiate remediation before the review process begins. If applicants fail to submit all required materials, the Puerto Rico Broadband Program will communicate this deficiency.

The Puerto Rico Broadband Program and its partners will evaluate the number of applications received and prioritize applications for review order. This will facilitate efficient reviews and allow for earlier remediation, if needed. Though the complete benchmark and reserve bid will be released for all applicants prior to opening the competitive bidding process, the benchmark and reserve bidder will be scored when all applications have been received.

In the event of a tie between two applications, the Puerto Rico Broadband Program and its technical, financial, and programmatic review teams will assess awarded scores to determine whether any adjustments are appropriate. Any adjustments made will be approved by the respective review team and senior consultant. If no adjustments are warranted, the Puerto Rico Broadband Program will utilize the minimal BEAD program outlay score as the tiebreaker. In the event of a tie on minimal BEAD program outlay, scores for the following criteria as ranked in Appendix A will determine the winning bid.

The final recommendation will be based on the findings of comprehensive reviews. Reviewers from each expert area will present their findings to the subject matter leads and project manager, enabling the identification of potential inconsistencies before making a recommendation. The Puerto Rico Broadband Program and its partners will hold bi-weekly meetings to discuss reviews, remediation efforts, and funding recommendations. The project manager and lead reviewer will communicate the final recommendation through an award recommendation report and summary memos containing detailed information of the applicants and their applications.

Review Process

Technical reviewers will evaluate the high-level design and budgeted cost assumptions included in the applications. These reviewers will determine whether the proposed project is feasible and reasonable based on industry standards. Technical reviewers will also calculate the cost-efficiency and readiness of the applicant to execute the project in a reasonable timeline and budget.

An additional GIS reviewer will calculate the mileage of a given application and collaborate with technical and financial reviewers to ensure that it aligns with the mileage as detailed in the budget. The GIS reviewer will also evaluate the proposed conduit route, ensuring the core primary route has been addressed and any additional paths support Puerto Rico’s goals. The GIS resource will be available for any additional spatial analysis as required for review.

Financial reviewers will stress test the pro-forma included in the application. Although company financials will be unique, these stress tests will be standardized to determine the resiliency of a prospective subgrantee’s financial performance. Key elements of these tests will be to fluctuate take rates and average revenue per user (ARPU) to determine a prospective subgrantee’s ability to take on projects in different adverse scenarios. The financial reviews will also ensure that any matching commitments made, and the proposed matching fund sources are secure. Financial and technical reviewers will collaborate to ensure that the budget is detailed enough to ensure that only eligible expenses are included.

Programmatic reviewers will utilize the scoring guide to evaluate past experiences, strategic plans, and commitments presented by applicants for fair labor practices, open access, local coordination plans, and workforce development. Programmatic reviews will also ensure all applicants have complied with the minimum standards set forth in the scoring criteria and will comply with these commitments in the grant agreement if selected.

Estimated Review Timeline

The Puerto Rico Broadband Program estimates the conduit system subgrantee selection review process will be conducted over approximately four months, from materials development through grant agreement preparation. Figure 11 below outlines the key review process phases and estimated timespan.

Figure 11: Conduit Application Review Timeline

Review Phase	Time	Description
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Program Preparation	60 days	Reviewer orientation, pre-review meetings, application and scoring materials preparation
Complete Application Reviews	45 days	Review set-up, completeness checks, review prioritization process, reviews, recommendations, and remediation outreach, as applicable
Award and Grant Agreement Preparation	30 days	Grant agreement review and red-lining, execution by grantor and grantee, disbursement process review, compliance checks and process review

Scoring Criteria

Prior to accepting applications, the Puerto Rico Broadband Program will make all scoring criteria publicly available. Basic application information, including company name and history, contact information, and inclusion of all materials, will be assessed on a pass/fail basis. To ensure that any awarded project meets the core program objective for resilience, the Puerto Rico Broadband Program will require applicants to address a set of highest-priority routes selected by the program with the assistance of the engineering contractors. Applicants may demonstrate additional value by proposing to include additional routes in the engineered design that they would be able to build within the program budget. For project information, the Puerto Rico Broadband Program will use a maximum score of 400 points to evaluate applications. Figure 12 summarizes the conduit system subgrantee scoring criteria. All bids will be evaluated by the degree to which the application fulfills or exceeds expectations set by the scoring rubric detailed in Appendix A.

Figure 12: Conduit System Subgrantee Scoring Criteria Summary

Category	Criteria	Max points
	Minimal BEAD Program Outlay	60
	Affordability	60
	Experience	50
	Open Access	50
	Speed to Deployment	40
	Local Coordination	40
	Fair Labor Practices	40
	Workforce Development and Job Quality	30
	Other Technical Capabilities	30
Total		400

See Appendix A for a detailed Conduit System Subgrantee Selection rubric.

Affordable Device Program

The Puerto Rico Broadband Program seeks to establish an Affordable Device program to help increase the number of residents with access to computers using \$70 million of BEAD funding. As described in the Digital Equity Plan, 55% of Puerto Rican households do not have a desktop computer or a laptop and 24% do not own a computing device of any type.³¹

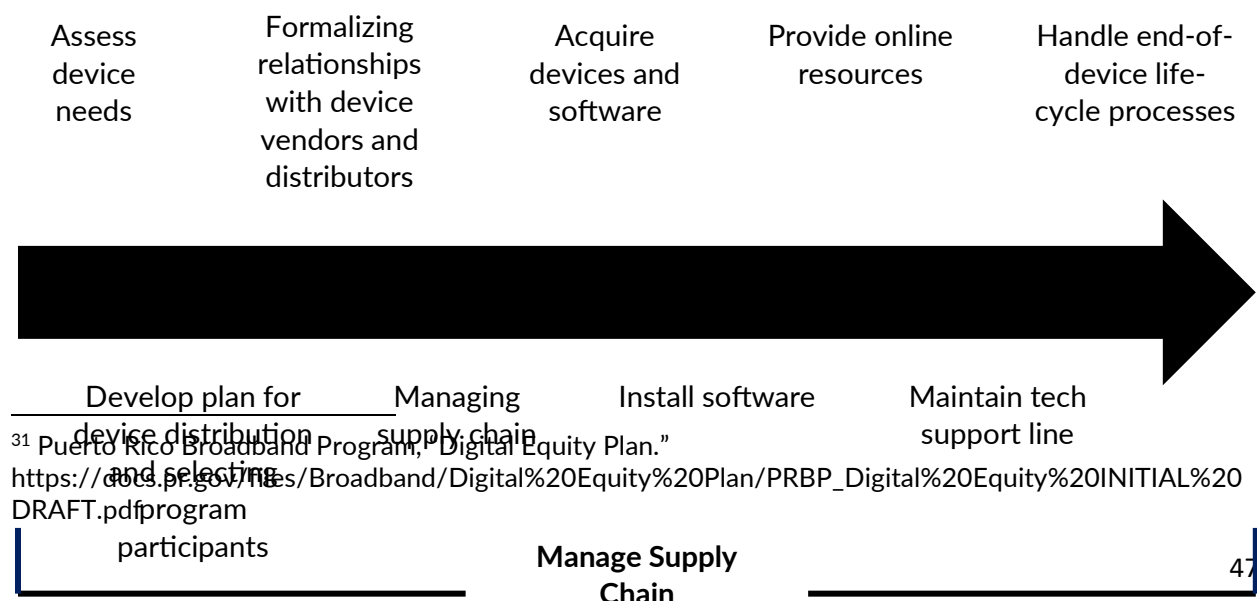
The Affordable Device Program’s goal is to give all Puerto Ricans access to a device, with an emphasis on targeting the needs of the most vulnerable populations.

The Puerto Rico Broadband Program will issue a Notice of Funding Availability (NOFA) to select a single subgrantee to design and implement the Affordable Device Program. The role of this subgrantee will include, but is not limited to, the following:

- Assessing device needs throughout Puerto Rico;
- Developing a comprehensive plan for device distribution that includes a process for selecting eligible program participants;
- Formalizing relationships with device vendors and distributors;
- Managing the supply chain from purchase to delivery at Multiservice and Internet Centers (MICs);
- Acquiring devices and necessary software;
- Installing software before device distribution;
- Providing easily accessible, online resources;
- Maintaining a tech-support help line with reasonable hours to assist device users with any questions or technical difficulties; and
- Handling end-of-device life-cycle processes, such as recycling, refurbishment, reuse, and donations.

Figure 13 provides a sample timeline of subgrantee activities.

Figure 13: Sample Timeline of Device Program Subgrantee Activities



The Affordable Device Program will include two initiatives: one for providing subsidized devices, the other for the recycling and redistribution of technology.

The subsidy initiative will enhance device accessibility for communities across the island, particularly at Multiservice and Internet Centers (MICs).³² The subsidy program will complement opportunities for financial assistance and subsidies beyond the federal Affordable Connectivity Program in partnership with internet service providers and device manufacturers. The Puerto Rico Broadband Program and its selected subgrantee will collaborate with community organizations throughout device negotiations to provide internet-enabled devices, including computers, laptops, and tablets, to underserved and economically disadvantaged communities throughout Puerto Rico.

The recycling and redistribution initiative is driven by the Puerto Rico Broadband Program's commitment to sustainability, social responsibility, digital inclusion, and equitable access to technology. The Puerto Rico Broadband Program's selected subgrantee will also facilitate the collection, refurbishment, recycling, and redistribution of devices.

Before distributing devices, the Puerto Rico Broadband Program and its selected subgrantee will develop a process to identify eligible households in partnership with relevant collaborators. Potential collaborators include, but are not limited to, government agencies, internet service providers, and relevant organizations. Stakeholder engagement will provide insight into the needs and challenges of each community, ensuring the program effectively supports individuals access to devices, trainings, and any additional support they may need.

While the goal of this program is to supply each eligible household with one device, there may be situations in which once this goal is met, households could qualify for additional devices. Factors the Puerto Rico Broadband Program may consider include, but are not limited to, the following:

- Number of students per household;
- Number of devices already in the household;
- Household eligibility and/or enrollment in the Affordable Connectivity Program (ACP);
- Participation in the Supplemental Nutrition Assistance Program (SNAP);
- Households with eligibility for Head Start and Early Head Start; and/or
- Households receiving unemployment insurance at any point in the past two years.

³² For more information on the Puerto Rico Broadband Program's plans for Multiservice and Internet Centers throughout Puerto Rico, see the Digital Equity Plan.

Once data-driven determinations are made regarding device eligibility, the subgrantee will coordinate with necessary parties, including, but not limited to, the following:

- Vendors;
- Distributors;
- Multiservice and Internet Center (MIC) staff;
- Digital Navigators; and/or
- Eligible Households.

The subgrantee will manage the entirety of the supply chain, ensuring that the device travels from the vendor to the hands of each eligible individual in a safe, timely, and cost-effective manner. Before distributing devices to eligible individuals, the subgrantee will run adequate quality tests and install necessary software for device use and to prevent theft, unauthorized reselling, and cybersecurity threats. The Puerto Rico Broadband Program will collaborate with the subgrantee to determine which specific tests and software are best to accomplish these goals.

The subgrantee will then contact each household and provide guidance on how to schedule an appointment at a local Multiservice and Internet Center (MIC) to pick up their device and receive an initial Digital Navigator and Literacy training session. For individuals unable to travel to a MIC, the subgrantee will make alternate arrangements on a case-by-case basis for device pickup and necessary training. More information regarding on these training sessions is available below, in the Digital Navigators and Literacy Program description.

The device program subgrantee will also operate a device helpline to assist device users with technical support, direct them toward resources, provide connections to additional digital literacy training, and direct device refurbishment, recycling, or replacement. The subgrantee will manage connection to third parties, such as device manufacturers, as needed to ensure all device users are equipped with quality products.

A rubric for device distribution partner selection is included in the figure below.

Figure 14: Affordable Device Program Rubric

Maximum points	Category	Description
40	Fulfillment Capacity	Priority given to organizations with a demonstrated capacity to process and fulfill digital device orders from local organizations, with priority given to organizations with experience working in Puerto Rico.
30	Efficacy and Efficiency	Demonstrates a cost-effective and expeditious plan to distribute devices within the region based on cost per device.
20	Coordination	Demonstrates a track record of prior coordination with small and medium sized nonprofit entities with federal or state compliance requirements in the region.
10	Community Engagement	Demonstrates strategy to evolve device procurement based on identified community needs and feedback, with priority given to organizations that already have relationships with organizations in Puerto Rico.

Digital Navigator and Literacy Program

To advance goals outlined in the Puerto Rico Digital Equity Plan and effectiveness of the Affordable Device Program, the Puerto Rico Broadband Program will develop a Digital Navigator and Literacy Program using \$20 million of BEAD funding. Digital Navigators will be based out of Multiservice and Internet Centers throughout Puerto Rico.

The Puerto Rico Broadband Program will issue a Notice of Funding Availability (NOFA) to select subgrantees to design and implement the Digital Navigator and Literacy Program. Selected subgrantees will be assigned regions of Puerto Rico to implement their navigator programs, ensuring every region is adequately supported. The Puerto Rico Broadband Program will conduct a fair and open competitive procurement process to select organizations that will:

- Assess and determine digital navigator and digital literacy needs throughout Puerto Rico;
- Based on findings, design a program informed by national best practices;
- Identify staffing needs for each Multiservice and Internet Center (MIC);
- Develop budgets for each MIC and plan for program scaling;
- Hire and train local digital navigators;
- Engage with national digital navigator programs (e.g. through the National Digital Inclusion Alliance)³³; and
- Design a program sustainability plan.

A rubric for a selecting Digital Navigator and Literacy Program subgrantees is included in Figure 15 below.

Figure 15: Digital Literacy and Digital Navigator Subgrantee Selection Rubric

Maximum points	Category	Description
50	Prior Digital Literacy or Digital Navigator Program Experience	Priority given to cost-efficient organizations with experience managing digital navigator, digital literacy, or other digital education programs that have a track record of demonstrated success.
20	Planned Staffing Capacity	Has demonstrated capacity or has demonstrated ability to scale to meet capacity requirements, for digital literacy or digital navigation services in planned service area.
20	Populations Covered	Priority given to organizations with a demonstrated ability to serve all populations, including those that are unable to travel to a specific destination.
10	Community Coordination	5 points: Has demonstrated community engagement and outreach plan that involves commitments from community stakeholders.

³³ National Digital Inclusion Alliance, "The Digital Navigator Model." <https://www.digitalinclusion.org/digital-navigator-model/>

		5 points: Demonstrates meaningful coordination with additional social service providers.
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Coordination between the Affordable Device & the Digital Navigator and Literacy Programs

Puerto Rico’s Multiservice and Internet Centers (MICs) will serve as the hub for both the Affordable Device and Digital Navigator programs, encouraging alignment and coordination between programs. Digital navigators will interface with the Affordable Device Program in the following ways:

- Collaborate with the Affordable Device Program subgrantee and the Puerto Rico Broadband Program to share information about residents’ device and digital equity needs;
- Assist residents with scheduling device pick-up;
- Coordinate digital literacy training sessions for when device program participants receive their devices; and
- Support the device program subgrantee with device pickup tracking
Coordinate efforts to support residents interested in program participation who can’t access a MIC.

Device and Digital Navigator Programs Selection Process

To select subgrantees to develop and administer both the Affordable Device and Digital Navigator programs, the Puerto Rico Broadband Program will conduct a transparent application review and evaluation process. The Puerto Rico Broadband Program will seek entities based in Puerto Rico with experience operating similar programs. The Puerto Rico Broadband Program will develop objective methods and scoring criteria and publish them in advance of accepting applications.

To safeguard against collusion, bias, conflicts of interest, and arbitrary decisions, the Puerto Rico Broadband Program and its partners will confirm all application reviewers are free of conflicts of interest and refrain from entering business arrangements or actions that result in such conflicts. Any applicant that attempts to inappropriately influence the grant process or collude in any way will be immediately disqualified.

To encourage participation by a wide variety of potential applicants, the Puerto Rico Broadband Program will provide at least 30 days public notice of the competitive application period for these programs. The Puerto Rico Broadband Program will announce the application period on its website and collaborate with community organizations and other stakeholders to disseminate information to potential applicants.

All applications will undergo a competitive review process to verify merit and alignment with program goals and federal requirements. Application scores will be based on an objective, common standard that does not favor one applicant over another. If the Puerto Rico Broadband Program develops preferences for specific types of entities during development of these programs, those preferences will be considered as secondary criteria in the program materials.

The Puerto Rico Broadband Program will extend existing Puerto Rican government networks of support to include the Affordable Device Program and Digital Navigator and Literacy Program. The program structure will prioritize ongoing trust and relationships with partners and community anchor institutions, including regional organizations, libraries, and senior centers, to maximize impact.

Non-Deployment Subgrantee Initiatives

2.5.2 Text Box: 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.**

As noted in Requirement 8, all BEAD subgrantee activities in Puerto Rico are considered “non-deployment.” The Puerto Rico Broadband Program has identified these three non-deployment activities—conduit system, affordable devices, and digital navigators—as priority uses of BEAD funding that will facilitate unprecedented connections and technology opportunities. Each of these activities will address direct needs of residents identified during development of the Five-Year Action and Digital Equity Plans.

The Puerto Rico Broadband Program has determined the conduit system is a priority infrastructure project. Weather events and outages have demonstrated Puerto Rico's need for reliable broadband infrastructure that can withstand unexpected events and continue to provide residents service long after initial installation. The proposed conduit system, with the required open access elements described above, will serve as a long-term solution for long-term problems in Puerto Rico.

Following allocation of BEAD funds to the conduit system, the Puerto Rico Broadband Program will then fund the device and navigator programs. Through data collection efforts on resident internet access and interviews with stakeholders, the Puerto Rico Broadband Program determined major obstacles for residents accessing the internet include the high cost of devices and lack of digital skills. Allocation of BEAD funding to an affordable device program and digital navigator training for residents will support every Puerto Rican, regardless of their location, having access to online tools and opportunities.

These BEAD non-deployment subgrantee programs will contribute valuable resources and empower Puerto Ricans to utilize newfound skills to benefit their own communities. The Puerto Rico Broadband Program will ensure that additional digital equity programs and infrastructure projects from other funding sources, informed by continued engagement with localities and stakeholders, complement these objectives and make efficient use of available funds for a comprehensive approach.

The Puerto Rico Broadband Program will continue to engage stakeholders including nonprofit and community-based organizations, public libraries, government agencies, municipalities, and internet service providers. Throughout program development, the Puerto Rico Broadband Program will seek feedback from these stakeholders to ensure the proposed funding uses and ultimate determinations reflect the public interest and build upon the strengths of existing operations in Puerto Rico. During implementation, the Puerto Rico Broadband Program will encourage all subgrantees to conduct local coordination and leverage existing services throughout Puerto Rico to make efficient use of BEAD funds.

Maximum points	Category	Description
40	Fulfillment Capacity	Priority given to organizations with a demonstrated capacity to process and fulfill digital device orders from local organizations, with priority given to organizations with experience working in Puerto Rico.
30	Efficacy and Efficiency	Demonstrates a cost-effective and expeditious plan to distribute devices within the region based on cost per device.
20	Coordination	Demonstrates a track record of prior coordination with small and medium sized nonprofit entities with federal or state compliance requirements in the region.
10	Community Engagement	Demonstrates strategy to evolve device procurement based on identified community needs and feedback, with priority given to organizations that already have relationships with organizations in Puerto Rico.

Before distributing devices, the Puerto Rico Broadband Program (PRBP) and its selected subgrantee will develop a process to identify eligible households in partnership with relevant collaborators. Potential collaborators include, but are not limited to, government agencies, internet service providers, and relevant organizations. Stakeholder engagement will provide insight into the needs and challenges of each community, ensuring the program effectively supports individuals access to devices, trainings, and any additional support they may need.

While the goal of this program is to supply each eligible household with one device, there may be situations in which once this goal is met, households could qualify for additional devices. Factors the Puerto Rico Broadband Program (PRBP) Puerto Rico Broadband Program may consider include, but are not limited to, the following:

- Number of students per household;
- Number of devices already in the household;
- Household eligibility and/or enrollment in the Affordable Connectivity Program (ACP);
- Participation in the Supplemental Nutrition Assistance Program (SNAP);
- Households with eligibility for Head Start and Early Head Start; and/or
- Households receiving unemployment insurance at any point in the past two years.

Once data-driven determinations are made regarding device eligibility, the subgrantee will coordinate with necessary parties, including, but not limited to, the following:

- Vendors;
- Distributors;
- Multiservice and Internet Center (MIC) staff;
- Digital Navigators; and/or
- Eligible Households.

The subgrantee will manage the entirety of the supply chain, ensuring that the device travels from the vendor to the hands of each eligible individual in a safe, timely, and cost-effective manner. Before distributing devices to eligible individuals, the subgrantee will run adequate quality tests and install necessary software for device use and to prevent theft, unauthorized reselling, and cybersecurity threats. The Puerto Rico Broadband Program will collaborate with the subgrantee to determine which specific tests and software are best to accomplish these goals.

The subgrantee will then contact each household and provide guidance on how to schedule an appointment at a local Multiservice and Internet Center (MIC) to pick up their device and receive an initial Digital Navigator and Literacy training session. For individuals unable to travel to a MIC, the subgrantee will coordinate with Digital Navigators operating externally to the centers, who will make alternate arrangements on a case-by-case basis for device pickup and necessary training. More information regarding the content of these training sessions is available below, in the Digital Navigators and Literacy Program description.

The device program subgrantee will also operate a device helpline to assist device users with technical support, direct them toward resources, provide connections to additional digital literacy training, and direct device refurbishment, recycling, or replacement. The subgrantee will manage connection to third parties, such as device manufacturers, as needed to ensure all device users are equipped with quality products.

Digital Navigator and Literacy Program

To advance goals outlined in the Puerto Rico Digital Equity Plan and effectiveness of the Affordable Device Program, the Puerto Rico Broadband Program will develop a Digital Navigator and Literacy Program using \$20 million of BEAD funding. Digital Navigators will be based out of Multiservice and Internet Centers throughout Puerto Rico.

The Puerto Rico Broadband Program will issue a Notice of Funding Availability (NOFA) to select subgrantees to design and implement the Digital Navigator and Literacy Program. Selected subgrantees will be assigned regions of Puerto Rico to implement their navigator programs, ensuring every region is adequately supported. The PRBP will conduct a fair and open competitive procurement process to select organizations that will:

- Assess and determine digital navigator and digital literacy needs throughout Puerto Rico;
- Based on findings, design a program informed by national best practices;
- Identify staffing needs for each Multiservice and Internet Center (MIC);
- Develop budgets for each MIC and plan for program scaling;
- Hire and train local digital navigators;

- Engage with national digital navigator programs (e.g. through the National Digital Inclusion Alliance)³⁴; and
- Design a program sustainability plan.

A rubric for a selecting Digital Navigator and Literacy Program subgrantees is included in Figure 15 below.

Figure 15: Digital Literacy and Digital Navigator Subgrantee Selection Rubric

Maximum points	Category	Description
50	Prior Digital Literacy or Digital Navigator Program Experience	Priority given to cost-efficient organizations with experience managing digital navigator, digital literacy, or other digital education programs that have a track record of demonstrated success.
20	Planned Staffing Capacity	Has demonstrated capacity or has demonstrated ability to scale to meet capacity requirements, for digital literacy or digital navigation services in planned service area.
20	Populations Covered	Priority given to organizations with a demonstrated ability to serve all populations, including those that are unable to travel to a specific destination.
10	Community Coordination	5 points: Has demonstrated community engagement and outreach plan that involves commitments from community stakeholders. 5 points: Demonstrates meaningful coordination with additional social service providers.

The Puerto Rico Broadband Program (PRBP) will engage nonprofit and community-based organizations, public libraries, and regional and local governments throughout the program development and implementation process. The PRBP will encourage subgrantees to leverage and build upon existing digital literacy trainings and digital navigation services throughout Puerto Rico.

Coordination between the Affordable Device & the Digital Navigator and Literacy Programs

Puerto Rico’s Multiservice and Internet Centers (MICs) will serve as the hub for both the Affordable Device and Digital Navigator programs, encouraging alignment and coordination between programs. Digital navigators will interface with the Affordable Device Program in the following ways:

³⁴ National Digital Inclusion Alliance, “The Digital Navigator Model.” <https://www.digitalinclusion.org/digital-navigator-model/>

- Collaborate with the Affordable Device Program subgrantee and the PRBP to share information about residents’ device and digital equity needs;
- Assist residents with scheduling device pick-up;
- Coordinate digital literacy training sessions for when device program participants receive their devices; and
- Support the device program subgrantee with device pickup tracking
Coordinate efforts to support residents interested in program participation who can’t access a MIC.

Coordinated Non-Deployment Initiatives

These two BEAD non-deployment subgrantee programs will contribute valuable resources and empower Puerto Ricans to utilize newfound skills to benefit their own communities. The Puerto Rico Broadband Program will ensure that additional digital equity programs from other funding sources, informed by continued engagement with localities and stakeholders, complement these objectives and make efficient use of available funds for a comprehensive approach to digital equity and workforce development programming.

Non-Deployment Funding Allocations

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

As noted in Requirement 8, all currently designated “unserved” or “underserved” locations in Puerto Rico have existing commitments from service providers Claro and Liberty to provide universal service by 2028. As a result, Puerto Rico is in a unique position to generate an implementation strategy that supplements current plans and addresses digital equity needs. The following table outlines the Puerto Rico Broadband Program’s current cost estimates for each non-deployment activity, totaling \$305 million.

Figure 16: Non-Deployment Funding Allocations

Activity	Funding Allocation
Conduit System	\$215M
Affordable Device Program	\$70M
Digital Navigator and Literacy Program	\$20M

Non-Deployment Subgrantee Qualifications

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

The Puerto Rico Broadband Program will ensure that non-deployment subgrantees meet compliance requirements, have managerial and financial capacity, and have the technical and operational capacity to deliver the proposed programs. The following subsections describe how the Puerto Rico Broadband Program will evaluate non-deployment subgrantee qualifications for each activity.

Compliance:

The Puerto Rico Broadband Program will ensure that any prospective non-deployment subgrantee is capable of carrying out activities funded by the subgrant competently in compliance with all applicable federal, state, and local laws.

Applicants for the conduit system will be required to certify compliance with all applicable federal and local laws relevant to carrying out the grant agreement. Conduit system applicants must provide a narrative describing the plan to comply with any relevant laws or regulations. The Puerto Rico Broadband Program will require attestation that a prospective subgrantee will permit workers to create worker-led health and safety committees that can meet with management upon reasonable request. For more on labor standards and protection, see Requirement 11. Among the information that the Puerto Rico Broadband Program shall require of prospective conduit subgrantees in the application process will be:

- The prospective subgrantee's record of past compliance with federal labor and employment laws, specifically regarding broadband development projects in the last three years;
- Certifications from an Officer/Director-level employee (or equivalent) of the prospective subgrantee evidencing consistent past compliance with federal labor and employment laws by the subgrantee, as well as all contractors and subcontractors;
- Written disclosures by the prospective subgrantee regarding any instances where the subgrantee or contractors have been found to violate 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; and
- Information on how the prospective subgrantee will ensure compliance in its own labor and employment practices as well as its contractors and subcontractors, including:
 - Applicable wage scales and wage and overtime payment practices for each class of employees expected to be involved in the physical construction of the broadband network and
 - How the subgrantee will ensure the implementation of workplace safety committees in connection with delivery of broadband deployment projects.

As detailed in Requirement 11 below, each of the above responses by the prospective conduit subgrantee will be factored into the Puerto Rico Broadband Program's review and scoring of each application to the program.

Prospective subgrantees for the affordable device and navigator programs must certify that they comply with all occupational and legal requirements for their respective organization. To determine if a prospective subgrantee for these programs meets the necessary standards, the Puerto Rico Broadband Program will:

- For each program, identify a baseline required experience level and
- Evaluate application materials to determine if all applicable laws have been complied with.

Evidence that the Puerto Rico Broadband Program may accept in making its determination includes but is not limited to:

- Information regarding past performance in a similar program,
- Past compliance, and/or
- Program plans and related analyses.

Financial and Managerial Capacity

The Puerto Rico Broadband Program will analyze all prospective non-deployment subgrantees to identify whether they have the financial and managerial capacity and have met the commitments of the subgrant and requirements of the program prescribed by the Puerto Rico Office of Management and Budget.

As part of the application materials, all prospective subgrantees for the conduit system, including the entity selected as the benchmark and reserve bidder, will be required to demonstrate the amount of capital they have available to spend in Puerto Rico for the proposed project. Prospective conduit subgrantees will be required to certify that the amount of this estimate, representing their best effort for accuracy, will remain available throughout the duration of the grant process. Subgrantees will also be required to certify that they have no existing financial obligations that would preclude them from maintaining these funds.

Each prospective conduit subgrantee will be required to certify that it has and will continue to have sufficient financial resources to cover eligible costs for the project until such time as the Puerto Rico Broadband Program authorizes additional disbursements. The Puerto Rico Broadband Program will review submitted financial estimates to determine each prospective subgrantee's financial capacity.

The Puerto Rico Broadband Program will require each prospective subgrantee for the conduit system to submit financial statements from the prior fiscal year, audited by an independent certified public accountant. If a prospective conduit subgrantee has not been audited during the ordinary course of business, in lieu of submitting audited financial statements, the prospective subgrantee must submit unaudited financial statements from the prior fiscal year and commit to providing audited financial statements by an independent certified public accountant during the grant agreement process. The Puerto Rico Broadband Program will not approve a grant until submitted documents demonstrate the prospective subgrantee's financial capability.

During the competitive bidding process, the Puerto Rico Broadband Program will require conduit applicants to submit financial analyses that substantiate the sustainability of the proposed conduit project. The Puerto Rico Broadband Program will require applicants to submit:

- key cost factors and proposed project cost;
- business plan for prospective tenant outreach and agreements;
- preliminary pro forma cash flow for a ten-year period; and
- key revenue and take-rate assumptions.

The Puerto Rico Broadband Program will require conduit applicants to demonstrate non-grant capital sources and sources to fund any initial operating losses if applicable. The Puerto Rico Broadband Program will use these financial analyses and the proposed plan to attract and retain tenants of the conduit system to determine the applicant's financial and relative capacity.

Prospective subgrantees for the affordable device and navigator programs must certify that they have met the following financial standards:

- Necessary financial qualifications in accordance with program obligations;
- Funding reserves or plans to budget for all project costs that exceed the grant amount;
- Ability to sustainably deliver the promised services over the course of the program; and
- Compliance with all program requirements.

To determine if a prospective subgrantee meets the necessary standards, the Puerto Rico Broadband Program will:

- Evaluate applicant organizational capacity for program operations and
- Examine cost estimations within proposed applicant budgets.

Evidence the Puerto Rico Broadband Program may accept in drawing conclusions includes but is not limited to:

- Proposed budget;
- Resumes;
- Organizational charts; and/or
- Narrative detailing experience and qualifications of key management and relevant organizational policies.

During the competitive bidding process, prospective subgrantees will be required to submit resumes for all key management personnel and any necessary organizational charts detailing all parents, subsidiaries, and affiliates. Each prospective conduit subgrantee must also provide a narrative describing its readiness to manage the open access conduit system. This narrative, for all non-deployment subgrantees, should describe the experience and qualifications of key management for undertaking the respective project, its experience undertaking projects of similar size and scope, recent and upcoming organizational changes including mergers and acquisitions, and relevant organizational policies. The Puerto Rico Broadband Program will not approve a grant until submitted documents demonstrate the prospective subgrantee's managerial capability.

The Puerto Rico Broadband Program may require a prospective subgrantee to agree to special grant conditions relating to maintaining the validity of representations a prospective subgrantee has made regarding its organizational structure and key personnel.

Technical and Operational Capacity

The Puerto Rico Broadband Program will certify that prospective non-deployment subgrantees have the technical and operational capability to manage the services outlined in the subgrant in the manner discussed by the subgrant award.

The Puerto Rico Broadband Program will request materials from each conduit applicant to verify that each is technically qualified to complete and operate the proposed conduit project and is capable of carrying out the project in a competent manner, including use of an appropriately skilled workforce. During the competitive bidding process, conduit applicants will commit to

using an appropriately skilled and credentialed workforce to deploy the conduit system. The selected subgrantee will:

- Ensure the use of an appropriately skilled workforce, e.g., through Registered Apprenticeships or other joint labor-management training programs that serve all workers;
- Take steps 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;
- Disclose whether the workforce is unionized and whether the workforce will be directly employed or whether work will be performed by a subcontracted workforce; and
- Identify the contractors and subcontractors that will be carrying out the proposed work.

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

- 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 and
- For each job title required to carry out the proposed work (including contractors and subcontractors), a description of:
 - 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
 - information on the professional certifications and/or in-house training in place to ensure that deployment is done at a high standard.

During the competitive bidding process, the Puerto Rico Broadband Program will require all prospective conduit subgrantees to include a summary of their operating history, financial information, and business size and stability to demonstrate operational capacity. Required materials will include:

- Organization history;
- Documented past performance of similar projects;
- Demonstration of financial stability;
- Risk management plan;
- Relevant licenses and certifications;
- History of participation and successful completion of grant programs, whether federal or local; and
- Staffing and management capacity.

The Puerto Rico Broadband Program will provide all prospective conduit subgrantees an engineered design that includes a core primary route of critical locations and a secondary route of priority access points. During the competitive bidding process, applicants will be required to submit materials demonstrating their ability and plan to complete the conduit project as presented in the design. Applicants will be required to submit project costs, a build-out timeline,

milestones for project implementation, and a capital investment schedule evidencing complete build-out and the initiation of tenant agreements within four years of the date on which the entity receives the subgrant. Prospective conduit subgrantees may elect to modify the provided engineered design to include all or portions of the secondary route. Any additional routes provided by a prospective subgrantee must be incorporated in the complete network design and certified by a professional engineer.

All conduit applicants will have access to materials developed for the initial benchmark and reserve bid and determinations made by the Puerto Rico Broadband Program's engineering services to complement planning conducted by the applicant for a competitive bid. All applicants may use the engineered design prepared by the engineering contractor; bidders who do not must demonstrate that an alternative design provides the functional equivalent. The Puerto Rico Broadband Program will not approve any grant for the conduit system until submitted documents demonstrate the prospective subgrantee's technical capability.

The Puerto Rico Broadband Program will require each prospective conduit subgrantee to attest to and specify the number of years the prospective subgrantee or its parent company has been operating. As the subgrantee will be deploying conduit infrastructure, in lieu of service distribution history, the Puerto Rico Broadband Program will require prospective subgrantees to provide a narrative describing any past projects similar in scope or activity that have prepared the prospective subgrantee to deploy and operate the proposed conduit system. Prospective subgrantees will be required to provide a detailed prospectus and pro forma detailing their business plans, expected revenue, tenant targets, staffing and management levels, resumes of key personnel, relevant existing project descriptions, and commitments from contractors or subcontractors. Competitive bids will need to meet or exceed standards established by the benchmark and reserve bid.

As described in Requirement 8, the Puerto Rico Broadband Program will additionally require prospective subgrantees for the conduit system to comply with letter of credit, ownership, and disclosure requirements in the BEAD NOFO and NTIA guidance.

Prospective subgrantees for the affordable device and navigator programs must certify that they have met the following standards:

- Evidence of a skilled workforce,
- Ability to maintain the workforce throughout the program's duration, and
- Experience operating similar programs.

To determine if a prospective subgrantee meets the required stipulations, the Puerto Rico Broadband Program will evaluate the following:

- Existing digital equity activities to establish minimum viable program standards, and, if applicable, setting minimum credentials for certain employees or contractors;
- Subgrantee plans for partnerships with other entities throughout Puerto Rico; and
- Any other detailed and measurable outcomes supplied by the prospective applicant.

Evidence the Puerto Rico Broadband Program may accept in making its determination includes but is not limited to the following:

- Program design;
- Personnel diagram;
- Project costs;
- Evidence of the professional certifications and/or in-house training for promised services; and/or
- Narrative discussing relevant experiences.

The Puerto Rico Broadband Program will continue developing plans for non-deployment subgrantee selection and determine final application materials following this proposal's submission to the NTIA.

Req. 10. Eligible Entity Implementation Activities

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

The Puerto Rico Broadband Program will implement the following activities as the recipient to facilitate BEAD funding distribution, compliance monitoring, and additional support to partners for successful project implementations.

Challenge Process Portal

For accurate data on community anchor institutions and other critical locations throughout Puerto Rico, the Puerto Rico Broadband Program will launch its own BEAD challenge process to give nonprofit organizations, units of local governments, and broadband service providers the opportunity to challenge BEAD eligibility of certain community anchor institutions, enforceable commitments, and planned service data.³⁵

The Puerto Rico Broadband Program will utilize BEAD funding to launch its own **challenge portal**. Challenges will be submitted through the portal and made visible to the service provider whose service availability and performance is being contested. The portal will notify providers of any challenges through automated email to include the provider's response deadline. The portal will also verify challenges by confirming addresses of broadband serviceable locations and evaluating the quality of scanned images.

Non-Deployment Programs Support

To ensure that each non-deployment project runs smoothly, the Puerto Rico Broadband Program requires additional staffing capacity to meet demand. Additional staff will be needed for both contractor support and coordination within the following programs.

- Conduit System
- Affordable Devices Program and
- Digital Navigator and Literacy Program.

Timely and successful deployment of the open access conduit system will require a dedicated team for the application, reviewing, grant agreement, and project management processes. As described in Requirement 9, the Puerto Rico Broadband Program and its engineering contractor will enlist the support of a grants administration **consulting contractor for conduit subgrantee oversight and grant compliance**. The consulting contractor will:

- Develop the scoring guide and application materials;
- Assist with GIS spatial analysis;
- Provide financial and technical reviews;
- Make recommendations for the conduit developer; and
- Operate as post-award construction project manager.

³⁵ For more information on the Puerto Rico Broadband Program's challenge process, see the Initial Proposal Volume 1.

The Puerto Rico Broadband Program will rely on both its staff and contractor support to design and carry out post-award compliance and project reporting efforts throughout the life of the project. The Puerto Rico Broadband Program will also engage its engineering contractor throughout the construction of the conduit project to ensure that the project is constructed to specification. This work will include reviews of invoices, field inspections, and as-built documentation. This process ensures timely implementation of awarded projects, and that the selected subgrantee complies with all relevant program guidelines and fulfills obligations established in the subgrant agreement, and local, state, and federal law. Additional Puerto Rico Broadband Program staff capacity will provide oversight of the project, including coordination between the Puerto Rico Broadband Program, engineering contractor, grant administrator, and conduit subgrantee.

For the device and digital navigator programs, the Puerto Rico Broadband Program will rely on both its **staff and contractor support to design and carry out post-award compliance and project reporting** efforts throughout the life of the subgrant projects. This process ensures subgrantees comply with all relevant program guidelines and ensures Puerto Rico achieves the objectives established by the BEAD program.

Grants Management

The Puerto Rico Broadband Program will utilize both its staff and contractor support to design and implement an electronic grants management system across each of its competitive subgrantee programs for non-deployment activities. It will require funds for program management, application processing, and compliance across BEAD activities. Activities of the **contracted BEAD grant administrator** will include:

- Development of program procedures;
- Grant agreement processing;
- Reporting, monitoring, and compliance; and
- Disbursement and financial management.

Outreach and Stakeholder Engagement

The Puerto Rico Broadband Program will engage with the wider community to ensure residents are aware of how to take advantage of the non-deployment initiatives, once implemented. The Puerto Rico Broadband Program will design outreach strategies and stakeholder engagement initiatives in line with the following goals.

- **Public Awareness Campaigns** will raise awareness surrounding how Puerto Ricans can take advantage of improved broadband access.
- **Targeted Outreach** will be aimed at specifically informing vulnerable populations about new opportunities, points of contact regarding questions, and additional resources.
- **School and Institution Engagements** will help connect the Puerto Rico Broadband Program with schools, libraries, and other institutions to streamline pathways for communicating with students and helping them access their benefits.
- **Community Visits and Assessments** will help Puerto Rico Broadband Program better understand nuances in planning and executing programs in different local communities and formulating relationships with relevant points of contact.

Online Government Services

The Puerto Rico Broadband Program will engage a **contractor to develop accessible online services for key government agencies**. The development of resources throughout the government will contribute to Puerto Rico's objective of providing fully inclusive and accessible online civic and social services for residents.³⁶ Coordination of online tools with government agency partners will ensure the Government of Puerto Rico is providing increased online opportunities as residents gain connection through unprecedented investments in broadband and digital equity.

The Puerto Rico Broadband Program will enter a memorandum of agreement (MOA) with partner government agencies, especially those supporting resident access to online tools, to utilize this contractor's services to create online functions where needed. Continued collaboration and engagement with these agencies will inform the website additions and support increased accessibility for residents throughout Puerto Rico.

The online services contractor will first assess the current accessibility and availability of online processes led by the Puerto Rico Broadband Program, Office for Socioeconomic and Community Development (ODSEC), the Administration for the Socioeconomic Development of the Family (ADSEF), and other key government agencies. Priorities include options for digital procurement of services, accessible mobile interfaces, event information, and connections to community organizations. The contractor will then implement online tools through collaboration with the Puerto Rico Broadband Program and its partners. Additional staff capacity in the Puerto Rico Broadband Program will allow oversight of this initiative and support the successful implementation of this agreement.

³⁶ For more information on Puerto Rico's accessibility goals, see the Five-Year Action Plan.

Req. 11. Labor Standards and Protection

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

- a. **Prospective subgrantees' record of past compliance with federal labor and employment laws, which:**
 - i. **Must address information on these entities' compliance with federal labor and employment laws on broadband deployment projects in the last three years;**
 - ii. **Should include a certification from an Officer/Director-level employee (or equivalent) of the prospective subgrantee evidencing consistent past compliance with federal labor and employment laws by the subgrantee, as well as all contractors and subcontractors; and**
 - iii. **Should include written confirmation that the prospective subgrantee discloses any instances in which it or its contractors or subcontractors have been found to have violated laws such as the Occupational Safety and Health Act, the Fair Labor Standards Act, or any other applicable labor and employment laws for the preceding three years.**
- b. **Prospective subgrantees' plans for ensuring compliance with federal labor and employment laws, which must address the following:**
 - i. **How the prospective subgrantee will ensure compliance in its own labor and employment practices, as well as that of its contractors and subcontractors, including:**
 1. **Information on applicable wage scales and wage and overtime payment practices for each class of employees expected to be involved directly in the physical construction of the broadband network; and**
 2. **How the subgrantee will ensure the implementation of workplace safety committees that are authorized to raise health and safety concerns in connection with the delivery of deployment projects.**

As described in Requirement 9 above, each prospective subgrantee for the conduit system will be required to describe how it will follow strong labor standards, such as those on prevailing wages and local hire provisions, if selected as the developer. The Puerto Rico Broadband Program will require the following information from prospective conduit subgrantees in the application process:

- The prospective subgrantee's record of past compliance with federal labor and employment laws, specifically regarding broadband development projects in the last three years. The Puerto Rico Broadband Program will collect data on the prospective subgrantee's historical use of contracting and subcontracting arrangements, including staffing plans, and at least one example of each contractor and subcontractor's past performance in the context of a similar project,

- A certification from an Officer/Director-level employee (or equivalent) of the prospective subgrantee evidencing consistent past compliance with federal labor and employment laws by the prospective subgrantee, as well as all contractors and subcontractors, and
- Written confirmation that the prospective subgrantee discloses any instances in which it or its 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.

Furthermore, in the application process, the Puerto Rico Broadband Program shall require each prospective subgrantee to detail how the prospective subgrantee 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 subgrantee will ensure the implementation of workplace safety committees that are authorized to raise health and safety concerns in connection with the delivery of deployment projects.

Each of the above responses regarding a prospective subgrantee's record of past compliance will be factored into the Puerto Rico Broadband Program's review of the application. The Puerto Rico Broadband Program shall give priority to fair labor practices, based on a prospective subgrantee's records of and plans for compliance with federal labor and employment laws. The Puerto Rico Broadband Program will review compliance with fair labor practices as an item in its application review scoring criteria, detailed in Appendix A. Along with other criteria such as project cost and affordability, the Puerto Rico Broadband Program will review applications and award up to 40 points for a subgrantee's demonstrated track record of fair labor practices and a strong plan for compliance with federal labor and employment laws.

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

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

The Puerto Rico Broadband Program shall make mandatory the following for the selected subgrantee, as well as its contractors and subcontractors:

- a. 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;
- b. Use of local hire provisions;
- c. Commitments to union neutrality;
- d. Use of an appropriately credentialed workforce (i.e., satisfying requirements for appropriate and relevant pre-existing occupational training, certification, and licensure).

For prospective subgrantees without a record of labor and employment law compliance, the Puerto Rico Broadband Program Puerto Rico Broadband Program shall, in accordance with the BEAD NOFO, allow such prospective subgrantees to make specific, forward-looking commitments to strong labor and employment standards and protections.³⁷

Additionally, the Puerto Rico Broadband Program Puerto Rico Broadband Program will detail these labor standards and protections in the subgrantee's grant agreement to be executed with the Puerto Rico Broadband Program. The Puerto Rico Broadband Program will further require specific provisions with which the subgrantee must agree in order to receive grant funding for the conduit system. As the Puerto Rico Broadband Program will not require subgrantees to use a directly employed workforce, certain procurements provisions will emphasize that the subgrantee should prioritize in its procurements employers with high labor standards, no recent violations of

³⁷ See BEAD NOFO, p. 43.

federal or state labor and employment laws, and who use project labor agreements and community benefits agreements that offer wages at or above the prevailing rate.

The Puerto Rico Broadband Program additionally shall make available to the subgrantee a subrecipient compliance and reporting guide, within which the various requirements related to labor standards and protections from the BEAD NOFO will be captured and communicated. The Puerto Rico Broadband Program will publish this subgrantee reporting and compliance guide at the Puerto Rico Broadband Program's website related to the implementation of its BEAD programs. The Puerto Rico Broadband Program will also regularly communicate and provide post-award guidance to the subgrantee to ensure compliance with the required labor standards as outlined in the NTIA's BEAD NOFO.

The Puerto Rico Broadband Program's process for regular subgrantee reporting will also focus on compliance with labor standards and protections. The Puerto Rico Broadband Program will require the selected subgrantee to complete and submit a full labor reporting form with every grant disbursement request or quarterly report, whichever one is submitted first. Thereafter, the Puerto Rico Broadband Program will require the subgrantee to submit a labor reporting form on a regular basis.

The Puerto Rico Broadband Program shall communicate in its guidance materials to prospective subgrantees the encouragement from NTIA/Commerce that capital projects incorporate strong labor standards, including labor agreements and local hire provisions that offer wages at or above the prevailing rate. The Puerto Rico Broadband Program's guidance, in accordance with the BEAD NOFO, will emphasize that if a subgrantee does not utilize union labor or pay at or above the prevailing wage, the wages paid to staff must be reported.³⁸

The Puerto Rico Broadband Program, in its post-award guidance, will provide reporting requirement information for the selected subgrantee. The subgrantee may provide a certification that all laborers and mechanics employed by contractors and subcontractors in the performance of the conduit project are paid wages at rates not less than those prevailing, as determined by the U.S. Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (commonly known as the "Davis-Bacon Act"), for the corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work in the civil subdivision of Puerto Rico.

If such certification is not provided, the subgrantee must provide a Project Employment and Local Impact report detailing:

- The number of employees 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. (As determined by US Secretary of Labor in accordance with subchapter IV of chapter 31 of Title 40, United States Code ("Davis-Bacon Act").

³⁸ BEAD NOFO Section VII.E.2.

The Puerto Rico Broadband Program will emphasize to the subgrantee that it must maintain sufficient records to substantiate the above information upon request.

In addition, the subgrantee 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 subgrantee does not provide such a certification, the subgrantee must provide a project workforce continuity plan, detailing:

1. How the recipient 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;
2. How the recipient will minimize risks of labor disputes and disruptions that would jeopardize timeliness and cost-effectiveness of the project;
3. How the recipient 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);
4. 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; and
5. Whether the project has completed a project labor agreement.

Finally, the subgrantee will be required to report on whether the project prioritizes local hires as well as whether the project has a Community Benefit Agreement, with a description of any such agreement.

Once the above detailed information is provided, the subgrantee must proceed to review, complete, and sign the certification box and signature section at the conclusion of its labor report certifying and acknowledging the accuracy and completeness of the information provided.

Req. 12. Workforce Readiness

2.8.1 Text Box: Describe how the Eligible Entity and their subgrantees will advance equitable workforce development and job quality objectives to develop a skilled, diverse workforce.

The Puerto Rico Broadband Program is committed to ensuring that Puerto Rico has the skilled workforce needed to meet this historic moment in the broadband industry. Across the nation, there is a shortage of trained fiber-optic installers and front-line electrical workers, as well as network and cybersecurity professionals.³⁹ Puerto Rico also faces shortages, which are exacerbated by the following economic factors:

- **Outmigration:** Puerto Rico has experienced significant outmigration of its population in recent years. Economic challenges, including high unemployment rates and limited job opportunities, have led many residents to seek better prospects elsewhere, particularly in mainland United States. This outmigration has resulted in a reduced local labor pool and shortages in specific industries;
- **Skill Mismatches:** There may be a disconnect between the skills demanded by employers and the skills possessed by the available workforce. The education and training system may not align effectively with the needs of the job market, leading to shortages in certain specialized or technical fields; and
- **Aging Population:** Puerto Rico has been grappling with an aging population, with a decreasing number of younger workers entering the labor force. This demographic trend can exacerbate future labor shortages, particularly in industries that require a younger workforce, such as manufacturing and healthcare.

The Puerto Rico Broadband Program estimates that there are currently 5,000 skilled telecommunications and broadband construction workers in Puerto Rico. To meet the demand generated by federal investments in broadband infrastructure, the Puerto Rico Broadband Program estimates Puerto Rico will need an additional:



3,000-5,000 skilled telecommunications workers (e.g. project managers, radio frequency (RF) engineers, tower climbers, installers, and compliance officers)



1,000-2,000 broadband-related construction workers



1,300 telecommunications customer service roles

Addressing these forecasted labor shortages requires a multi-faceted approach, including attracting and retaining skilled workers, aligning education and training programs with industry needs, encouraging entrepreneurship and economic diversification, and addressing the

³⁹ FCC, "Telecommunications Interagency Working Group Report on Workforce Needs," January 13, 2023, <https://www.fcc.gov/document/telecom-interagency-working-group-report-workforce-needs>.

underlying economic factors that contribute to outmigration. The Puerto Rico Broadband Program will address workforce needs through a coordinated approach across all its broadband funding programs.

To address the workforce requirements of the BEAD program, the Puerto Rico Broadband Program will require the selected conduit subgrantee to adhere to all labor standards and protections described in Requirement 11 and will be accountable for ensuring that Puerto Rican workers will be highly skilled, have high quality jobs, operate in a safe environment, and have opportunities for career development and advancement.

The following subsections address Puerto Rico Broadband Program's approach to:

- Ensuring a highly skilled workforce;
- Developing sector-based partnerships;
- Creating equitable on-ramps, ensuring job quality and worker voice; and
- Supporting a diversity of workers.

Highly Skilled Workforce

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

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

The Puerto Rico Broadband Program is investing in Puerto Rico Broadband Infrastructure Funds (PRBIF) to develop a highly skilled broadband workforce, specifically for deployment construction and maintenance. Puerto Rico's BEAD conduit project will benefit from the range of workforce development opportunities supported by PRBIF.

Puerto Rico's BEAD conduit subgrantee and its contractors will be required to develop a plan for supporting a highly skilled workforce and will be expected to contribute to the development of workforce programs and initiatives that meet employer demands. Please see box 2.8.2 for the subgrantee requirements regarding components of the required workforce plan. Additionally, the conduit subgrantee will be required to participate in upcoming data collection efforts through the Puerto Rico Broadband Infrastructure Fund and supply input on maintaining a highly skilled broadband workforce in Puerto Rico.

The Puerto Rico Broadband Program will also include provisions that the BEAD conduit subgrantee use a highly skilled workforce that is capable of safely carrying out work and that all subgrantees abide by state and federal labor laws.

Existing Programs for a Highly Skilled Workforce

Currently, Puerto Rico has many broadband-related degree-granting programs, including computer science, information technology, and electrical engineering. These programs produce

highly skilled workers who will help grow the industry. Universities offering these programs in the form of either bachelor's and/or master's degrees include:

- Universidad Ana G. Méndez;
- University of Puerto Rico – Recinto de Bayamón;
- Instituto Tecnológico de Puerto Rico;
- EDP University;
- Universidad Interamericana de Puerto Rico;
- Caribbean University;
- University of Puerto Rico – Recinto de Mayagüez;
- NUC University – Recinto de Arecibo; and
- Polytechnic University of Puerto Rico.

The Puerto Rico Broadband Program recognizes the value of these degree programs for residents and employers and will continue to engage with Puerto Rico's universities to ensure alignment between employer needs and academic programs. Additionally, the Puerto Rico Broadband Program will require its BEAD conduit subgrantee join discussions with academic institutions to ensure that degree-granting programs are producing the talent needed to construct and maintain broadband infrastructure in Puerto Rico.

Program Needs for a Highly Skilled Workforce

To further increase opportunities for Puerto Ricans and to quickly grow the broadband industry, the Government of Puerto Rico will look to high value, non-degree credentials that lead to employment or further education. Demand for credentials with industry-wide recognition has grown in recent decades and accelerated in the wake of the COVID-19 pandemic. According to the National Conference of State Legislatures (NCSL), these credentials are generally:

- Designed to demonstrate competencies for targeted, job-relevant skills that can be tailored to meet labor market demand,
- Far shorter and significantly cheaper than a traditional degree program, and
- Offered by a variety of providers including colleges, universities and technical schools, but also industry groups and other training providers.⁴⁰

The Puerto Rico Broadband Program has identified the following relevant job titles that require a credential or training certificate but not a degree. Titles and descriptions are provided below in Figure 17.

⁴⁰ "Credentials of Value," National Conference of State Legislatures, February 2023: <https://www.ncsl.org/education/credentials-of-value#:~:text=Brief%20Credentials%20of%20Value&text=States%20are%20focusing%20on%20high,of%20the%20COVID%2D19%20pandemic.>

Figure 17: Broadband Jobs Available to Those Completing a Non-Degree Program

Job Title	Credential or Training Required
Customer Representative	High school diploma or GED, 2 years of experience; associate degree or higher + 6-12 months of experience (preferred)
GIS Specialist	Specialized credential or degree required: knowledge of GIS analysis, cartographic principles, mapping software including GIS, Arc Map; programming, SQL experience
Permitting Specialist	2+ years of experience or associate degree (or higher); technical knowledge of Real Estate Law/local, state, federal regulations, Land Surveying, GIS, telecommunications
Fixed Wireless Technician	High school diploma or GED; and at least 2 years related experience and/or training
5G Microcell Technician	No degree required: 1+ years wireless, cellular, or PCS telecommunications experience
Fiber Splicer	No degree required: High school diploma or equivalent preferred; experience with splicing
Cable Installers / Fiber Optic Technician	No degree required: some knowledge of fiber optic cable
Tower Climber	No degree required: basic mechanical schools, ability to operate basic hand and power tools
Broadband Technician	No degree required: high school diploma or equivalent; ability to lift
Machinery Operator	No degree required: knowledge of excavation practices/safety practices
Civil Construction Laborer	No degree required: on-the-job training (ATSSA certification)
Electrical Construction	No degree required
Safety Lead	No degree required, 1 + years of experience
Quality Inspector	No degree required, some relevant experience
Other: Welder, Concrete Finisher, etc.	No degree required

The Puerto Rico Broadband Program will continue to invest Puerto Rico Broadband Infrastructure Funds (PRBIF) in the development of a highly skilled workforce, with an emphasis on high-demand, short-term credentials. The PRBIF-funded efforts will focus on program design and piloting, and scaling and promoting successful programs. NTIA’s Workforce Planning Guide highlights training programs that the Puerto Rico Broadband Program will look to as models. These programs include, but are not limited to:

- Fiber Broadband Association’s (FBA) Optical Telecom Installer Certification Program
- Verizon and GenerationUSA Technical Training
- Telecommunications Industry Registered Apprenticeship Program

- Jobs for the Future (JFF) Building Equitable Pathways Program.⁴¹

The Puerto Rico Broadband Program's BEAD conduit subgrantee will be required to provide input on PRBIF-funded workforce programs and curriculum, recruit graduates from such workforce programs, and ensure that its existing workers have opportunities for additional training and career growth.

Ensuring Worker Safety in the BEAD program

The Puerto Rico Broadband Program will ensure that its BEAD conduit subgrantee will:

- Implement best practices in worker safety, benefits and pay, and workplace satisfaction,
- Prioritize safety issues, and
- Ensure compliance with state and federal provisions set forth in Requirement 11 above.

The Puerto Rico Broadband Program is committed to maintaining a safe, fair, and competitive work environment by safeguarding worker protections. It will do so by including the provisions described in Requirement 11 in the BEAD conduit subgrantee contract, ensuring compliance, and developing reporting requirements. By enforcing appropriate labor standards and policies, the Government of Puerto Rico will support the well-being of workers, increase job satisfaction, and contribute to the successful implementation of broadband infrastructure throughout Puerto Rico.

Sector Based Partnerships

2.8.1 Text Box (cont.): 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;

Throughout the BEAD program implementation, the Government of Puerto Rico will continue to coordinate and partner with workforce stakeholders to ensure that the local broadband workforce is prepared to meet the needs of employers. Engaging in partnerships and collaboratively developing training programs will be a responsibility of the selected BEAD conduit subgrantee, as defined in the subgrantee contract.

Existing Sector-Based Partnerships

The Puerto Rico Broadband Program and its partners have been engaged with a range of stakeholders and partners, including internet service providers and training providers, industry organizations, universities, and other departments within the Government of Puerto Rico to better understand the broadband industry workforce landscape and emerging needs.

⁴¹ Internet for All, Workforce Planning Guide, National Telecommunications and Information Administration, https://broadbandusa.ntia.doc.gov/sites/default/files/2022-10/DOC_NTIA_Workforce%20Planning%20Guide_FINAL_100722.pdf

Leveraging the Digital Equity Advisory Subcommittee

Building upon consultations with unions and workforce organizations, employers, and education and training providers, the Puerto Rico Broadband Program will utilize the Digital Equity Advisory Subcommittee as a springboard for bringing workforce issues to light. The committee will act as a platform for discussing broadband workforce strategies, providing updates on the current state of the industry during implementation, and addressing feedback. The Puerto Rico Broadband Program encourages participation from unions and workforce organizations, universities, training programs, service providers and others in these meetings, and commits to evaluating their insight.

The Digital Equity Advisory Subcommittee will support workforce strategies and contribute to the program's capacity to connect broadband workforce interventions with additional employment opportunities throughout Puerto Rico. By combining labor discussions into the Digital Equity Advisory Subcommittee's agenda, the Puerto Rico Broadband Program aims to elevate these important discussions to a wider audience with different perspectives and expertise and increase efficiency.

Building Upon Agency Partnerships

The Puerto Rico Broadband Program will consider expanding existing workforce initiatives hosted by other government offices. For example, the Department of Economic Development and Commerce has led a multi-year effort to bolster on-island opportunities in information technology. The Puerto Rico Broadband Program will evaluate efforts to integrate current support of information technology jobs and training with other career paths by exploring options for digital support applicable to all members of the workforce.

Emerging Sector-Based Partnership

The Puerto Rico Broadband Program continues to engage in opportunities for partnerships with industry associations. These partnerships will allow stakeholders to grow capacity at local colleges and universities to offer non-degree specialized courses. The Puerto Rico Broadband Program has identified industry partners to engage, including the Fiber Broadband Association and the National Telephone Cooperative Association, to discuss the following:

- Implementing pilot programs;
- Providing input on curricula;
- Forming direct contracts with internet service providers;
- Standardizing certification programs to fit industry needs;
- Preparing students for interviews; and/or
- Developing and deploying apprenticeship programs.

The Puerto Rico Broadband Program and the Digital Equity Advisory Subcommittee will ensure that the educational opportunities, services, available funds, programs, and other workforce development opportunities are known to employers and Puerto Ricans by bringing together key stakeholders to accomplish the following goals:

- Determine what skills are needed, design education and training programs with employers to ensure program graduates have the skills employers need;

- Communicate about broadband career opportunities to inform all Puerto Ricans of available high-quality broadband jobs; and
- Provide relevant training and wrap-around services for workers to access and complete training (e.g., childcare, transportation, mentorship), to attract, train, retain, or transition to meet local workforce needs and increase high-quality job opportunities.

Wrap-Around Services

The Puerto Rico Broadband Program will work to connect its current and future workforce (in both deployment/construction occupations and in other industry-related occupations) with relevant social services to attract, train, and retain workforce members and meet their needs. The Puerto Rico Broadband Program will promote public resources and encourage the conduit subgrantee to do the same. These services include, but are not limited to, the following (many housed within government agency partners ODSEC and ADSEF):

- Public Transportation;
- Public Healthcare;
- Financial Assistance for Childcare;
- Low-Income Energy Assistance Program;
- Supplemental Nutrition Assistance Program (SNAP); and/or
- Temporary Assistance for Needy Families (TANF).

Additionally, the Puerto Rico Broadband Program will encourage its government agency partners to promote broadband industry workforce development opportunities to their current clients. These wrap-around services will help Puerto Ricans overcome the barriers to education, training and employment and will promote access to entering the broadband industry, especially for underrepresented groups.

Through sector-based partnerships, the Puerto Rico Broadband Program will continue support efforts to sustain the workforce needed. Regular communication with partners will ensure that all stakeholders work toward the same goal and efficiently leverage available resources and programs.

Equitable On Ramps, Job Quality and Worker Voice

2.8.1 Text Box (cont.): 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.

The Puerto Rico Broadband Program is committed to supporting a diverse workforce through equitable on-ramps into high-quality broadband-related jobs. To do so, the Puerto Rico Broadband Program will examine best practices that leverage intermediaries to connect working-class adults to better economic opportunities in the broadband sector. Across the country, on-ramp programs serve learners with significant barriers to accessing opportunity. According to research by the Strada Institute, for the Future of Work and Entangled Solutions, on-ramp programs can take many forms and done well, will “boost skills, employment, and earnings for working class adults and connect them faster and more

directly to employers seeking new and more diverse talent pipelines.”⁴² The Puerto Rico Broadband Program will consider developing short-term programs that include the following best practices:

- Intensive assessments and screening
- Opportunities for experiential learning
- Soft skills training
- Wraparound support, and
- Job placement and advancement services.⁴³



Image source: On-Ramps to Good Jobs, Strada Institute for the Future of Work and Entangled Solutions, 2019, <https://stradaeducation.org/report/on-ramps-to-good-jobs/>

Through continued engagement with labor organizations, community-based organizations, the University of Puerto Rico, the Department of Education Community College System, and others, the Puerto Rico Broadband Program will ensure that workers’ voices continue to inform the planning and implementation process. The Puerto Rico Broadband Program will convene key workforce development stakeholders to ensure alignment with employer needs.

The efforts described above will strengthen the Puerto Rico Broadband Program’s relationships with employers and training providers to best serve the interests of all Puerto Ricans. To further cement equity in its processes, the Puerto Rico Broadband Program will ensure that the BEAD conduit subgrantee and Puerto Rico Broadband Infrastructure Fund (PRBIF) subgrantees will:

- Maintain job quality for new and incumbent workers engaged in the sector through addressing:
 - Living wage;
 - Benefits;

⁴² On-Ramps to Good Jobs, Strada Institute for the Future of Work and Entangled Solutions, 2019, <https://stradaeducation.org/report/on-ramps-to-good-jobs/>

⁴³ Ibid Strada Institute

- Career building through providing education and training opportunities for advancement..⁴⁴
- Ensure fair workplaces:
 - Engage with labor organizations and community-based organizations to maintain worker voice and
 - Ensure programs and training opportunities are timely, accessible, and meet employers' needs.

Diversity of Workers

2.8.1 Text Box (cont.): 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.

The Puerto Rico Broadband Program recognizes the value of diversity in the workforce and is committed to initiatives that work toward this goal. As outlined in the Digital Equity Plan, the Puerto Rico Broadband Program has already begun this work by consulting with various stakeholders and spearheading discussions surrounding equitable workforce strategies through the April 2023 Smart Island Summit.⁴⁵

Increasing Awareness

To increase awareness of broadband industry careers, the government of Puerto Rico will use Puerto Rico Broadband Infrastructure Funds (PRBIF) to target populations through marketing campaigns and partnerships with corporations, government agencies, schools, and other relevant organizations. The Puerto Rico Broadband Program plans to consider the following initiatives to attract a diversity of workers to the industry:

- Definition and segmentation of audience to inform marketing strategy;
- Design marketing strategy to promote awareness of on-ramps and recruit more potential students to non-degree programs;
- Targeted outreach to recruit underrepresented populations for available positions;
- Define learning experience required for degree and non-degree positions and RFP requirements;
- Identify key partners that support underrepresented communities;
- Define matching process and apprenticeship model in alignment with feedback from target employers; and/or
- Identify the most impactful wrap-around services to drive enrollment and retention (ex: career center that offers advisement, interview training, and wardrobe assistance).

⁴⁴ Clark, J., 2017. Insight at Pacific Community Ventures, Moving Beyond Job Creation, National Fund for Workforce Solutions. United States of America. Retrieved from <https://policycommons.net/artifacts/2136314/insight-at-pacific-communit-y-ventures/2891612/> on 28 Aug 2023. CID: 20.500.12592/w7b7fm.

⁴⁵ Puerto Rico Broadband Program, "Digital Equity Plan Initial Draft." https://docs.pr.gov/files/Broadband/Digital%20Equity%20Plan/PRBP_Digital%20Equity%20INITIAL%20DRAFT.pdf.

Promoting Access to Training Opportunities for a Diversity of Puerto Ricans

The Puerto Rico Broadband Program will explore the following diversity, equity, and inclusion initiatives for Puerto Ricans to enter and be successful in non-degree programs and improving and/or adding these offerings for students in degree programs:

- Providing career-centers staffed with advisors specializing in non-degree and broadband job-seeking student needs, particularly staff that will help connect members of underrepresented populations with additional resources they find helpful when searching for a job;
- Encouraging partnering organizations to establish pipelines for diversity recruitment programs;
- Establishing affinity group programs for underrepresented groups to create pathways for additional mentorship, support, and career advancement;
- Utilizing local expertise to build equity-informed curricula for all educational programs;
- Providing accommodations and support for non-degree program students with disabilities;
- Partnering with an external organization to provide financial literacy workshops to students;
- Creating pathways for feedback that will help the Puerto Rico Broadband Program and its partners continue to iterate and improve upon its procedures;
- Allocating monetary resources to provide scholarships and/or other financial support for students from lower socioeconomic backgrounds.
- Facilitating increased remote education and work opportunities, particularly for those living in rural areas;
- Welcoming feedback from local advocacy groups, union representatives, and other entities committed to advancing diversity and equity in workplace initiatives; and/or
- Expanding the reach of social service offerings, such as childcare, public transportation, and mentorship.

The Puerto Rico Broadband Program commits to continue iterating based on community feedback to ensure that its programs are best serving members of underrepresented groups. The Puerto Rico Broadband Program will facilitate connections with the BEAD conduit subgrantee to relevant entities engaging with diversity, equity, and inclusion work to cultivate synergies across workstreams.

Information Required of Prospective Subgrantees

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

- a. The ways in which the prospective subgrantee will ensure the use of an appropriately skilled workforce, e.g., through Registered Apprenticeships or other joint labor management training programs that serve all workers;
- b. The steps that will be taken to ensure that all members of the project workforce will have appropriate credentials, e.g., appropriate and relevant pre-existing occupational training, certification, and licensure;

- c. Whether the workforce is unionized;
- d. Whether the workforce will be directly employed or whether work will be performed by a subcontracted workforce; and
- e. The entities that the proposed subgrantee plans to contract and subcontract with in carrying out the proposed work.

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

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

The Puerto Rico Broadband Program will require that prospective conduit subgrantees and subcontractors advance the Puerto Rico Broadband Program's workforce development initiatives, ensuring the conduit project workforce will be appropriately skilled and credentialed. Prospective subgrantees must develop a workforce plan that includes:

- a) Ensuring the use of an appropriately skilled workforce, e.g., through Registered Apprenticeships or other joint labor-management training programs that serve all workers;
- b) Ensuring that all members of the project workforce will have appropriate credentials, e.g., appropriate and relevant pre-existing occupational training, certification, and licensure;
- c) Discussing whether the workforce is unionized;
- d) Clarifying if it will be directly employing workers or whether the work will be performed by a subcontracted workforce; and
- e) Listing the contractors and subcontractors carrying out the proposed work, if applicable.

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

- a. The job titles and size of the workforce (FTE positions, including for contractors and subcontractors) required to carry out the proposed work over the course of the project and the entity that will employ each portion of the workforce and
- b. For each job title required to carry out the proposed work (including contractors and subcontractors), a description of:
 - i. Safety training, certification, and/or licensure requirements (e.g., OSHA 10, OSHA 30, confined space, traffic control, or other training as relevant depending on title

and work), including whether there is a robust in-house training program with established requirements tied to certifications, titles and

- ii. Information on the professional certifications and/or in-house training in place to ensure that deployment is done to a high standard.

Req. 13. Minority Business Enterprises (MBEs and Women's Business Enterprises (WBEs) / Labor Surplus Area Firms Inclusion

2.9.1 Text Box: 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.

Puerto Rico Broadband Program Process

The Puerto Rico Broadband Program will have a comprehensive approach to recruitment, utilization, and retention of minority businesses, women's business enterprises, and labor surplus area firms as described in greater detail below.

The Puerto Rico Broadband Program will utilize Puerto Rican economic development and community organizations to create more awareness of opportunities related to the construction and maintenance of BEAD-funded infrastructure. Included in the list of organizations the Puerto Rico Broadband Program will seek to leverage to this end are chambers of commerce, minority-serving institutions, additional local colleges and universities, local, state, and regional economic development organizations, and other industry and business-based organizations.

Strategy and Tracking Methods

The Puerto Rico Broadband Program certifies that it, as the Eligible Entity, will take all necessary affirmative steps to ensure minority business, women's business enterprises, and labor surplus area firms are utilized when possible.

Puerto Rico Broadband Program Strategy

2.9.2 Check Box: 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:

Solicitation Lists

a. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

The Puerto Rico Broadband Program will conduct virtual and in-person outreach events to share project opportunities and provide information on contracting with the Puerto Rico Broadband Program. Qualified small and minority businesses and WBE's in attendance at such events will have the opportunity to be added to the solicitation list.

Potential Source Solicitation

b. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

In order to ensure that qualified WBE, MBE, and disadvantaged and labor surplus area-owned businesses are included on solicitation lists, the Puerto Rico Broadband Program will strive to create a MBE/WBE directory relating to the broadband industry which will include suppliers, carriers, contractors and engineers. The Puerto Rico Broadband Program will create a registration link for MBE's and WBE's to register at the Puerto Rico Broadband Program's website. Utilizing this directory of MBE/WBE registered companies, the Puerto Rico Broadband Program will share

any open solicitations for projects related to the construction and maintenance of BEAD infrastructure. Additionally, the Puerto Rico Broadband Program will encourage qualified businesses to register with the Secretary of State's office to market their services and products.

Division of Total Requirements to Permit Maximum MBE, WBE Participation

c. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;

Whenever it is economically feasible to do so, the Puerto Rico Broadband Program will divide total program requirements into smaller tasks or quantities so as to facilitate maximum participation by MBE's and WBE's. It shall accomplish this by identifying particular competencies of such MBE's and WBE's and creating requirements which align with the services and products of the qualified MBE's and WBE's on the solicitation lists.

To facilitate this, the Puerto Rico Broadband Program will seek to minimize the consolidation of procurements for goods and services into one contract and require prime vendors to strengthen their subcontracting plans and goals for small and diverse business participation through provisions in the Puerto Rico Broadband Program's contracts with prime vendors. The Puerto Rico Broadband Program will regularly assess and require regular reporting by prime vendors so as to lessen the likelihood that contracts will be unnecessarily bundled. Where contracts are bundled, the Puerto Rico Broadband Program will encourage groups of small entities to compete for such contracts.

Establishing Delivery Schedules

d) and e): 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;

When allowed for by the requirement, the Puerto Rico Broadband Program shall accommodate, establish, and provide for delivery schedules that will encourage participation by small and minority businesses and women's business enterprises. It will accomplish this by requiring contracting officers to facilitate participation of MBE's, WBE's, and Labor surplus area owned businesses in solicitations and quotes for preparation time, scopes of work, and delivery schedules.

As part of this, the Puerto Rico Broadband Program will ensure organizational compliance with the Federal Acquisition Regulations (FAR) subpart 11.4 (Regarding Delivery and Performance Schedules, sections 11.401-11.404), relating to contracting officer compliance.⁴⁶

The Puerto Rico Broadband Program shall utilize the services and assistance of the Small Business Administration (SBA) and the Minority Business Development Agency (MBDA) of the Department of Commerce.

⁴⁶ Federal Acquisition Regulations, "11.4 Delivery and Performance Schedules (11.401-11.404)," October 11, 2023, https://www.acquisition.gov/far/part-11#FAR_Subpart_11_4.

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

In communications with subgrantees, the Puerto Rico Broadband Program shall emphasize that subgrantees must take the affirmative steps detailed above to MBE and WBE recruitment related to subcontractors of the subgrantee. The Puerto Rico Broadband Program shall accomplish this throughout the administration of BEAD subgrants, from the application process, subgrantee selection process, and award administration, monitoring, and compliance processes. The Puerto Rico Broadband Program will do this by incorporating these requirements in its application questions, informational webinars and award orientation materials and programs, and through the inclusion of provisions in its grant agreements requiring subgrantees to take each of the affirmative steps detailed above with regard to solicitation lists, active solicitation, division of program requirements, favorable delivery schedules, and the use of the SBA and MBDA of the Dept. of Commerce.

In addition, the Puerto Rico Broadband Program will require subgrantees to have a plan of action that may include but is not limited to the following:

- Formal commitment letters from the subgrantee confirming the organization's commitment to supplier diversity,
- An outreach plan for awareness and providing information and contacts related to diverse recruitment, including information sessions (virtual or in-person), email campaigns, social media posts, or other activities, and
- Deployment/enhancement of the subgrantee's internal supplied diversity program demonstrating subgrantee commitment to supplier inclusion and equitable procurement practices.

Data Tracking Methods

The Puerto Rico Broadband Program will incorporate a provision in its grant agreements with subgrantees whereby, in addition to agreeing to other nondiscrimination provisions in the grant agreement, it will recruit, use, and retain, minority business enterprises (MBE), women-owned business enterprises, (WBE) and labor surplus area firms when possible. By virtue of participation in the BEAD program as a subgrantee of the Puerto Rico Broadband Program, subgrantees will agree that the subgrantee, its contractors, and its subcontractors will each demonstrate they have made "good faith efforts" to recruit, use, and retain MBE's, WBE's, and labor surplus firms when possible from the Puerto Rico Broadband Program's list of certified MBE, WBE, and labor surplus firms. The Puerto Rico Broadband Program will communicate in the grant agreement and supplemental compliance information—including but not limited to subgrantee compliance guidance—that the subgrantee and its contractors shall demonstrate that each has made good faith efforts. The subgrantee shall provide, at a minimum, the following to the Puerto Rico Broadband Program in documenting the good faith efforts of it and any contractors:

- Copies of any solicitations of certified minority- and/or women-owned business enterprises listed in the Puerto Rico directory of certified businesses, and any responses thereto;

- If responses to the contractor's solicitations were received, but a certified minority- or woman-owned business enterprise was not selected, the specific reasons that such enterprise was not selected;
- Copies of any advertisements for participation by certified minority- and women-owned business enterprises timely published in appropriate general circulation, trade and minority- or women-oriented publications, together with the listing(s) and date(s) of the publication of such advertisements; and
- Information describing the specific steps undertaken to reasonably structure the contract scope of work for the purpose of subcontracting with, or obtaining supplies from, certified minority- and women-owned business enterprises.

In addition to the information provided by the subgrantees above, the Puerto Rico Broadband Program may also consider the following to determine whether the subgrantee/contractor/subcontractors have demonstrated good faith efforts:

- Whether the subgrantees/contractors submitted an alternative utilization plan consistent with the subcontract or supplier opportunities in the contract;
- The number of certified minority- and women-owned business enterprises in the region listed in the directory of certified businesses that could, in the judgment of the Puerto Rico Broadband Program, perform work required;
- The actions taken by the subgrantee/contractor to contact and assess the ability of certified minority- and women-owned business enterprises located outside of the region in which the grant agreement scope of work is to be performed to participate on the project;
- Whether the subgrantee/contractor provided relevant plans, specifications or terms and conditions to certified minority- and women-owned business enterprises sufficiently in advance to enable them to prepare an informed response to a contractor request for participation as a subcontractor or supplier;
- The terms and conditions of any subcontract or provision of suppliers offered to certified minority- or women-owned business enterprises and a comparison of such terms and conditions with those offered in the ordinary course of the subgrantee/contractor's business and to other subcontractors or suppliers of the subgrantee or contractor; and
- Any other information that is relevant or appropriate to determining whether the subgrantee/contractor has demonstrated a good faith effort.

Req. 14. Cost and Barrier Reduction

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

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

The Puerto Rico Broadband Program's proposal for use of BEAD funds is focused on reducing costs and barriers to deployment throughout Puerto Rico. Priorities for the Puerto Rico Broadband Program include:

- Promoting and adopting dig-once regulations;
- Ensuring clear, consistent, and expeditious processes for utility pole and conduit access;
- Engaging small and medium enterprises; and
- Collaborating with stakeholders.

Investing in a carrier-neutral, island-wide conduit system will allow multiple users the opportunity to provide a variety of services. Prospective tenants without the capital to make last-mile connections on their own will be supported by conduit infrastructure, providing the access points needed to deploy reliable high-speed internet in areas previously unconnected. With the conduit system, tenants can provide seamless broadband service throughout Puerto Rico in a cost-effective, collaborative system, eliminating previous barriers including high costs of infrastructure and time-consuming right-of-way processes.

The Puerto Rico Broadband Program will promote cooperative efforts for access to new routes and ensure professional, responsive management of the open conduit. The conduit system will be designed using a "dig-once" policy, with additional capacity built into the system for future expansion. Last-mile, middle-mile, and backhaul services will be made more available and more resilient through use of this system.

While the Government of Puerto Rico has taken steps since 2019 to expedite the permitting process for pole and conduit installations in public rights-of-way, significant delays can still occur when projects involve municipalities.⁴⁷ When a project such as the proposed conduit system spans multiple municipalities, the permitting process of each municipality applies, which can delay development. The Puerto Rico Broadband Program will continue to work with the Legislative Assembly of Puerto Rico, government agencies, municipal governments, and other key stakeholders to eliminate administrative obstacles. Members of the Broadband Advisory Council, including representatives of government agencies, continue to help develop procedures in regular convenings.

⁴⁷ For more information on pole and conduit access in Puerto Rico, see the Five-Year Action Plan.

Req. 15. Climate Assessment

2.11.1 Text Box: 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;**

In recent years, Puerto Rico has faced significant challenges dealing with several major natural events of Hurricanes Maria and Irma in 2017 and the Southwestern Puerto Rico earthquakes in 2020 which have changed the way the United States has handled disaster recovery and restoration. Additionally, during these weather events, the government's ability to execute on any proposed mitigation strategies administratively and operationally was limited due to pre-existing socio-economic conditions and the start of global pandemic.

As a result of these weather events, the Puerto Rican government has taken additional steps in to ensure that missteps from past events were avoided and incorporated lessons learned into the update of Puerto Rico State Natural Hazard Mitigation Plan (PRSNHMP). The PRSNHMP is a comprehensive plan that outlines areas of concern across all natural disasters that could potentially impact Puerto Rico on an annual basis. The plan itself is a helpful guide for commonwealth and municipal leaders for evaluating and planning out how to prepare for natural disasters, as well as laying the groundwork for post-event restoration and recovery.

The Puerto Rico Broadband Program has reviewed the Puerto Rico State Natural Hazard Mitigation Plan (PRSNHMP) to highlight areas that are most susceptible to natural disasters and other high-risk events. According to the PRSNHMP, nearly 62% of Puerto Rico's population lives near coastal areas. These areas are the most susceptible to hazards such as hurricanes and coastal and riverine flooding. Residents that reside in the central interior, prone to natural disasters such as flooding, high winds from hurricanes and landslides, also experience some of the highest social risk factors in the United States. These risk factors limit residents' ability to seek assistance when unforeseen events occur in these impacted communities.

Using the Census Bureau's Community Resilience Estimates (CRE) to identify other areas at risk, nearly 46.1% of Puerto Rico's population is estimated to have three or more risks factors related to social vulnerability more than double the estimated share (21.6%) of the stateside U.S. population in 2019.⁴⁸ Out of 78 Municipalities, seven municipalities have over 55% of their residents at risk, including Maricao (65.0%), Lajas (63.3%), Guánica (62.3%), Sabana Grande

⁴⁸US Census Bureau, "How Socially Vulnerable Is Puerto Rico to Disasters?" June 7, 2023, [https://www.census.gov/library/stories/2023/06/how-socially-vulnerable-is-puerto-rico-to-disasters.html#:~:text=All%20municipios%20in%20Puerto%20Rico,0%20risk%20factors%20\(14.7%25\).](https://www.census.gov/library/stories/2023/06/how-socially-vulnerable-is-puerto-rico-to-disasters.html#:~:text=All%20municipios%20in%20Puerto%20Rico,0%20risk%20factors%20(14.7%25).)

(57.0%), Vieques (57.4%) Ciales (56.4%) and Patillas (55.7%).⁴⁹ A majority of these municipalities outside of Vieques and Patillas are in the southwestern and central areas of Puerto Rico, more remote with difficult terrain and limited infrastructure.

To ensure that these areas are addressed, the Puerto Rico Broadband Program will be using information pulled from the most recent Puerto Rico State Natural Hazard Mitigation Plan (PRSNHMP) updated every five years, the Census Bureau, and other federal and local sources when planning out infrastructure projects for BEAD and other funding sources.

2.11.1 Text Box (cont.): 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;

By 2050, climate models for Puerto Rico suggest a continuation of the trends experienced over the last decade. Longer dry periods of 20-40% less precipitation, interrupted by more intense storms that will produce a higher propensity for infrastructure damage and water scarcity. Average temperatures in Puerto Rico today are 2.3 degrees F higher since 1920.⁵⁰ Looking forward to that same time, Puerto Rico projects to warm 1.8 degrees F under a current emissions scenario and as much as 7.2 degrees F under a higher emissions scenario. These higher temperatures directly impact the environment and cause critical ecological stress to Puerto Rico's forests and coastal areas.

Warmer global temperatures also lead to warmer ocean temperatures, which increase storm intensity. Both Hurricane Maria and Irma were some of the costliest natural disasters on record and are a sheer reminder of the threats posed against Puerto Rico. With the increase in frequency and intensity of these storms, existing and future infrastructure is at significant risk. Infrastructure will need to be hardened to withstand the stress of these storms.

In addition to the threat of wind damage, stronger storms increase the risk of flooding. Coastal flooding can occur during and after a storm event, while flash flooding can occur from heavy rainfall in a short period of time. Flash flooding can happen in coastal areas but also in Puerto Rico's deep mountain valleys, where water can rush down the steep mountain sides and into rivers and streams that can quickly fill up and impact towns and cities. These coastal and mountain communities are particularly high risk due to the remoteness, and limited infrastructure has only exacerbated the problems in these areas.

Outside of rain and wind events, Puerto Rico resides in a seismically active area along the Caribbean and North American tectonic plate. Over the past 100 years, Puerto Rico has

⁴⁹ US Census Bureau, "Community Resilience Estimates for Puerto Rico Viewer." <https://mtgis-portal.geo.census.gov/arcgis/apps/experiencebuilder/experience/?id=e851575739ca4b4281037d92cc62cbd4>

⁵⁰ US Global Change Research Program, NOAA Fourth National Climate Assessment Chapter 20 – Caribbean [https://nca2018.globalchange.gov/chapter/20/U.S.Caribbean-FourthNationalClimateAssessment\(globalchange.gov\)](https://nca2018.globalchange.gov/chapter/20/U.S.Caribbean-FourthNationalClimateAssessment(globalchange.gov))

experienced several large earthquakes and aftershocks above 7.0 on the Richter Scale.⁵¹ When these powerful earthquakes occur close to population centers, they can cause extensive infrastructure damage and loss of life. The southwest portion of Puerto Rico has seen the most seismic activity in recent years, including the 6.4 magnitude earthquake in early 2020. This area is an area of concern and will be actively monitored, as it is also prone to landslides and tsunamis,

Landslides significantly impact rural and at-risk communities in Puerto Rico's interior. With the increase of heavier rainfall from tropical systems and stronger seasonal rains, these communities are under a significant threat of landslides as the ground becomes so saturated with moisture that plants and other exposed debris begin to move due to the ground not being able to support any more water. Two factors that drive landslides are high soil moisture content and steep slopes. After Hurricane Maria, the University of Puerto Rico Mayaguez campus and the United States Geological Survey (USGS) published a study that evaluated physical landslide susceptibility by area across Puerto Rico. Their study identified several areas that fell into the "Extremely High", category. Maricao, led the study with ninety-four percent (94%); Jayuya, with seventy-five percent (75%); Adjuntas, with sixty-eight percent (68%), and Las Marías, with sixty-seven (67%) of their total land area.⁵² The study also looked at where the most landslides occurred by municipalities. The top five municipalities where landslides occurred were Utuado, Adjuntas, Ponce, Orocovis and Ciales, with the leading cause high soil moisture content.⁵³

Climate hazards are a looming threat to Puerto Rico, and Puerto Rico's residents and infrastructure are feeling its early impacts. The Puerto Rico Broadband Program will be working directly with all the resources available and stakeholders during planning to ensure that the infrastructure installed is hardened and resilient to withstand climate hazards.

2.11.1 Text Box (cont.): c. Characterize any weather and climate risks to new infrastructure deployed using BEAD Program funds for the 20 years following deployment;

The Puerto Rico Broadband Program is undertaking the rollout of a large, island-wide underground open access conduit system. Creating a network at this scale will present many challenges, including dealing with natural hazards on an annual basis and contending with very complex socio-economic and political environments that will impact network. The Puerto Rico Broadband Program is conducting extensive planning to ensure that this program is successful and long-lasting.

With Puerto Rico's high risk for stronger hurricanes and tropical weather systems, the infrastructure will need to be hardened and buried when possible. This process will need to account for rugged mountainous interior, dense vegetation, and coastal plains. While building infrastructure in seismic areas, the Puerto Rico Broadband Program will take steps to ensure the infrastructure meets or exceeds all federal and commonwealth regulations.

⁵¹ United States Geological Survey, "Caribbean Tsunami and Earthquake Hazards Studies," August 21, 2018, <https://www.usgs.gov/centers/whcmssc/science/caribbean-tsunami-and-earthquake-hazards-studies>.

⁵² Puerto Rico State Natural Hazard Mitigation Plan, August 2021, page 42, https://recovery.pr.gov/documents/2021%20PR%20State%20Hazard%20Mitigation%20Plan_Aug2021.pdf.

⁵³ Puerto Rico State Natural Hazard Mitigation Plan, pages 88-92.

Conduit routes will need to be constructed through areas that are highly susceptible to landslides and other risks. Puerto Rico's topography, especially areas in the interior, will inform the builds. Whenever possible, the Puerto Rico Broadband Program will refer to any local hazard mitigation plans to identify potential problem areas in relevant jurisdictions.

Puerto Rico is home to diverse and unique ecosystems, including forests, wetlands, tropical rainforests, and coastal areas. As the Puerto Rico Broadband Program plans infrastructure, careful development will be a priority to mitigate impacts on these ecosystems.

Development of the open access conduit network will coincide with road and electrical grid improvements. In 2019, the American Society of Civil Engineers assigned Puerto Rico's infrastructure an overall GPA of D-.⁵⁴ Since 2019, there have been concerted efforts to improve Puerto Rico's infrastructure. With assistance from the Federal Government and other sources, significant projects have begun to improve roads and the electrical grid, improvements that will further support resident access to resources. Coordination with road and electrical grid construction, including shared solutions to material shortages and supply chain issues, will be critical for efficient timing and location of projects and successful operation of an underground conduit system.

2.11.1 Text Box (cont.): d. Identify how the proposed plan will avoid and/or mitigate weather and climate risks identified; and

The Puerto Rico Broadband Program is committed to proactively preventing infrastructure failures of the past. While overseeing the development of the island-wide open access conduit system, the Puerto Rico Broadband Program will focus on key areas to ensure that a resilient and robust network will be able to withstand any climate or weather-related event throughout the lifespan of the network.

Resiliency Strategies

The Puerto Rico Broadband Program will implement resilience strategies during construction of the open access conduit system. The subgrantee will be required to conduct more in-depth site surveys when building in sensitive areas and to work directly with community leaders and local stakeholders when building in areas with limited infrastructure. Non-traditional construction methods, such as micro trenching, and high-density conduit systems will be considered to minimize the impact of building in sensitive areas. To optimize costs, the subgrantee may partner with other state and local agencies to share costs under a "One-Dig" policy.

Fiber Optic Preference:

The Puerto Rico Broadband Program prefers the deployment of fiber optic cables within the open-access system. Fiber optics offer several advantages, listed below.

- Lower environmental impact
- Extended data transmissions
- Lightweight and durable cables
- Future proof cables with a high ceiling for growth

⁵⁴ American Society of Civil Engineers, "ASCE Puerto Rico Report Card 2019," https://www.infrastructurereportcard.org/wp-content/uploads/2019/11/Brochure_PR2019_digital.pdf.

- High data transfers
- Reduced latency
- High capacity
- Less prone to failure from water

High Density Conduit System:

This system will be designed as high-density conduit system, to allow for multiple providers to operate in each section. Wherever possible, this system will be buried to protect and harden the conduit from any outside elements and hazards. High capacity systems allow for multiple providers to extend their existing networks, enhancing competition and lowering costs to build and deploy infrastructure in areas that need services.

Diversity & Redundancy Strategies:

The Puerto Rico Broadband Program will design multiple routes across Puerto Rico to ensure redundancy, minimizing service outages. All proposed colocations facilities will be required to have redundant power systems and battery backup support to prevent any major system outages for extended periods of time. Every site will have redundancy requirements, including a minimum of two physical pathways going into the site to mitigate isolations in the event of an outage. All facilities will be strategically selected to factor in potential natural hazards, soil and land sustainability and impact to the environment, and growth potential of the facility for network user access.

Community Strategies

Community engagement and support from local stakeholders is essential for ensuring success in the deployment of this network. Having strong ties in the community will help to identify community needs and priorities, as well as address concerns and potential barriers to deployment. This system's top priority is deploying infrastructure in communities that are the most at risk within Puerto Rico. By working closely with local communities, service providers can build stronger, more resilient networks that are better equipped to withstand the challenges of the future.

Recovery Strategies for Weather and Climate Events:

Knowing that there is high likelihood that extreme events will occur during the lifespan of the network, the Puerto Rico Broadband Program will require the subgrantee to prepare through the following steps:

- Develop an evacuation plan for operations and engineering teams;
- Have an emergency team in place to take charge and make decisions pre & post-storm;
- Take steps to secure the job site. Document and inventory available material resources;
- Have a detailed risk assessment sheet;
- Evaluate damage and restore the site to pre-storm conditions after storms; and
- Consult the Puerto Rico State Natural Hazard Mitigation Plan (PRSNHMP) and Local Hazard Mitigation plans to gain insights into existing emergency protocols, identify problem areas, and any additional concerns raised by local and state agencies.

Adopting these measures will ensure the Puerto Rico Broadband Program's open-access conduit system is resilient, adaptable, and well prepared for the challenges that may arise during the network's lifespan.

2.11.1 Text Box (cont.): e. Describe plans for periodically repeating this process over the life of the Program to ensure that evolving risks are understood, characterized, and addressed, and that the most up-to-date tools and information resources are utilized.

The Puerto Rico Broadband Program will work with federal, local, and community stakeholders, including non-profits, internet service providers, and private enterprises, to implement strategies recommended in the Puerto Rico State Natural Hazard Mitigation Plan (PRSNHMP) and raise the profile of the document. The PRSNHMP is updated every five years, as mandated by FEMA, but is subject to any changes given Puerto Rico's recent history. In addition to the hazard mitigation plan, the Puerto Rico Broadband Program will use tools and resources from the Puerto Rican Planning Board, FEMA, USDA, and the Census to evaluate programs for the most up-to-date information for risk assessments.

Req. 16. Low-Cost Broadband Service Option

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

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

Puerto Rico’s existing commitments for universal service have shaped the Puerto Rico Broadband Program’s approach to the low-cost broadband service option requirement in BEAD implementation. If the Puerto Rico Broadband Program were implementing last-mile deployment, the Puerto Rico Broadband Program would utilize the model’s low-cost alternative. As the Puerto Rico Broadband Program will not be making subgrants for broadband service with BEAD funds, a low-cost broadband service option will not be required of the BEAD conduit subgrantee. Successful development and tenant use of the proposed conduit system will support low-cost broadband service for residents as the open access nature of the system provides more opportunities for small and medium enterprises to compete.

Uniendo awardees are held to charge caps by the Federal Communications Commission.⁵⁵ As noted in the program procedures, recipients may offer a variety of broadband service offerings as long as they offer at least one standalone voice plan and one service plan that provides broadband at the relevant performance tier and latency requirements, and these plans must be offered at rates that are reasonably comparable to rates offered in urban areas. For voice service, a support recipient will be required to certify annually that the pricing of its service is no more than the applicable reasonably comparable rate benchmark that the Bureau releases each year. For broadband services, a support recipient will be required to certify that the pricing of a service that meets the required performance tier and latency performance requirements is no more than the applicable reasonably comparable rate benchmark, or that it is no more than the non-promotional price charged for a comparable fixed wireline broadband service in the state or U.S. territory where the eligible telecommunication carrier (ETC) receives support.

The Puerto Rico Broadband Program continues to provide additional low-cost measures in programs funded through the Puerto Rico Broadband Infrastructure Fund (PRBIF) and other sources. Through ongoing Affordable Connectivity Program outreach efforts, the Puerto Rico

⁵⁵ Federal Communications Commission, “The Uniendo a Puerto Rico Fund and the Connect USVI Fund, Connect America Fund, ETC Annual Reports and Certifications,” March 20, 2020, <https://www.federalregister.gov/documents/2020/03/20/2020-05508/the-uniendo-a-puerto-rico-fund-and-the-connect-usvi-fund-connect-america-fund-etc-annual-reports-and>.

Broadband Program continues to connect eligible residents with subsidies for their internet service. The Puerto Rico Broadband Program is finalizing the initial round and beginning the second round of the free public Wi-Fi program through PRBIF, providing residents access to free Wi-Fi in each municipality for at least ten years. The Puerto Rico Broadband Program will further prioritize long-term affordability in PRBIF-funded resilient infrastructure projects.

Req. 17. Use of 20 Percent of Funding

2.14.1 Text Box: 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.

Puerto Rico will utilize BEAD funds to conduct three non-deployment activities. As such, the Puerto Rico Broadband Program requests \$329,614,151 upon approval of this Initial Proposal, 100% of Puerto Rico's BEAD allocation minus \$5,000,000 in initial planning funds already received. The Puerto Rico Broadband Program is developing a detailed program budget to match the projects in this proposal.

The Puerto Rico Broadband Program has identified the following categories of activities that will require use of allocated expenses prior to the approval of the Final Proposal, including the below items.

- Challenge process, as described in Requirement 10
- Subgrantee selection, as described in Requirement 9, including staff and contractor expenses
- Selection and set-up of an electronic grants management system
- Administrative expenses, including staff and contractor expenses required for financial management and grants reporting to NTIA and to entities to which the Puerto Rico Broadband Program is accountable within the Government of Puerto Rico, and preparation of the Final Proposal
- Staff and contractor resources to support the Outreach and Stakeholder Engagement activities described in Requirement 10 during the first year of BEAD implementation
- Accessibility assessment and first year of online tool development for government agencies, as described in the Online Government Services activity described in Requirement 10

Installation of hardened and resilient infrastructure in Puerto Rico begins with development of the open access conduit system described in Requirement 9. Residents in every area of Puerto Rico, especially those in historically underserved rural areas left out of major development projects, must have access points that are structurally reinforced to withstand unexpected events. Swift and efficient deployment of this conduit system with the full allocation will allow internet service providers and other critical tenants to deploy needed middle-mile, backhaul, and last-mile services to residents and community anchor institutions throughout Puerto Rico in a new resilient, sustainable system upon completion of relevant routes, rather than waiting for the entire system to be completed before using the conduit capacity.

Puerto Ricans face additional obstacles to connection, including device needs and digital literacy skills gaps. Receipt of the full allocation as quickly as possible will allow the Puerto Rico Broadband Program to launch programs together, allowing construction of the island-wide conduit system to coincide with increased device and skills access.

While the Puerto Rico Broadband Program has and will continue to reduce costs and barriers to deployment, anticipated construction delays in permitting, administrative approvals, and environmental assessments may impact the timeline for the conduit system. Access to the full BEAD allocation will allow the Puerto Rico Broadband Program to make progress toward all non-deployment goals throughout construction of the conduit system. Further, subgrantee selection with access to the full allocation will allow more accurate and efficient use of funds for non-deployment purposes and will ensure residents are able to participate in digital equity programming well before the conduit system's complete deployment in 2028.

Req. 18. Eligible Entity Regulatory Approach

2.15.1 Text Box

- 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.**

To date, there are no laws of Puerto Rico concerning broadband, utility services, or similar subjects, whether they predate or postdate enactment of the Infrastructure Act that either:

- preclude certain public sector providers from participation in the subgrant competition, or
- 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.

As such, there are no laws of Puerto Rico that shall need to be waived by the Puerto Rico Broadband Program in the implementation of the BEAD program.

Req. 19. Certification of Compliance with BEAD Requirements

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

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

The Puerto Rico Broadband Program will comply with all applicable requirements of the BEAD Program, including the reporting requirements.

The Puerto Rico Broadband Program will prescribe in its published program procedures a process by which subgrantees shall be reimbursed for actual eligible program expenses up to a maximum project cost identified in the Puerto Rico Broadband Program's award to that subgrantee.

In addition, the Puerto Rico Broadband Program will prepare and distribute to subgrantees a post-award guidance document by which it will detail steps in the post-award process for ensuring subgrantee accountability.

For the conduit subgrantee, following the execution of the subgrantee's grant agreement with the Puerto Rico Broadband Program, and following submittal of the conduit subgrantee's required documentation in order to obtain a notice to proceed with pre-construction activities from the Puerto Rico Broadband Program, the Puerto Rico Broadband Program will conduct project meetings to review the requirements needed for the deployment subgrantee to obtain a Notice to Proceed with Construction Activities.

Following the execution of each non-deployment subgrantee's grant agreement with the Puerto Rico Broadband Program, and submittal of any required documentation related to such subgrantee's project, the Puerto Rico Broadband Program will review all documentation and provide the non-deployment subgrantee with a notice to proceed with project activities.

Notice to Proceed with Pre-Construction/Design Activities and Initial Budget Breakdown

Prior to the conduit subgrantee making any eligible expenditures, the conduit subgrantee must obtain a Notice to Proceed with pre-construction activities from the Puerto Rico Broadband Program. The Puerto Rico Broadband Program shall require the deployment subgrantee to provide, as part of its grant agreement, required documentation uploaded within the Puerto Rico Broadband Program's online grant administration portal. Included in this documentation are items such as the signed grant agreement with the Puerto Rico Broadband Program, subgrantee debarment review form, proof of establishment of a separate project bank account by the subgrantee, a completed environmental law applicability questionnaire, information related to the conduit subgrantee's financial management system and record retention policies as applicable, among other information. Additionally, the required documentation shall include the subgrantee's certification of review of potentially applicable laws, evidence of consultation with any historic preservation office and required clearances.

Once the Puerto Rico Broadband Program issues a notice to proceed with pre-construction activities, the conduit subgrantee may then begin pre-construction activities, which involves expenditures on non-construction activities such as engineering functions, permit applications/right-of-way practices, and associated logistical efforts.

Engineered Design Requirements

Following the issuance by the Puerto Rico Broadband Program of a notice to proceed with pre-construction (non-construction) activities, but prior to requesting an Award contract with construction activities, the Puerto Rico Broadband Program will require its conduit subgrantee to submit a comprehensive and full project plan to the Puerto Rico Broadband Program. The Puerto Rico Broadband Program will have assigned its Engineering Contractor to supply Construction Plans, along with high-level design and engineering plans, which the conduit subgrantee will use as the basis for its construction and project plans. All changes and modifications will be coordinated with the Puerto Rico Broadband Program's engineering partner before implementing any changes. The Puerto Rico Broadband Program will work the engineering firm and the grant administrator that will oversee the conduit subgrantee's implementation of the engineered design and any approved modifications to specifications. The Puerto Rico Broadband Program will also require the conduit subgrantee to provide copies of any DOT permits, any other applicable permits, clearances, applicable Dig Once Notifications, pole attachment agreements, and applicable bonds as well. Should the conduit subgrantee's project occur on private property or property outside of the ROW, the Puerto Rico Broadband Program will require the subgrantee to provide evidence of any required easements or clearances as well. For projects requiring underlying municipality or Federal agency approvals, the Puerto Rico Broadband Program will require the conduit subgrantee to submit evidence of such documentation.

Submitting Invoices

To ensure accurate and organized processing of invoices, the Puerto Rico Broadband Program requires use of equipment and materials in a project prior to subgrantee submitting invoices for such items,

- Grant Disbursement Requests

In the grant disbursement request, the Puerto Rico Broadband Program will require from subgrantees submission of proof of expenditures on eligible costs for review prior to reimbursement. If the Puerto Rico Broadband Program determines, based on audits, reviews, or monitoring of the grant agreement with the subgrantee that any amounts or prior payments made are not allowable under the terms of the grant agreement with the Puerto Rico Broadband Program, any applicable Federal or State Laws, program regulations, public policy, or administrative requirements, the subgrantee's invoice shall be subject to reduction by the Puerto Rico Broadband Program.

Generally, to be eligible for grant disbursements, subgrantees:

- Must comply with post-award monitoring and reporting requirements,
- Are responsible for active technical, financial, and project management of the awarded project, and

- Must cooperate with technical and financial monitoring and review.

Compliance Reporting

Additionally, as part of subgrantee accountability, the Puerto Rico Broadband Program will place semi-annual reporting requirements upon subgrantees upon execution of the grant agreement between a subgrantee and the Puerto Rico Broadband Program. Included among these requirements are the BEAD NOFO's specified subgrantee reporting requirements.⁵⁶ The Puerto Rico Broadband Program will require subgrantees to provide regular reports to ensure that both the Puerto Rico Broadband Program and subgrantees meet all reporting requirements as prescribed in NTIA/Commerce BEAD program guidelines. As with other Federal broadband grant reporting administered by the Puerto Rico Broadband Program to ensure subrecipient accountability, the Puerto Rico Broadband Program shall build reporting forms conforming to BEAD program requirements and provide compliance guidance to subgrantees regarding requirements and methods of submittal to the Puerto Rico Broadband Program. Included in such compliance reporting shall be guidance related to required, regular labor reporting for projects over \$5 million in expected total costs as detailed in the BEAD NOFO. The information that will be required as part of such reporting is included in this Initial Proposal Volume 2, in "Requirement 11. Labor Standards and Protection."

Field Review

The Puerto Rico Broadband Program and its partners will conduct field reviews at various phases of the conduit subgrantee project. This process ensures that the new BEAD-funded constructed network is compliant with construction/engineering standards and meet the Puerto Rico Broadband Program's conduit system requirements and Dig Once policy. This will be accomplished through regular progress meetings with the conduit subgrantee and shall involve the submission by the conduit subgrantee to the Puerto Rico Broadband Program of as-builts documentation, and report of miles completed, addresses passed, and conduit capacity. Further, when projects approach 50% completion, the Puerto Rico Broadband Program's project manager will reconcile invoices with as-builts to confirm project alignment with approved construction plans and spending estimates. **The Puerto Rico Broadband Program's grant administrator will oversee the conduit subgrantee's adherence to the engineered design specifications.** From this point until project close-out, desktop and field reviews will be scheduled between the Puerto Rico Broadband Program and the conduit subgrantee. The desktop and field review process will include an ongoing high-level verification that the design and the actual construction of the conduit network are in compliance with grant requirements and in accordance with industry best practices.

The Puerto Rico Broadband Program's technical reviewers will verify the consistency of the plant observed with the project's scope as defined in the deployment subgrantee's contracting materials with the Puerto Rico Broadband Program and note general quality observations.

In conjunction with the field review described above, the Puerto Rico Broadband Program's field validation team, will prepare a mid-construction field review report which shall include the outputs from the field review, photographs, and identify any discrepancies or issues. Following this, the conduit subgrantee shall have a prescribed period in which to cure or provide proof of

⁵⁶ See BEAD NOFO pgs. 89-92.

corrective actions taken to remedy any discrepancies or issues and provide a revised report to the Puerto Rico Broadband Program for review.

Upon a project's completion, the Puerto Rico Broadband Program will require the conduit subgrantee to submit a closeout package with required documentation for review and approval of the final 10% of the grant retained which the Puerto Rico Broadband Program will release following approval of all closeout documentation and final field reviews. Included in the closeout package documentation shall be all as-built files and any other applicable tests results not already provided by the subgrantee. A field review will be conducted for a sample of the completed network at this point and a field review report (construction complete) shall be prepared by the field team, similar to the field review report (mid-construction) described above. As with the mid-construction field review, the conduit subgrantee shall have a prescribed amount of time to remedy discrepancies or issues identified in the construction complete field review report.

2.16.2 Text Box (cont.): b. The inclusion of clawback provisions (i.e., provisions allowing recoupment of funds previously disbursed) in agreements between the Eligible Entity and any subgrantee

In general, the Puerto Rico Broadband Program will include provisions in its grant agreement with subgrantees stating that the Puerto Rico Broadband Program may deduct amounts or withhold payments invoiced by the subgrantee if the subgrantee fails to comply with any requirements of the grant agreement. Further, the Puerto Rico Broadband Program will have provisions in the agreement stating that funds withheld due to unsatisfactory project performance or failure to comply with the terms and conditions of the grant agreement may be restored upon the subgrantee's satisfactory remedy of the condition that caused the withholding. Lastly, in general the Puerto Rico Broadband Program's practice will be to retain 10% of any grant award until project completion, including approval of all closeout documents and reporting requirements.

The Puerto Rico Broadband Program, in its grant agreements with subgrantees, will reserve the right to disallow costs and recover funds disbursed on the basis of audit or review, even following closeout of the subgrantee's project. Such provisions will specify that subgrantees shall be obligated to return any funds due as a result of later refunds, corrections, or other transactions. Additionally, the Puerto Rico Broadband Program's grant agreements with subgrantees will have provisions relating to subgrantee performance measures, with language stating that subgrantee achievement and compliance with performance measures will be evaluated based upon project plan information submitted with the subgrantee's application. The Puerto Rico Broadband Program's objective is that the project plan and performance measures established be used by the Puerto Rico Broadband Program to evaluate performance under the grant agreement. This will be accomplished during regularly scheduled monitoring visits and reviews by the Puerto Rico Broadband Program and its partners.

In its agreements with subgrantees, the Puerto Rico Broadband Program will further specify that failure by subgrantees to substantially meet performance measures may result in suspension of reimbursement payments, termination of the grant agreement, and/or prohibit the subgrantee from being eligible to submit an application for future allocations until the identified shortcomings are resolved. Included in these provisions the Puerto Rico Broadband Program will

outline the process if a subgrantee fails to comply with its project plan. In this process, the Puerto Rico Broadband Program will provide notice and an opportunity for subgrantees to cure any failures or deficiencies within 30 days or such other reasonable time as may be specified in the notice. If the subgrantee fails to cure during the designated period, the Puerto Rico Broadband Program may avail itself of one or more of the following actions, including but not limited to:

- requiring additional project monitoring to ensure compliance with the subgrantee's project plan,
- requiring the subgrantee to obtain technical or management assistance in order to ensure compliance with the project plan, and
- reducing the program funds to be disbursed under the grant agreement in an amount not to exceed the difference between the full amount of the subgrantee award and the total amount for which the subgrantee has submitted a reimbursement request that is consistent with the progress made in complying with the project plan as of the date of the expiration of the cure period.

Lastly, the Puerto Rico Broadband Program shall communicate to subgrantees that it reserves the right to recapture funds remaining due to cost underruns.

2.16.2 Text Box (cont.): c. Timely subgrantee reporting mandates

As an exhibit to its grant agreement with subgrantees, the Puerto Rico Broadband Program will require a form that complies with the BEAD NOFO's regular financial and performance reporting requirements for subgrantees.⁵⁷ The grant agreement and compliance guidance materials will specify that subgrantees must submit the information in this form on at least a semi-annual basis to the Puerto Rico Broadband Program for the duration of the subgrant. Typically, the Puerto Rico Broadband Program will require the first such submission by subgrantees in the initial quarter the grant agreement is signed. The Puerto Rico Broadband Program will include provisions governing such regular compliance reporting within the grant agreement for subgrantees. In the grant agreement, subgrantees will be required to certify compliance with all applicable reporting and record retention requirements. Requirements may be derived from the following sources:

- Federal and state laws;
- Programmatic regulations;
- Public policy; and/or
- Administrative requirements, such as quarterly project and expenditure reports.

In addition to the periodic reporting requirements, the Puerto Rico Broadband Program will convey any record retention requirements. Per the grant agreement, subgrantees will be required to provide information requested by the Puerto Rico Broadband Program and its partners to fulfill any additional annual performance reporting requirements. In this section of the grant agreement with subgrantees, the Puerto Rico Broadband Program will condition final disbursement payment on subgrantees agreeing to provide the Puerto Rico Broadband Program

⁵⁷ See BEAD NOFO, p. 90-92.

final as-built network documentation in a manner to be approved by the Puerto Rico Broadband Program.

Regarding record retention requirements, the Puerto Rico Broadband Program will prescribe that subgrantees retain financial records, supporting documents, and any other records pertinent to the grant agreement for a period of five years from the submission date of the final expenditure report or payment of final invoice. Extensions to this period may be granted in the event of litigation, claims, or audits beginning prior to end of the five-year period.

Regarding the Puerto Rico Broadband Program's access to records, the Puerto Rico Broadband Program will incorporate provisions into its grant agreements with subgrantees detailing the right of the Puerto Rico Broadband Program and other duly authorized representatives the right of timely and unrestricted access to books, documents, papers, or other records, and reasonable access to past and present personnel for audits, examinations, and the like. Additionally, the Puerto Rico Broadband Program will communicate that the right of access to subgrantee records will last throughout the required retention period or as long as records are retained, if longer.

Regarding closeout, the Puerto Rico Broadband Program will require the subgrantee to submit any final reports as required by the NTIA and the Puerto Rico Broadband Program prior to close out of the subgrantee award. Following the Puerto Rico Broadband Program's receipt of a subgrantee's final project audit, closeout will be conditioned on the Puerto Rico Broadband Program's determination that all monitoring and audit findings have been formally addressed and resolved. The Puerto Rico Broadband Program will require subgrantees to provide any outstanding financial, performance, or other required reports within 90 days after the end date of the period of performance.

2.16.2 Text Box (cont.): d. Robust subgrantee monitoring practices.

The Puerto Rico Broadband Program's robust subgrantee monitoring process for various stages of its programs is outlined above. Through its two-step notice to proceed, budget amendment, initial budget breakdown, and its requirements regarding engineered design submittals, the Puerto Rico Broadband Program will have sufficient protections in place to ensure that all subgrantee projects are monitored throughout the period of performance. In addition, as also detailed above, the Puerto Rico Broadband Program's practices regarding invoice submittals, the grant disbursement request process, regular compliance reporting, testing, and the field review process will ensure that subgrantees comply with BEAD program requirements.

Further, regarding audits and monitoring, the Puerto Rico Broadband Program will require each subgrantee to agree as a condition of its subaward and as part of its grant agreement with the Puerto Rico Broadband Program that it will cooperate with the Puerto Rico Broadband Program, NTIA, and the Department of Commerce with respect to any audit of the Puerto Rico Broadband Program's programs or the award. Additionally, the Puerto Rico Broadband Program will require subgrantees to review, understand, and comply with any applicable Puerto Rico laws regarding audits or accountability of Puerto Rico grant recipients, as applicable.

Documentation regarding the above requirements will be collected and reviewed by qualified Puerto Rico Broadband Program personnel and partners.

The Puerto Rico Broadband Program will communicate the above requirements to all prospective subgrantees prior to the selection process via outreach efforts to stakeholders in the form of webinars, in-person meetings, or guidance posted to the Puerto Rico Broadband Program's website. Additionally, such requirements will be noted in grant application instructions, grant agreement provisions, and compliance guidance to be published to the Puerto Rico Broadband Program website.

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

The Puerto Rico Broadband Program certifies that its selection of subgrantees will account for and satisfy each of the following authorities:

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

The Puerto Rico Broadband Program shall, prior to distributing any BEAD funding to a subgrantee, require all subgrantees to agree, by contract or other binding commitment, to abide by the nondiscrimination 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 Check Box: Certify that the Eligible Entity will ensure subgrantee compliance with the cybersecurity and supply chain risk management requirements on pages 70 - 71 of the BEAD NOFO to require prospective subgrantees to attest that:

Cybersecurity

1) The prospective subgrantee has a cybersecurity risk management plan (the plan) in place that is either: (a) operational, if the prospective subgrantee is providing service prior to the award of the grant; or (b) ready to be operationalized upon providing service, if the prospective subgrantee is not yet providing service prior to the grant award;

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 Puerto Rico Broadband Program prior to the allocation of funds. If the

subgrantee makes any substantive changes to the plan, a new version will be submitted to the Puerto Rico Broadband Program within 30 days.

Supply Chain Risk Management (SCRM)

- 1) The prospective subgrantee has a SCRM plan in place that is either: (a) operational, if the prospective subgrantee is already providing service at the time of the grant; or (b) ready to be operationalized, if the prospective subgrantee is not yet providing service at the time of grant award and
- 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 subgrantee 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 subgrantee's plan to NTIA upon NTIA's request.

The Puerto Rico Broadband Program certifies that it will ensure subgrantee compliance with the above cybersecurity and supply chain risk management requirements, and that the Puerto Rico Broadband Program will require prospective subgrantees to comply with the following measures.

The Puerto Rico Broadband Program shall also, to the extent a BEAD subgrantee relies in whole or in part on network facilities owned or operated by a third party (e.g., purchases wholesale carriage on such facilities), require such subgrantees to obtain the below attestations from its network provider with respect to cybersecurity practices and supply chain risk management practices.

- 1) The prospective subgrantee has a SCRM plan in place that is either:
 - (a) operational, if the prospective subgrantee is already providing service at the time of the grant or
 - (b) ready to be operationalized, if the prospective subgrantee is not yet providing service at the time of grant award;
- 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 Puerto Rico Broadband Program prior to the allocation of funds. If the subgrantee 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 subgrantee's plan to NTIA upon NTIA's request.

The Puerto Rico Broadband Program does not plan to impose any additional cybersecurity or supply chain risk management requirements on subgrantees.

Req. 20. Middle Class Affordability Plans

2.13.1 Text Box: 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.

Puerto Rico Broadband Program

In the Five-Year Action Plan, the Puerto Rico Broadband Program identified objectives in four key pillars of connectivity, quality, accessibility, and knowledge that have informed development of the proposed conduit system, which will provide high-quality services at reasonable prices for residents.⁵⁸ Objectives in the Five-Year Action Plan relevant for the conduit system include:

- Resilient fiber optic cable along key routes, available for multiple uses
- Easily scalable network to meet the evolving connectivity needs of households and businesses
- Mechanisms for the participation of small and medium enterprises; and
- Service affordability measures integrated into infrastructure planning.

Though the Puerto Rico Broadband Program will not directly fund last-mile deployment through BEAD, the BEAD-funded open access conduit network will facilitate high-quality broadband services for all middle-class families in Puerto Rico, as the conduit system will lower the cost of deployment and increase competition amongst providers, ultimately lowering the cost of service for residents. The inclusion of small and medium enterprises through conduit lease agreements will support long-term middle-class affordability in Puerto Rico, as lowered capital costs and less access barriers allow a more competitive service price environment. The Puerto Rico Broadband will continue to develop infrastructure with other funding sources that also address these affordability objectives.

⁵⁸ See Puerto Rico's Five-Year Action Plan for a complete list of goals and objectives.

Volume 2 Public Comment

2.17.1 Text Box: 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 by the Eligible Entity. The response must demonstrate:

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

As with the Initial Proposal Volume 1, the Puerto Rico Broadband Program will post this Initial Proposal Volume 2 draft document for a 30-day public comment period. Residents are invited to share their thoughts on specific sections of this document through the online web portal, by email to info@smartisland.pr.gov, and through meetings hosted by the Puerto Rico Broadband Program. Prior to submission to NTIA, the Puerto Rico Broadband Program will incorporate relevant changes and provide a report on local coordination during the comment period, a summary of comments received, and the impact on the submitted proposals.

The public comment period will be advertised on social media, email newsletter, and through press release by the Puerto Rico Broadband Program. During the public comment period, the Puerto Rico Broadband Program will host at least one public hearing discussing major funding initiatives, subgrantee selection, and other key elements of this Initial Proposal Volume 2. All Puerto Ricans, including representatives of local community organizations, worker groups, and underrepresented individuals, are encouraged to participate.

Residents may submit comments to the Puerto Rico Broadband Program by:

1. Online comment form,
2. Mail to: Puerto Rico OMB Cruz Street #254 Viejo San Juan, San Juan, PR 00901-1610
3. Discussion during a listening session.

In addition to receiving public comments, the Puerto Rico Broadband Program continues to seek ongoing feedback from state agencies, workforce groups, and community organizations through the Broadband Executive Committee, the Broadband Advisory Council, and the Digital Equity Advisory Subcommittee. For more information on regular convenings with stakeholders, see Requirement 4. For a complete list of outreach and engagement activities conducted by the Puerto Rico Broadband Program, see the Local Coordination Tracker.

Appendix A: Conduit System Subgrantee Selection Rubric

Minimal BEAD Program Outlay	60 max points
<p>The total BEAD funding required to complete the project, accounting for the total projected cost and the prospective subgrantee's proposed. The selection process would involve carefully assessing proposed budgets, ensuring they align with industry standards while maintaining a commitment to quality and durability. Entities capable of offering competitive costs without compromising the integrity of the buried conduit system would score higher, as this reflects financial acumen and positions them as valuable contributors to the economic feasibility and success of the telecommunications infrastructure project.</p> <p>60 Points – 1 point per percentage point increase in the total miles of buried conduit to be constructed for the grant funding offered, compared to the milage estimated to be constructable at that grant cost calculated in the design budget.</p>	
Affordability	60 max points
<p>Affordability requirements for utilizing the open conduit and fiber network system are integral to ensuring accessibility and inclusive service provision. Telecom carriers commit to offering affordable services to end-users, particularly in underserved or economically disadvantaged areas. The prospective entity must outline conduit pricing structures that promote widespread affordable access, mitigate digital divides, and enhance connectivity for the benefit of all residents.</p> <p>60 Points – A benchmark assessment of the market and competitive landscape and suggested pricing models for access to the conduit system will be included in the solicitation. Bidders will be assigned points in this category based on the following criteria: 0 points for coming in at the Benchmark Rate or higher. 20 Points for a 5% discount, 40 Points for a 10% discount, and 60 Points for a 15% discount. The “benchmark” rate will be set at a level to encourage proposals that are below current available commercial rates for similar services.</p>	
Experience	50 max points
<p>The prospective subgrantee should provide evidence of a successful track record in planning, deploying, and managing buried conduit systems for telecommunications infrastructure. This should include proof of completing projects of similar scale and technical complexity while adhering to industry standards.</p> <p>35 Points – Must include at least three (3) examples of specific experience and indicate proven ability to implement similar projects for the firm and the individuals involved in the projects. 15 Points – A summary of related projects with the original deadline and cost estimate versus the actual completion date and final variance cost of the project.</p>	

Open Access**50 max points**

The open access model prevents a single entity from monopolizing the conduit, creating a level playing field and fostering a dynamic market environment. By allowing multiple competitors to share the same infrastructure, the buried conduit project aims to maximize efficiency, minimize redundancy, and deliver diverse, high-quality telecommunication services to the community.

10 Points – Have at least one letter of intent from a potential conduit system user not affiliated with the applicant.

20 Points – Have a second letter of intent from a potential conduit system user not affiliated with the applicant.

20 Points – Have a third letter of intent from a potential conduit system user not affiliated with the applicant AND letters of intent from non-affiliated users covering at least 90% of the proposed system mileage.

Speed to Deployment**40 max points**

The promptness of project implementation is a crucial factor in selecting a subgrantee for the buried conduit system project. The selection criteria will prioritize candidates who can efficiently and promptly execute the project without compromising on quality or safety. Factors such as a well-defined project timeline, proactive problem-solving approaches, and streamlined construction processes are evaluated to assess an entity's ability to expedite the deployment of the buried conduit system. A non-performance penalty for not achieving the commitment may be levied up to 5% of the grant cost.

20 Points – 20 Points for achieving 30 percent completion within 18 months of award.

20 Points – 20 Points for achieving 75 percent completion within 36 months of award.

Local Coordination**40 max points**

Prospective subgrantees must possess a strong understanding and dedication to collaborating with local stakeholders. This scored criterion seeks entities that effectively communicate and cooperate with municipal authorities, utility providers, and community representatives to navigate local permitting processes, zoning regulations, and unique challenges specific to the project's location. The applicant will submit a strategic plan for building positive relationships with local entities, ensuring a seamless integration of the buried conduit system into the existing infrastructure while addressing any concerns or preferences of the community.

15 Points – Project plan must include how the entity will achieve a comprehensive community engagement, regular public consultations, and proactive measures to address and incorporate community feedback.

15 Points – Project plan must include how the entity will achieve extensive collaboration with local government bodies, municipal authorities, and relevant agencies.

10 Points – Plan must include projected effectiveness of measures to be taken to mitigate the environmental impact of construction activities, considering factors like soil erosion, vegetation preservation, and waste management.

Fair Labor Practices**40 max points**

The criteria will evaluate candidates based on their demonstrable adherence to ethical employment standards, which ensure the welfare and equitable treatment of workers involved in the project. This encompasses compliance with pertinent labor laws, adherence to health and safety regulations, and a dedication to providing just compensation and benefits.

40 Points – For bidders with a proven Fair Labor Practice compliance track record.

30 Points – For bidders that supply a robust implementation plan for Fair Labor Practices. Points are determined based on the strength of the plan.

Workforce Development and Job Quality**30 max points**

Equitable workforce development and job quality are essential selection criteria for deploying a buried conduit system project, emphasizing the prospective entity's commitment to creating positive socio-economic impacts. Applicants will be assessed by their willingness to advance the workforce initiatives described in Requirement 12.

Applicant will support the Puerto Rico Broadband Program's workforce plans and align with the requirements described in the BEAD Notice of Funding Opportunity (Section IV.C.1.f) to use a highly skilled workforce capable of carrying out work in a **manner that is safe and effective..** Specifically, the applicant will commit to:

10 Points – Supporting workforce development through engagement with the Puerto Rico Broadband Program's workforce initiatives. Agreed upon workforce development initiative which will include employing Registered Apprentices, engaging with short-term credential programs and other training opportunities.

10 Points – Leveraging equitable on-ramps into deployment, construction and maintenance jobs, advancing job quality for new and incumbent workers; and engaging with labor organizations and community-based organizations to maintain worker voice throughout the planning and implementation process.

5 Points – Participating in sector-based partnerships with 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., childcare, transportation, mentorship), to attract, train, retain, or transition to meet local workforce needs and increase high-quality job opportunities.

5 Points – Ensuring that the job opportunities created by the Puerto Rico Broadband Program are available to a diverse pool of workers.

Other Technical Capabilities**30 max points**

The prospective entity must demonstrate proficiency in advanced engineering and construction techniques for buried conduit systems.

15 Points – Applicant must present documentation that reflects a deep understanding of soil conditions, environmental considerations, and the optimal deployment of fiber optic cables—

expertise in trenching, boring, and backfilling techniques and utilizing cutting-edge technology for surveying and installation purposes.

15 Points – Applicant’s capacity to integrate smart infrastructure components, such as sensors and monitoring systems, may also be considered to enhance maintenance and ensure long-term system resilience.