



Pennsylvania
Broadband Development Authority

Broadband Equity, Access, and Deployment FINAL PROPOSAL



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





Pennsylvania
Broadband Development Authority

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Final Proposal Overview

The Pennsylvania Broadband Development Authority (PBDA) operates through the Pennsylvania Department of Community Economic Development (DCED) and will administer the Broadband Equity, Access, and Deployment (BEAD) program by adhering to the requirements outlined by the National Telecommunications and Information Administration (NTIA). PBDA has determined, through its Benefit of the Bargain application round, that all eligible locations within Pennsylvania can be served at a cost of \$790,729,316 resulting in a savings of \$350 million. PBDA recognizes that NTIA may provide future opportunities for states to respond to non-deployment guidance with complementary initiatives. PBDA looks forward to the possibility of pursuing such opportunities to support projects and programs that are innovative and beneficial to all Pennsylvanians by extending the long-term impact of broadband infrastructure investments in the Commonwealth.

The provisionally selected projects include a diverse mix of technologies with 65% of eligible locations receiving fiber, 4% hybrid-fiber coaxial, 13% fixed wireless, and 18% low-Earth orbit satellite. Comments were received by PBDA through an online form. The public had seven days to submit comments beginning on August 22, 2025, through August 29, 2025.

Data Submission

For the following data, please refer to PBDA's [BEAD webpage](#):

Attachment 0.1: Subgrantees ([subgrantees.csv](#))

Attachment 0.2: Deployment Projects ([deployment_projects.csv](#))

Attachment 0.3: Locations ([locations.csv](#))

Attachment 0.4: No BEAD Locations ([no_BEAD_locations.csv](#))

Question 0.5 (Y/N): If PBDA intends to use BEAD funds to serve CAIs, does PBDA certify that it ensures coverage of broadband service to all unserved and underserved locations, as identified in the NTIA-approved final list of eligible locations and required under 47 U.S.C. § 1702(h)(2)?

Yes.

Attachment 0.6: CAIs ([cais.csv](#))

Requirement 1: Subgrantee Selection Process Outcomes

1.1 Describe how PBDA's deployment subgrantee selection process undertaken is consistent with that approved by NTIA in Volume II of the Initial Proposal as modified by the BEAD Restructuring Policy Notice.

PBDA's process for BEAD subgrantee selection was consistent with the procedures outlined in its approved Initial Proposal, which were modified in accordance with NTIA's BEAD Restructuring Policy Notice from June 6, 2025. PBDA conducted its Round One application process from November 22, 2024, through February 7, 2025, for a total of 77 days and received 239 project applications from 26 applicants. Eligible entities interested in participating in BEAD were asked to submit an application that detailed their capacity, project plans, and financial abilities to complete the project.

As a result of NTIA's updated guidance, PBDA did not offer a preliminary award to any applicants following Round One. All scoring from Round One was voided and applicants were given the opportunity to re-apply in Round Two, PBDA's Benefit of the Bargain Round.

In accordance with its approved Initial Proposal and updated guidance from the BEAD Restructuring Policy Notice, PBDA conducted a competitive Round Two grant application process that objectively evaluated measures to ensure applications were complete and met all program requirements. Applicants that participated in Round One were given three options for how to proceed, which were outlined in detail in BEAD Program Guidelines:

- First, Round One applicants could submit updated applications in Round Two to align their application(s) with new policy and scoring criteria (this option was recommended). Applicants from Round One were not required to submit updated applications in Round Two.
- The second option PBDA offered to Round One applicants was to allow them to stand on their Round One applications as submitted. However, if an applicant did not submit an updated application(s) for Round Two, its Round One application(s) would be evaluated based on Round Two scoring criteria.
- Third, Round One applicants were offered the option of withdrawing their application(s) submitted in Round One.

This process provided an equal opportunity to participate in Round Two and ensured that all applications reviewed by PBDA were compliant with NTIA's BEAD Restructuring Policy Notice.

PBDA approached its second-round application process as neutral to all technologies, including fiber-optic, cable modem, hybrid fiber-coaxial, Low Earth Orbit (LEO) satellite services, terrestrial fixed wireless technology using entirely licensed spectrum, entirely unlicensed spectrum, and a hybrid of licensed and unlicensed spectrum. PBDA's primary scoring criteria evaluated applications based on minimal BEAD outlay. Secondary scoring criteria was applied to overlapping applications where relevant (refer to Requirement 13.1 in this document for more detail on how scoring criteria was applied).

1.2 Describe the steps that PBDA took to ensure a fair, open, and competitive process, including processes in place to ensure training, qualifications, and objectiveness of reviewers.

After the BEAD Restructuring Policy Notice was released by NTIA on June 6, 2025, PBDA began outreach to inform all eligible entities of updated policies, procedures, and instructions for applying in Round Two. PBDA's fair, open, and competitive process for Round Two included the following:

- Following NTIA's June 6, 2025, BEAD Restructuring Policy Notice, PBDA sent an email announcement to its stakeholders, including eligible applicants, to announce the updates and to communicate that additional information would be available as it was being developed (PBDA's email distribution list reaches nearly 4,500 contacts that include local government entities, non-profit and non-governmental organizations, internet service providers, and other stakeholders). On June 13, this [communication](#) was posted on PBDA's website.
- PBDA posted a policy notice for [Unlicensed Fixed Wireless \(ULFW\) and BEAD Location Eligibility](#), which included updated guidance and instruction specifically related to ULFW. The notice outlines that ULFW would have the opportunity to demonstrate that BEAD funding is not required for specific locations already served by ULFW, thus preventing overbuild, and provided instructions for how to submit the required evidence.
- PBDA posted its [Round Two Scoring Criteria](#), updated based on requirements included in the BEAD Restructuring Policy Notice, on its public website on June 18, 2025 (it was updated for clarity on July 17, 2025). On both dates, PBDA announced the availability of updated scoring criteria by emailing its stakeholder distribution list. A separate email was sent specifically to entities that applied during Round One, which explained options for updating applications to align with new policy and scoring requirements.
- Scoring criteria, application procedures, and a description of the application process are also included in detail in [PBDA's BEAD Program Guidelines](#), which were made available to the public on July 18, 2025.
- An email was sent via the distribution list on June 27, 2025, that announced a tentative timeline for Round Two of the BEAD program. The timeline was also made available on [PBDA's website](#) on this date.
- PBDA made its ["Frequently Asked Questions \(FAQs\)" webpage](#) available on July 8, 2025, along with a revised list of BEAD Eligible Locations, an [overview of BEAD Program changes](#), and the above-mentioned update to Round Two scoring criteria.
- PBDA's Board of Directors approved its BEAD Program Guidelines for Round Two in a public meeting on July 17, 2025. BEAD Program Guidelines explain an overview of the program, specify eligible applicants, detail scoring criteria, the program timeline, and other program requirements. PBDA posted the guidelines document to its website and announced the opening of Round Two (its Benefit of the Bargain round) starting on July 18, 2025, through August 1, 2025. No application extensions were considered or issued.
- In all emails and on its website, PBDA encouraged prospective applicants and other stakeholders to reach out to PBDA directly via its BEAD Resource Account (ra-dcpba_bead@pa.gov).
- Throughout the BEAD planning process, PBDA frequently connected with broadband offices from other states to compare strategies and discuss best practices, including development of the Priority Broadband Project methodology. This process proved to be a valuable strategy in drafting various aspects of this Final Proposal.

Immediately following the BEAD Round Two application closure on August 1, 2025, PBDA commenced its review and scoring process of the 172 new applications it received through Round Two, the 21 applications from Round One that were re-evaluated based on revised scoring, for a total of 193 applications from 30 applicants.

The review team consisted of PBDA staff and consultants from Michael Baker International (MBI), a firm contracted through PBDA and PA DCED's procurement process. All reviewers were qualified and objective in their analyses. These reviewers were categorized into various teams, including a

data team, a technical team, a compliance team, a financial team, and a decision team. Each included the following:

- The **Data Team** was responsible for incorporating application data into a deconfliction and scoring tool (developed by PBDA and MBI), merging applicant BSA/BSL/CAI data, map applicant project data, and developing and presenting reports from the deconfliction and scoring tool. Made up of the following professionals:
 - PBDA's Broadband Technical Specialist
 - MBI's Data and Geographic Information Systems (GIS) Administrator
 - DCED's Economic Development Consultant for Strategic Information Services
- The **Technical Review Team** determined which applications qualified as priority broadband projects. Throughout the review process, it reviewed submitted network designs, cost estimates, and other broadband network-related information. This team also used a rubric to evaluate managerial capabilities. Following the team's review, it created a Technical Memo to document the review and assign a technical grade to applications. The team included subject matter experts from MBI, including the following:
 - The president of PrimeLime (a subconsultant to MBI)
 - MBI's Vice President and Executive for National Broadband Practice
 - PBDA's Infrastructure Director
- The **Financial Review Team** reviewed applications and analyzed proforma and financial statements using a Financial Memo template developed by MBI. The team also prepared a memo to document its review and assign a financial grade to applications. Subject matter experts on the Financial Review Team included:
 - MBI's strategy and performance consultant
 - A CPA from GrantWorks (a subconsultant to MBI)
- The **Compliance Review Team** consisted of PBDA staff. The team reviewed uploaded affidavits to ensure compliance with the instructions in BEAD Program Guidelines, and ensured compliance-related application questions were completed using an Intake Checklist developed by MBI.
- Finally, the **Decision Team**, comprised of PBDA staff reviewed all application data, analyzed proposed locations and project areas, and made provisional award recommendations based on processes outlined in the Initial Proposal, updated with the BEAD Restructuring Policy Notice, aligned with PBDA's methodology for determining a priority broadband project, and scored using its Round Two scoring criteria. Members of the decision team included the following PBDA staff:
 - Executive Director
 - Deputy Executive Director
 - Infrastructure Director
 - Director of Digital Community Investment

The Review Teams listed above engaged in the following procedures to deconflict proposed projects and selection provisional awards:

- Deconfliction began through review of several factors that determined whether a proposed project included all BEAD qualifications. When PBDA reviewed applications, those applying with less than 25% of matching funds were flagged.

- Applicants that proposed fewer than 95% of Broadband Serviceable Locations (BSLs) and Community Anchor Institutions (CAIs) within a Broadband Serviceable Area (BSA) were also flagged.
- Next, reviewers evaluated the applicants' technical, financial, and operational capabilities using a rubric created by PBDA and MBI. Please see Requirement 1.2 for information about these processes. Reviewers confirmed that all applicants completed their application following the instructions provided by PBDA, that they completed required sections of the application, and that they attached the required forms and affidavits with their submission. PBDA conducted curing as appropriate.
- The teams determined whether the proposed projects met the definition of a Priority Broadband Project (PBP) for the BSAs they bid (please see Requirement 12 for details of PBDA's methodology for determining PBPs). Non-priority broadband projects were considered within BSAs where there were no PBPs.
- Scoring was based on an applicant's requested BEAD subsidy, divided by the number of BSLs and CAIs proposed to be served by the project. The team then applied the subsidy per BSL and CAI to each BSA within the project. This determined Minimal BEAD Outlay. Minimal BEAD outlay is defined as the total amount of BEAD funding requested for the project divided by the total number of locations the project proposed to serve. Where there were competing applications and subsidy requests within 15%, secondary scoring criteria were applied, as set forth below, to determine the provisionally selected applicant.

Additional steps in the review and deconfliction process included the following:

- During PBDA's Benefit of the Bargain round, it received applications where providers bid nominal subsidy amounts, including zero-dollar bids, for specific BSAs. In some cases, these bids were provisionally selected. However, PBDA did not evaluate BSAs in isolation but rather at the project level, consistent with its scoring methodology.
- The driving factor in PBDA's subgrantee selection was the lowest overall cost to the BEAD program. As a result, nominal BEAD subsidy request for a single BSA did not always guarantee selection if that BSA was included in a larger project with overall minimal BEAD outlay that was higher than a competing project, which included the same BSA at a lower per-location cost. In those cases, PBDA selected the project configuration that delivered the greatest benefit to the program in terms of cost efficiency and the number of locations served.
- This approach ensured that the program's limited federal resources were allocated in the most cost-effective manner possible, prioritizing projects that maximized the number of unserved and underserved Pennsylvanians reached at the lowest subsidy per location, rather than awarding BSAs on a piecemeal basis that could have increased program costs.
- PBDA applied its Priority Broadband Project (PBP) criteria to all 1,303 BSAs to determine Priority Broadband Projects and Non-Priority Broadband Projects.
- Based on the costs submitted by all applicants, PBDA determined an excessive cost threshold of \$19,500 and required that the Minimal BEAD Outlay for a BSA needed to be at

or below the threshold in order to be considered for provisional selection. This excessive cost threshold was established after analyzing cost-per-location distributions across all applications and identifying the point at which investment yielded diminishing returns in terms of the number of unserved or underserved locations reached. The \$19,500 threshold balances the BEAD program's objective of maximizing the number of locations served with available funding against the need to ensure fiscal responsibility in deploying limited public resources. If a BSL in a BSA within a proposed project exceeded this threshold, it was "trimmed" from the proposed project area and awarded to the next highest-scoring priority broadband project, as applicable. If no other Priority Broadband Project applied in a trimmed BSA, the BSA was awarded to the lowest-cost non-priority applicant.

- Following the processes outlined above, PBDA notified all priority broadband applicants with the lowest Minimal BEAD Outlay for the BSAs that were being considered further. In BSAs where no priority broadband project existed or any additional priority project(s) exceeded the excessive threshold, PBDA notified the non-priority applicant with the lowest minimal BEAD outlay that they were being considered further. Applicants were given two business days to accept or reject the BSA(s). If an applicant rejected, those BSAs were offered to the priority broadband applicant with the second ranked Minimal BEAD Outlay for the given BSAs, followed by applications that did not meet the PBP standard.

PBDA stands on several internal policies within the Commonwealth of Pennsylvania to prevent collusion in the review process. Largely, PBDA is governed by the Pennsylvania Procurement Code. This is further interpreted by the Department of General Services' Procurement Handbook, in addition to various management directives covering various procurement and related instructions. Relevant management directives include, but are not limited to, the following:

- Identification of Boards, Commissions, Councils, Advisory Committees, and Authorities
- Contract Compliance
- Contract Processes
- Continuity of Operations (COOP) Program
- Accounting, Reporting, and Cash Management of Federal Grants and Contracts
- Grant Administration
- Processing Subrecipient Single Audits of Federal Pass-Through Funds
- Records Management

To prevent any conflict of interest, PBDA staff with close involvement to any subgrant applicant or awardee were required to recuse themselves from any matters related to the grant (including grant evaluation, scoring, compliance, monitoring, and reimbursement). All PBDA staff are subject to the Pennsylvania Public Official and Employee Ethics Act 65 Pa.C.S. § 1101 et seq. ("Ethics Act"). Section 1103(f) of the Ethics Act prohibits a PBDA employee or his/her spouse, child, or any business the official/employee, spouse or child is associated with, from entering into a contract (or sub-contract) valued at \$500 or more with PBDA unless the contract has been awarded through an open and public process. Before formal review began, PBDA's executive director conferred with PBDA staff and consultants, and assessed that none had close involvement with BEAD applicants.

1.3 Affirm that, when no application was initially received, PBDA followed a procedure consistent with the process approved in the Initial Proposal.

Within its Initial Proposal, for areas where no applications were received, PBDA established its right to identify gaps as project areas, and to allocate funds accordingly. Through its Round Two application process, PBDA maintained consistency with this statement. Only six locations received

no bids. Those locations have been reassigned to the adjacent lowest cost bidder. This resulted in no location going unserved.

1.4 If applicable, describe PBDA's methodology for revising its eligible CAI list to conform with Section 4 of the BEAD Restructuring Policy Notice.

When NTIA released its BEAD Restructuring Policy Notice on June 6, 2025, PBDA revised its definition of a Community Anchor Institution (CAI) to align with the updated federal guidance.

The approved definition included in Volume I of PBDA's Initial Proposal listed a CAI as an entity that facilitates publicly accessible internet service to vulnerable populations, including NTIA-defined covered populations, and those that lack access to gigabit-level broadband service. In Volume I, PBDA added institutions that provide consistent access to broadband service that is available to the public during set hours, and without access limitations such as membership, fees/dues, security measures, and/or other barriers to use. In accordance with the BEAD Restructuring Policy Notice, PBDA adjusted its definition of a CAI to the IIJA statutory definition of an entity such as a school, library, health clinic, health center, hospital or other medical provider, public safety entity, institution of higher education, public housing organization, or community support organization that facilitates greater use of broadband service by vulnerable populations, including, but not limited to, low-income individuals, unemployed individuals, children, the incarcerated, and aged individuals. Additional criteria for community support organizations includes the requirement that they are housed in government-owned buildings.

This resulted in the removal of 1,251 CAIs from PBDA's CAI list. The total number of CAIs after revision is 3,775.

1.5 (Y/N) Certify that PBDA will retain all subgrantee records in accordance with 2 C.F.R. 200.334 at all times, including retaining subgrantee records for a period of at least 3 years from the date of submission of the subgrant's final expenditure report. This should include all subgrantee network designs, diagrams, project costs, build-out timelines and milestones for project implementation, and capital investment schedules submitted as a part of the application process.

Yes.

Requirement 3: Timeline for Implementation

3.1 Has PBDA taken measures to:

(a) ensure that each subgrantee will begin providing services to each customer that desires broadband service within the project area not later than four years after the date on which the subgrantee receives the subgrant;

PBDA's BEAD application required that applicants provide a Project Gantt Chart to demonstrate an applicant's timeline and list of project milestones. During the application review process, PBDA's application compliance reviewers evaluated timelines to confirm that the applicant commits to deployment within four years.

Applicants selected to receive a BEAD award will be required through the BEAD subgrantee agreement to adhere to a four-year maximum deployment period. The agreement states that all projects funded by BEAD must reach substantial project completion no later than four years after the date on which the subgrantee receives the award, which commences the date of the Contract Period of Performance.

Through the monitoring process outlined in Requirement Four of this document, PBDA staff will evaluate a subgrantee's risk of defaulting on their proposed timeline, and whether they remain on track to provide broadband service within four years after project implementation. If PBDA determines that a project will face challenges in this regard, it will apply special award conditions to ensure that the subgrantee considers the implications of maintaining compliance with PBDA and NTIA policies.

(b) ensures that all BEAD subgrant activities are completed at least 120 days prior to the end of PBDA's period of performance, in accordance with 2 C.F.R. 200.344; and

PBDA confirms that all of its BEAD subgrant activities will be completed at least 120 days prior to the end of PBDA's period of performance, in accordance with 2 C.F.R. 200.344.

(c) ensure that all programmatic BEAD grant activities undertaken by PBDA are completed by the end of the period of performance for its award, in accordance with 2 C.F.R. 200.344.

PBDA confirms that it will complete all of its federal BEAD grant activities by the end of the period of performance for the award.

Requirement 4: Oversight and Accountability Processes

4.1 (Y/N): Does PBDA have a public waste, fraud, and abuse hotline, and a plan to publicize the contact information for this hotline?

Yes.

4.2 Attachments: Upload the following two required documents:

(1) BEAD program monitoring plan;

(2) Agency policy documentation which includes the following practices:

Distribution of funding to subgrantees for, at a minimum, all deployment projects on a reimbursable basis (which would allow PBDA to withhold funds if the subgrantee fails to take the actions the funds are meant to subsidize) or on a basis determined by the terms and conditions of a fixed amount subaward agreement; and b. Timely subgrantee (to PBDA) reporting mandates.

RISK ASSESSMENT & MONITORING PLAN

1. Overview

The Risk Assessment & Monitoring Plan (“Plan”) allows PBDA to provide support and technical assistance for subgrant performance and financial compliance, in accordance with 2 CFR § -200.303. The Plan’s purpose is to prevent subgrantees from falling into a non-compliance status or defaulting on their award. The Plan will aid PBDA in avoiding potential fraud, waste, and abuse of federal taxpayer dollars. For purposes of this Plan, the four-year deployment period applies to all subgrantees, The Plan applies to LEOs throughout that four-year deployment period and an additional 10-year Extended Period of Performance. See, Appendix C of the [BEAD Restructuring Policy Notice](#).

It is important to note that PBDA conducted a high level of risk assessment through application review, during which subject matter experts analyzed applicants’ capabilities and qualifications with scrutiny to determine if a proposed project was worthy of being selected for BEAD.

2. Outreach and Technical Assistance

Throughout the period of performance for all BEAD subgrants, PBDA will offer technical assistance to subgrantees, when requested and where appropriate, to include ongoing verbal and written communication, formal trainings, and other updates and guidance.

PBDA’s goal is to provide subgrantee outreach and technical assistance to:

- Ensure subgrantees clearly understand their compliance responsibilities;
- Establish clear communications protocols between subgrantees and PBDA;
- Provide subgrantees with the timeline, tools, and training necessary to successfully manage federal grant funds; and
- Maintain project data accuracy, information simplicity, and accessibility.

3. Subgrantee Risk Assessments

As awards are being contracted, PBDA will assess each subgrantee's risk of noncompliance with the standards outlined in the Subgrantee Agreement (contract), the BEAD Program Guidelines, the BEAD NOFO, the BEAD Restructuring Policy Notice, and other federal and state statutes and regulations. Identifying risks as early as possible facilitates deployment, maximizes the efficient and responsible use of grant funds, and promotes compliance with the BEAD program requirements.

To ensure each subgrantee and subgrantee project are consistently assessed for risk, PBDA will construct an internal plan of action for executing the monitoring plan.

Based on the level of risk determined through this process, PBDA will develop a customized written monitoring plan that will include Special Award Conditions (SACs), which in turn will be included in some subgrant agreements. These SACs will be assigned and communicated during the project's kick-off meeting at the commencement of the award.

To determine the appropriate level of subgrantee monitoring, subgrantees and each subgrantee project will be evaluated and monitored based on the following categories:

- **Financial**, to include criteria such as:
 - Amount of the subgrant award;
 - Consistent reimbursement and budget protocols;
 - Adherence to pre-determined project budget; and
 - Financial risk identified during application review.
- **Operational**, to include criteria such as:
 - A subgrantee's level of grant management experience;
 - Level of experience managing broadband deployment in Pennsylvania;
 - Changes in management or construction personnel; and
 - Timely submission of required reporting.
- **Construction**, to include criteria such as:
 - Federal, state, and local permitting;
 - Adherence to pre-determined project schedules;
 - Successful on-sight inspections to verify compliance with approved project design and workplace safety; and
 - Reported issues impacting the construction schedule, such as supply chain, land acquisition, permitting, and cybersecurity breaches.

PBDA will assign a score and weighting for each criterion associated with the risk category listed above. Each subgrantee project will be assigned a level of risk: Low-Risk, Medium-Risk, or High-Risk. PBDA will reevaluate risk level monthly throughout the deployment period. Where appropriate, PBDA will adjust a subgrantee's risk level based on the before-mentioned criteria. PBDA will develop a risk assessment report, to be updated as the risk levels change, along with a corresponding risk assessment matrix to document the level of risk per by the categories outlined above.

4. Ongoing Assessment of Risks throughout the Period of Performance

Throughout the deployment period of the project (or four years from the date that the subgrant agreement is executed), PBDA will continue to monitor projects for risks. Monitoring

will include frequent communication between PBDA and the subgrantee, both formally during the reporting process or reimbursement processing, and informally in between scheduled reports. Subgrantees deemed to be at a higher level of risk may receive additional technical assistance, with a goal of ensuring they meet project goals and remain in compliance with all BEAD program requirements.

Various factors could trigger a project's risk level to elevate, including, but not limited to:

- The subgrantee's failure to reach a required milestone;
- A failure to submit a report on time and/or comply with reporting requirements;
- A failure to submit requested documentation;
- Frequent requests for budget modifications;
- Financial audit findings;
- Frequent management and/or personnel turnover; or
- Other violations of the terms and conditions included in the BEAD Program Guidelines or executed subgrantee agreement.

Third-party risks will be considered as deemed appropriate or necessary. PBDA aims to identify any third-party risk up front but will monitor any such risks that might arise throughout the deployment period. If PBDA or a subgrantee anticipates a delay or setback due to a third-party risk, PBDA will request supporting documentation and other details in writing. Third party risks could fall into any of the following categories:

- Political
- Financial
- Supply chain
- Workforce
- Cybersecurity
- Force majeure events

5. Standard Monitoring Schedule

All subgrants will be monitored during the deployment period using the following standard monitoring schedule:

- Year One: Standard Reporting, SACs, Desk Reviews
- Year Two: Standard Reporting, SACs, Desk Reviews, Site Visits, additional auditing (where necessary)
- Year Three: Reporting, SACs, Desk Reviews, Site Visits, additional auditing (where necessary)
- Year Four: Reporting, SACs, Desk Reviews, Site Visits, Final Report

Additional monitoring activities may be required for subgrantee projects considered Medium- or High-Risk.

6. Record Keeping

As required by 2 CPF § 200.334 and NTIA guidance, PBDA will maintain records of all BEAD monitoring and compliance activities, to be made available upon request from NTIA. Records will be maintained for a minimum of five years following the completion of the BEAD subgrant. Record keeping includes, but is not limited to, the following:

- Results of risk assessments
- Monitoring schedules
- Notification letters
- Reports from site visits
- Financial records
- Invoices and reimbursement records
- Project data
- Emails and other communications with subgrantees
- Other applicable technical assistance documentation

7. Corrective Actions

If PBDA determines that a subgrantee has either failed compliance requirements or that they present activities that increase risk, PBDA will immediately engage with the subgrantee and provide technical assistance and/or require corrective action(s) to ensure that subgrantees reverse course. Examples of corrective actions include, but are not limited to the following:

- Additional desk reviews
- Performance improvement plans
- Withholding of reimbursement payments and other measures authorized under the agreement with the subgrantee
- Termination and clawback of the grant award

8. Reimbursements

PBDA's BEAD subgrant is a fixed amount subaward pursuant to the fixed amount subaward structure detailed in NTIA's Uniform Guidance Policy Notice. BEAD subgrantees may request reimbursement for eligible project costs actually incurred but must provide an itemized financial breakdown that details the subgrant's federal share, matching funds, and third-party contributions. Through its Subgrantee Agreement, PBDA will require subgrantees to comply with NTIA's guidance and exceptions.

Subgrantees will comply with the activities committed to in their BEAD application and subgrantee agreement for payment and fiscal responsibilities and incremental reimbursements of actual, documented costs upon completion of milestones.

With each payment request submitted to PBDA, subgrantees must sign a payment request form certifying that expenses were incurred in accordance with the scope of work approved by PBDA.

Subgrantees will be required to submit a request for reimbursement to PBDA, along with invoices and other supporting evidence as requested by PBDA or for processing through the Commonwealth of Pennsylvania. The request must be submitted at the end of each month along with evidence milestone achievement. Subgrantees must follow the processes and requirements in they committed to in their BEAD application and the subgrantee agreement.

- **For all BEAD subgrants except LEO capacity subgrants:**

PBDA will operate the BEAD program as a fixed amount subaward and will require submission of evidence of costs for incremental reimbursements of actual, documented costs demonstrating a subgrantee's compliance with performance milestones. Funds will be distributed through a reimbursement and milestone-based process. Subgrantees must

satisfy each performance milestone and fully document reimbursement requests to the satisfaction of PBDA.

- **For all BEAD grants, including LEO capacity grants:**
 - a. Subgrantees must agree that they possess sufficient financial resources to cover project costs.
 - b. PBDA will hold 10% of the award amount in reserve, to be released upon project completion and PBDA's acceptance of the subgrantee's final report, or as determined by PBDA at the time of contracting with the subgrantee.
 - c. In the event that subgrantees are found to be in noncompliance or have defaulted on the milestone requirements of the BEAD program, PBDA reserves the right to conduct onsite inspections, financial audits, and network performance evaluations at any time. PBDA will provide written notice to subgrantees prior to taking any corrective action.
- **Documentation required for reimbursement of costs includes all of the following:**
 - a. A report from the subgrantee's project accounting system, with a summary description of significant project deliverables.
 - b. Completed and signed invoices along with backup documentation.
 - c. A Pennsylvania prevailing wage determination from the Pennsylvania Department of Labor and Industry, if utilizing contracted labor.
 - d. Upon request from PBDA, a copy of the contract between the subgrantee and its subcontractor(s) and certified payroll forms from the contractor.

Additional documentation and financial information must be provided by subgrantees within 10 calendar days of a request. At any time, PBDA may conduct an audit before approving reimbursements and remitting payment.

The type, quality, and sufficiency of documentation provided by subgrantees for reimbursement requests shall be solely determined by PBDA. PBDA will not reimburse for unreasonable expenses or insufficient documentation of costs, questionable support, or costs disputed by PBDA.

- **Performance Milestones:**
 - a. **Planning and Ordering** (the subgrantee may receive a maximum of 20% of the award amount). The subgrantee must provide evidence that it has completed all planning for broadband deployment, including completion of all design plans and ordering of necessary facilities.
 - b. **Permitting and Resource Readiness** (the subgrantee may receive a maximum of 20% of the award amount). Includes obtaining all permits necessary for broadband infrastructure deployment and the procurement of resource readiness to support the deployment of broadband infrastructure.
 - c. **Network 50% Complete** (the subgrantee may receive a maximum of 20% of the award amount). Subgrantees must demonstrate compliance by providing documents and information providing that 50% of deployment of network infrastructure has been completed.
 - d. **Network Complete & Community Anchor Institutions Connected** (the subgrantee may receive a maximum of 30% of the award amount). Subgrantees must provide documents and information proving that all network deployment has been completed and that all community anchor institutions are connected.

- e. **Final Report** (the subgrantee may receive a maximum of 10% of the award amount). To comply with the final milestone, subgrantees must submit a final report, to be approved by PBDA.

9. **Clawback Provisions:**

In addition to other possible remedies under the subgrantee agreement, if PBDA determines that a subgrantee has failed to comply with any requirement under applicable law or the executed subgrantee agreement, and if the subgrantee cannot or will not remedy such a failure, the subgrantee may be required to return up to the entire award amount to PBDA. In such instances, the subgrantee will be held liable for the amount equal to the clawback. Provisions could include, but are not limited to:

- Recoupment of BEAD funds
- Cancellation of BEAD funds
- Other actions permitted within the subgrantee agreement or law, until compliance is achieved to PBDA's satisfaction.

10. **Timely Subgrantee Reporting Mandates:**

In accordance with 2 C.F.R. Part 200, NTIA guidance, and PBDA BEAD Program Guidelines, and the subgrantee agreement, PBDA will require all subgrantees to submit timely, accurate, and complete reports on the following basis:

- a. **Monthly Reports:** Subgrantees must submit monthly reports to PBDA, and within five calendar days after the end of each month and shall provide a report on the following:
 - **Project Progress Updates:** The subgrantee should provide a summary of deployment progress and related activities, along with supporting documentation and descriptions demonstrating the work undertaken or completed during the reporting period. Monthly reports will track with required milestones.
 - **Challenges and Risks:** A detailed description of delays, obstacles, and mitigation strategies should be included in the monthly report. This could include updates on permitting, material sourcing, and make-ready status.
- b. **Semi-Annual Progress Reports:** Subgrantees must submit a semi-annual progress report, addressing all of their BEAD subgrants as applicable, on January 10th and July 10th each year, commencing the first six-months after the beginning date of the contracted Period of Performance.
 - Subgrantees with a standard broadband infrastructure subgrant must submit semi-annual progress reports through the subgrant's period of performance.
 - Subgrantees with a LEO capacity subgrant must submit semi-annual progress reports through the subgrant's period of performance.
 - Through the Semi-Annual Progress Report, subgrantees shall report on the following:
 - o Addresses or locations that constitute the service locations that will be served by the broadband infrastructure to be constructed, and the status of each project.
 - o Identify any new locations served within each project area at the relevant reporting intervals, and service taken (if applicable).
 - o Identify whether each address or location is residential, commercial, or a Community Anchor Institution.

- o Describe the types of facilities that have been constructed and installed.
- o Describe the peak and off-peak actual speeds of the broadband service being offered.
- o Describe the maximum advertised speed of the broadband service being offered.
- o Describe the non-promotional prices, including any associated fees, charged for different tiers of broadband service being offered.
- Subgrantees must also submit a certification or report of compliance with:
 - o Pennsylvania prevailing wage rates, under the Pennsylvania Prevailing Wage Act (43 P.S. §§ 165-1 – 165-17);
 - o The Build America, Buy America (BABA) Act;
 - o The Secure and Trusted Communications Networks Act of 2019;
 - o The National Defense Authorization Act of 2019;
 - o Documentation of adherence to permitting requirements for all state and federal environmental and historic preservation laws, including the National Environmental Preservation Act (NEPA) and Environmental Planning and Historic Preservation (EHP) processes; and
 - o Any other federal and state laws and BEAD programmatic metrics required or requested by PBDA.
- c. **BEAD Closeout & Final Compliance Certification**
 - Subgrantees submit a final compliance certification within 90 calendar days after project completion. Reports must include the following:
 - o Certification of project completion and full network deployment;
 - o A final financial report with documentation of all expenditures;
 - o Certification of compliance with the Low-Cost Service Option.
 - o Affirmation of compliance with the PBDA BEAD agreement for a 10-year service period.
 - o Federal Interest Certification for BEAD-funded assets and infrastructure;
 - o Transfer of any remaining funds or unused subgrant proceeds to PBDA.
- d. **Additional Financial Auditing**
 - PBDA reserves the right to audit a subgrantee's financial records, program records, and accounts, effective starting with the contract period of performance and continuing for five years after the Federal Interest Period or the Extended Federal Interest Period.

4.3 (Y/N): Certify that the subgrant agreements will include, at a minimum, the following conditions:

- a. Compliance with Section VII.E of the BEAD NOFO, as modified by the BEAD Restructuring Policy Notice, including timely subgrantee reporting mandates, including at least semiannual reporting, for the duration of the subgrant to track the effectiveness of the use of funds provided;
- b. Compliance with obligations set forth in 2 C.F.R. Part 200 and the Department of Commerce Financial Assistance Standard Terms and Conditions;
- c. Compliance with all relevant obligations in the Eligible Entity's approved Initial and Final Proposals, including the BEAD General Terms and Conditions and the Specific Award Conditions incorporated into PBDA's BEAD award;

- d. Subgrantee accountability practices that include distribution of funding to subgrantees for, at a minimum, all deployment projects on a reimbursable basis;
- e. Subgrantee accountability practices that include the use of clawback provisions between PBDA and any subgrantee (i.e., provisions allowing recoupment of funds previously disbursed);
- f. Mandate for subgrantees to publicize telephone numbers and email addresses for PBDA's Office of Inspector General (or comparable entity) and/or subgrantees' internal ethics office (or comparable entity) for the purpose of reporting waste, fraud or abuse in the Program. This includes an acknowledge of the responsibility to produce copies of materials used for such purposes upon request of the Federal Program Officer; and
- g. Mechanisms to provide effective oversight, such as subgrantee accountability procedures and practices in use during subgrantee performance, financial management, compliance, and program performance at regular intervals to ensure that subgrantee performance is consistently assessed and tracked over time.

Yes.

Requirement 5: Local Coordination

5.1 Describe the public comment period and provide a high-level summary of the comments received by PBDA during the public comment period, including how PBDA addressed the comments.

PBDA posted a draft of its Final Proposal to its public-facing website on August 22, 2025. The document was available for public review for seven days, between August 22 and August 29, 2025. Alongside the document, PBDA included an online form for members of the public to submit comments and suggestions relevant to PBDA's draft Final Proposal. The form was available to anyone with access to PBDA's website, including units of local government, internet service providers, associations, legislators, consultants, digital equity advocates, libraries, Commonwealth of Pennsylvania employees, educational institutions, workforce development organizations, and others. PBDA announced the Public Comment Period dates, instructions to view the document, and instructions to submit through its email distribution list, which reaches approximately 4,500 contacts.

The Pennsylvania Broadband Development Authority (PBDA) conducted a seven-day public comment period, as required by NTIA, from August 22 through August 29, 2025. During this period, PBDA received 42 comments from 28 entities and individuals, including five internet service providers, eight advocacy organizations, and 15 Pennsylvania residents. Submissions reflected a wide range of perspectives and largely reinforced provisions in the draft Final Proposal.

Several providers questioned why certain projects or project areas were not provisionally selected and urged PBDA to ensure compliance with NTIA's Restructuring Policy Notice. PBDA made provisional selections in accordance with the published BEAD Round Two Scoring Criteria and all federal requirements. While cost was an important factor, other program requirements also determined eligibility.

Some commenters, including residents and providers, expressed concerns about provisional selections awarded to low-Earth orbit (LEO) satellite providers. They emphasized that, despite lower upfront costs, satellite is not a sustainable long-term solution compared to fiber.

Other submissions urged PBDA to maintain close coordination with county and municipal governments to prevent deployment delays related to permitting, make-ready work, or pole attachments. Commenters also raised questions about PBDA's monitoring, invoicing, and permitting processes. PBDA will continue working with local governments and stakeholders to streamline deployments and reduce administrative barriers during the implementation phase.

Commenters also suggested applying unallocated funds toward non-deployment projects. While current NTIA guidance does not permit such uses, PBDA updated the Final Proposal to note its interest in pursuing complementary initiatives to maximize the long-term impact of broadband investments.

Several residents expressed frustration with the pace of broadband deployment, noting that they have waited years for reliable and affordable service. PBDA will continue engaging directly with these individuals to provide information on provisional projects in their areas and the next steps for obtaining service.

PBDA values the time and effort that stakeholders and citizens dedicated to the public comment process. The feedback received has informed refinements to the Final Proposal and validated the process for BEAD Round Two, and will guide PBDA's ongoing work to implement the BEAD program in a manner that is transparent and responsive to the needs of Pennsylvanians.

Requirement 6: Challenge Process Results

6.1 (Y/N): Certify that PBDA has successfully completed the BEAD Challenge Process and received approval of the results from NTIA.

Yes, PBDA successfully completed the BEAD Challenge Process, as required by NTIA, during the Initial Proposal phase of the program. PBDA's Challenge Process was conducted from April 24, 2024 through July 22, 2024. NTIA approved PBDA's eligible BEAD locations after its Challenge Process on November 1, 2024

6.2 Provide a link to the website where PBDA has publicly posted the final location classifications (unserved/underserved/CAIs) and note the date that it was publicly posted.

Final location classifications can be found on this webpage: <https://broadband.pa.gov/broadband-equity-access-and-deployment-bead-program/> under the "Additional Information" list.

Locations were publicly posted on November 12, 2024.

Requirement 7: Unserved and Underserved Locations

7.1 (Y/N) Certify whether PBDA will ensure coverage of broadband service to all unserved locations within its jurisdiction, as identified upon conclusion of the Challenge Process required under 47 U.S.C. § 1702(h)(2).

Yes.

7.2 If PBDA does not serve an unserved location because it is either financially incapable or has determined that costs to serve the location would be unreasonably excessive, explain and include a strong showing of how PBDA made that determination.

Not applicable.

7.3 Attachment (Optional) If applicable to support PBDA's response to Question 7.2, provide relevant files supporting PBDA's determination.

Not applicable.

7.4 (Y/N) 7.4 Certify whether PBDA will ensure coverage of broadband service to all underserved locations within its jurisdiction, as identified upon conclusion of the Challenge Process required under 47 U.S.C. § 1702(h)(2).

Yes.

7.5 If PBDA does not serve an underserved location because it is either financially incapable or has determined that costs to serve the location would be unreasonably excessive, explain and include a strong showing of how PBDA made that determination.

Not applicable.

7.6 Attachment (Optional) If applicable to support PBDA's response to Question 7.5, provide relevant files supporting PBDA's determination.

Not applicable.

7.7 (Y/N) Certify that PBDA has utilized the provided reason codes to investigate and account for locations that do not require BEAD funding, that PBDA will utilize reason codes 1, 2, and 3 for the entire period of performance, and that PBDA will maintain documentation, following the guidelines provided by NTIA, to justify its determination if there is a reason to not serve any unserved or underserved location on the NTIA-approved Challenge Process list through a BEAD project. The documentation for each location must be relevant for the specific reason indicated by PBDA in the fp_no_BEAD_locations.csv file. PBDA shall provide the NTIA documentation for any such location for NTIA review, as requested during Final Proposal review or after the Final Proposal has been approved.

Yes.

Requirement 11: Implementation Status of Plans for Cost and Barrier Reduction, Compliance with Labor Laws, Low-Cost Plans, and Network Reliability and Resilience

11.1 Provide the implementation status (Complete, In Progress, or Not Started) of plans described in the approved Initial Proposal Requirement 14 related to reducing costs and barriers to deployment.

To reduce costs and barriers to deployment, PBDA committed to enacting the following measures in its Initial Proposal:

1. Use of Existing Infrastructure: In Progress

Within its BEAD Program Guidelines, PBDA encouraged applicants to utilize the Pennsylvania Office of Enterprise Wireless Management (OEWM)'s asset mapping tool, publicly available on that office's website and also linked to the guidelines document. OEWM oversees the Commonwealth's efforts to utilize and optimize excess and underutilized capacity of commonwealth-owned wireless assets to support development, improvement, and expansion of broadband and wireless connectivity in Pennsylvania. Additionally, PBDA provided information about the OEWM tool in its "BEAD Frequently Asked Questions" webpage on its publicly facing website, to provide information and resources to applicants.

2. Municipal Coordination: In Progress

To streamline its coordination process with county and municipal governments across Pennsylvania, PBDA has developed a "Broadband Ready Communities" (BBRC) program. BBRC provides the designation of "Broadband Ready" to communities that undergo a series of actions that enable broadband infrastructure investment within their communities. BBRC also works to reduce procedural, policy, and permitting barriers to broadband deployment at the municipal level. To date, 146 local government entities have been designated "Broadband Champions" through BBRC. PBDA aims to expand this number as BEAD awards are granted, to aid and assist the communities that will benefit from the federal funds.

3. Permitting: In Progress

PBDA has developed a partnership with Pennsylvania's Governor's Office of Transformation and Opportunity (OTO) to prepare a system to manage the permitting requirements necessary to implement BEAD projects. OTO coordinates with Pennsylvania state government agencies to help problem-solve, avoid bottlenecks, and streamline permitting processes while proactively engaging with relevant business entities throughout the Commonwealth. Amongst other strategies, OTO uses data visualization tools and is in the process of implementing a Performance Management System. Once BEAD projects are underway, PBDA will encourage subgrantees to work directly with OTO to manage their projects' permitting requirements.

Additionally, PBDA will continue its contract with Michael Baker International (MBI), whose experts will monitor all environmental permit requirements throughout the project period of performance (see Requirement 14 for a detailed methodology of how MBI will manage this process). Within the first year of BEAD project implementation, PBDA will host a permitting conference event to facilitate discussion about best practices and other strategies.

4. Rights of Way: Not Started

Though the above-mentioned partnership with OTO will facilitate some coordination in relation to utility rights-of-way in Pennsylvania, PBDA has not moved forward with managing the challenges related to rights-of-way. PBDA does intend to create a permitting working group. While this has not yet materialized, efforts will commence within the next year. In the meantime, PBDA has engaged with the Pennsylvania Public Utility Commission's Pole Attachment Working Group. This group is charged with working to streamline the process of attaching to poles to expedite deployment of broadband infrastructure.

11.2 (Y/N) Affirm that PBDA required subgrantees to certify compliance with existing federal labor and employment laws.

Yes.

11.3 (Optional—Conditional on a 'No' Response to Intake Question 11.2) If PBDA does not affirm that subgrantees were required to certify compliance with federal labor and employment laws, explain why PBDA was unable to do so.

Not applicable.

11.4 (Y/N) Certify that all subgrantees selected by PBDA will be required to offer a low-cost broadband service option for the duration of the 10-year Federal interest period.

Yes.

11.5 (Optional – Conditional on a 'No' Response to Intake Question 11.4) If PBDA does not certify that all subgrantees selected by PBDA will be required to offer a low-cost broadband service option for the duration of the 10-year Federal interest period, explain why PBDA was unable to do so.

Not applicable.

11.6 (Y/N) Certify that all subgrantees have planned for the reliability and resilience of BEAD-funded networks.

Yes.

11.7 (Optional – Conditional on a 'No' Response to Intake Question 11.6) If PBDA does not certify that subgrantees have ensured planned for the reliability and resilience of BEAD-funded networks in their network designs, explain why PBDA was unable to do so.

Not applicable.

Requirement 12: Substantiation of Priority Broadband Projects

12.1 Describe how PBDA applied the definition of Priority Project as defined in the Infrastructure Act and the BEAD Restructuring Policy Notice.

The Infrastructure, Investment, and Jobs Act (IIJA) requires Eligible Entities to prioritize funding for “priority broadband projects”. Priority broadband projects are projects that:

“Provide broadband service that meets speed, latency, reliability, consistency in quality of service, and related criteria as the Assistant Secretary shall determine and ensure that the network built by the project can easily scale speeds over time to meet the evolving connectivity needs of households and businesses, and support the deployment of 5G, successor wireless technologies, and other advanced services.”

This definition speaks to the current **and future** needs of broadband service for Pennsylvanians beyond the minimum 100/20 speed threshold identified in IIJA.

To maximize the number of priority broadband projects, Pennsylvania determined that all applications would be subject to priority broadband project review rather than asking applicants to select for consideration. PBDA did not utilize a speed threshold as a determination for priority broadband projects. Instead, PBDA closely evaluated project area geography and density as factors that would represent challenges to the scalability of speeds over time to meet evolving connectivity needs pursuant to the priority broadband definition.

Methodology

Pennsylvania’s diverse geography, topography, varying population density, and seasonal weather patterns can present significant challenges to delivering reliable, scalable broadband service. These environmental and physical conditions must be considered when evaluating the feasibility of any proposed Priority Broadband deployment.

To that end, PBDA developed a consistent, technology-neutral methodology to assess the ability of proposed projects to meet the Priority Broadband Project requirements set forth in the IIJA and Section 3.1 of the BEAD Restructuring Policy Notice. This methodology incorporates four key geographic and environmental factors known to impact broadband performance: Broadband Serviceable Location (BSL) density, average slope, tree canopy/foilage density, and precipitation rate. These factors were applied to all Broadband Serviceable Areas (BSAs) in the Commonwealth using standardized datasets and GIS analysis.

Based on this analysis, PBDA identified BSAs where these conditions present elevated risks to broadband service delivery based on established risk levels. Each project area was then evaluated to determine whether its proposed technology can meet BEAD performance standards within the BSAs proposed in the project area, including speed, latency, and reliability. This approach ensures that all technologies are assessed fairly and that projects selected for funding are capable of delivering Priority Broadband service.

The descriptions below outline each Priority Broadband Factor and its associated risk levels for Priority Broadband service.

Density of Broadband Serviceable Locations (BSLs)¹

The evaluation of density considered how closely unserved and underserved locations are located within each service area. Nearby locations were grouped into clusters, while isolated locations were treated as dispersed locations. Using these clusters, along with the total area size, PBDA estimated the overall density of each service area. Density was then categorized into six levels, ranging from very high to ultra-low. Areas with moderate, very high, or ultra high densities were identified as presenting greater challenges for scalable broadband deployment and therefore received closer review when determining whether a project could qualify as a priority broadband project.

Density Risk Levels

- Risk Level 0: Ultra-low density, 0.01–2.0 BSL per square mile
- Risk Level 1: Very low density, 2.01–5.0 BSL per square mile
- Risk Level 2: Low density, 5.01–8.0 BSL per square mile
- Risk Level 3: Moderate density, 8.01–12.0 BSL per square mile
- Risk Level 4: High density, 12.01–14.0 BSL per square mile
- Risk Level 5: Very high density, greater than 14.0 BSL per square mile

Average Slope²

Terrain slope is an important factor in evaluating broadband deployment because it influences sky visibility and the reliability of service in certain areas. The average slope was measured across each service area to understand how terrain might obstruct signals and affect performance. Slopes were categorized on a scale from low slope to extreme slope, with increasing steepness associated with greater risk of service disruption. Areas with steep, rugged, or extreme slopes were identified as higher risk, since surrounding terrain can block signals and reduce service quality. These conditions received closer review in determining whether a project could qualify as a priority broadband project.

Slope Risk Levels

- Risk Level 0: Flat (plains, plateau tops), 0–3% slope (0–1.7 degrees). No impact, excellent sky visibility.
- Risk Level 1: Gentle (rolling hills, broad valleys), 3–8% slope (1.71–4.6 degrees). Minimal impact, broad sky view.
- Risk Level 2: Moderate (foothills), 8–15% slope (4.61–8.5 degrees). Potential minor obstruction; some low-angle satellites may be blocked depending on surroundings.
- Risk Level 3: Steep (mountain valleys, ridges), 15–25% slope (8.51–14 degrees). Service degradation likely; line of sight to horizon may be blocked by slope itself or nearby terrain.
- Risk Level 4: Rugged (deep valleys, gorges), 25–35% slope (14.01–19 degrees). Poor service reliability; high likelihood of dropouts unless site is elevated.
- Risk Level 5: Extreme (canyon floors, cirques), greater than 35% slope (greater than 19 degrees). Extremely poor or no service; only patchy or no coverage.

¹ <https://www.usgs.gov/3d-elevation-program>

² <https://www.usgs.gov/3d-elevation-program>

Tree Canopy and Foliage Density³

Vegetation plays a significant role in broadband performance, as dense tree cover can obstruct signals and reduce reliability. To evaluate this factor, average percentage of tree canopy within each service area was considered. Areas with minimal tree cover, such as farmland or open prairie, present little concern, while areas with heavy or continuous canopy, such as dense forests, pose greater challenges for delivering consistent service. Because dense vegetation can block or weaken signals, service areas with higher levels of canopy cover were identified as higher-risk and received closer review when determining priority broadband projects.

Tree Canopy and Foliage Density Risk Levels

- Risk Level 0: Open agricultural land or prairie, 0–10% coverage.
- Risk Level 1: Light woodland with scattered trees, 11–25% coverage.
- Risk Level 2: Mixed forest/clearing or suburban areas, 26–50% coverage.
- Risk Level 3: Dense deciduous forest, 51–75% coverage.
- Risk Level 4: Heavy mixed forest, 76–90% coverage.
- Risk Level 5: Old growth forest with complete canopy, 91–100% coverage.

Weather and Precipitation Rate⁴

Severe weather, particularly heavy precipitation, can affect the reliability of broadband service. To assess this risk, historical precipitation rates were evaluated in each service area, focusing on the intensity and frequency of precipitation events. Areas with light or infrequent precipitation generally present little concern, while areas that experience regular heavy or extreme precipitation pose a greater challenge for maintaining consistent service. Because strong precipitation events can disrupt signals and reduce service quality, locations with higher precipitation rates were identified as higher-risk and received closer review when determining priority broadband projects. These factors were applied to all BSAs in the Commonwealth using standardized datasets and GIS analysis. PBDA also worked with broadband technology experts to determine appropriate thresholds for these factors at which Priority Broadband service would be compromised.

Based on this analysis, PBDA identified BSAs where these conditions present elevated risks to broadband service delivery based on data-driven identified risk levels. Each project area is then evaluated to determine whether its proposed technology can meet BEAD performance standards within the BSAs proposed in the project area, including speed, latency, and reliability. This approach ensures that all technologies are assessed fairly and that projects selected for funding are capable of delivering Priority Broadband service.

Precipitation Risk Levels

- Risk Level 0: Low rain risk, less than 1 inch per hour typical, less than 2 inches per hour maximum observed.
- Risk Level 1: Low precipitation, 1–2 inches per hour common, less than 3 inches per hour in rare events.
- Risk Level 2: Moderate precipitation, 2–3 inches per hour occasional, brief events above 3 inches per hour.

³ <https://data.fs.usda.gov/geodata/rastergateway/treecanopycover/>

⁴ https://hdsc.nws.noaa.gov/pfds/pfds_gis.html

- Risk Level 3: High precipitation, regular events at 3+ inches per hour, some above 4 inches per hour.
- Risk Level 4: Very high precipitation, frequent events at 4+ inches per hour.
- Risk Level 5: Extreme precipitation, regular events above 5 inches per hour.

Requirement 13: Subgrantee Selection Certification

13.1 Provide a narrative summary of how PBDA applied the BEAD Restructuring Policy Notice's scoring criteria to each competitive project application and describe the weight assigned to each Secondary Criteria by PBDA. Scoring criteria must be applied consistent with the prioritization framework laid out in Section 3.4 of the BEAD Restructuring Policy Notice.

All applications were evaluated using the criteria outlined below. PBDA's approved list of BEAD eligible Broadband Serviceable Locations (BSLs) and Community Anchor Institutions (CAIs) were revised for Round Two in accordance with the Restructuring Policy Notice.

Round Two Primary Scoring Criteria

Applications were evaluated based on the minimal BEAD outlay for each proposed project. Minimal BEAD outlay is defined as the total amount of BEAD funding requested for the project divided by the total number of locations the project proposes to serve. For applicants proposing multiple Broadband Serviceable Areas (BSAs), PBDA considered each BSA individually or in combination, and selected the configuration with the lowest overall cost to the BEAD Program.

An applicant's proposed project could consist of one or more contiguous BSAs. An applicant with multiple BSAs was permitted to vary its subsidy request for each BSA.

Round Two Secondary Scoring Criteria

Overlapping applications with subsidy requests within 15% of one other were scored using secondary criteria. The application with the most points were provisionally selected to win that BSA or combination of BSAs.

Secondary scoring includes:

1) Speed of Network and Other Technical Capabilities:

<i>Download Speed Range</i>	<i>Download Points</i>	<i>Upload Speed Range</i>	<i>Upload Points</i>
Greater than or equal to 1 Gbps	25	Greater than or equal to 1 Gbps	25
700 Mbps- 999 Mbps	20	250 Mbps- 999 Mbps	20
250 Mbps- 699 Mbps	15	100 Mbps- 249 Mbps	15
100 Mbps- 249 Mbps	10	20 Mbps - 99 Mbps	10

2) Speed to Deployment:

Commitment to complete project in 2 years or less – 10 points

3) Preliminary / Provisional Subgrantee from Round One:

Not applicable.

Requirement 14: Environmental and Historic Preservation (EHP) Documentation

14.1 Submit a document which includes the following:

- Description of how PBDA will comply with applicable environmental and historic preservation (EHP) requirements, including a brief description of the methodology used to evaluate PBDA's subgrantee projects and project activities against NTIA's National Environmental Policy Act (NEPA) guidance. The methodology must reference how PBDA will use NTIA's Environmental Screening and Permitting Tracking Tool (ESAPTT) to create NEPA project records, evaluate the applicability of categorical exclusions, consider and document the presence (or absence) of Extraordinary Circumstances, and transmit information and draft NEPA documents to NTIA for review and approval.
- Description of PBDA's plan to fulfill its obligations as a joint lead agency for NEPA under 42 U.S.C. 4336a, including its obligation to prepare or to supervise the preparation of all required environmental analyses and review documents.
- Evaluation of the sufficiency of the environmental analysis for your state or territory that is contained in the relevant chapter of the FirstNet Regional Programmatic Environmental Impact Statement (PEIS), available at <https://www.firstnet.gov/network/environmentalcompliance/projects/regional-programmatic-environmental-impact-statements>.
- Evaluation of whether all deployment related activities anticipated for projects within Pennsylvania are covered by the actions described in the relevant FirstNet Regional PEIS.
- Description of PBDA's plan for applying specific award conditions or other strategies to ensure proper procedures and approvals are in place for disbursement of funds while projects await EHP clearances.

Environmental and Historic Preservation (EHP) Documentation (Requirement 14)

- **Environmental and Historic Preservation Requirements:** A description of how the Eligible Entity will comply with applicable environmental and historic preservation (EHP) requirements, including a brief description of the methodology used to evaluate the Eligible Entity's subgrantee projects and project activities against NTIA's National Environmental Policy Act (NEPA) guidance. The methodology must reference how the Eligible Entity will use NTIA's Environmental Screening and Permitting Tracking Tool (ESAPTT) to create NEPA project records, evaluate the applicability of categorical exclusions, consider and document the presence (or absence) of Extraordinary Circumstances, and transmit information and draft NEPA documents to NTIA for review and approval.

PBDA will leverage its internal processes and resources, as well as the tools developed by NTIA, to streamline the NEPA review process. This will support a timely and comprehensive environmental and historical preservation review and approval processes for BEAD Program awarded subgrants.

NTIA's environmental review tools - the ArcGIS Pro Permitting and Environmental Information Tool (APPEIT)¹ and the Environmental Screening and Permitting Tracking Tool (ESAPTT)² will reduce potential delays to deployment and support subgrantee efforts to complete the awarded projects within committed timeframes. PBDA has retained subject matter experts with NEPA training and expertise to coordinate and review documentation.

PBDA will rely on these NEPA professionals and NTIA's tools to implement the processes described below. These processes will support compliance with PBDA's duty and obligation as a joint lead agency as well as compliance with BEAD Program EHP requirements more generally, as described within:

- National Environmental Policy Act of 1969 (42 U.S.C. 4321, et seq.) (NEPA),
- Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.) (NHPA),
- Section 7 of the Endangered Species Act (16 U.S.C. 1521, et seq.) (ESA),
- Section 404 of the Clean Water Act (33 U.S.C. 1251, et seq.) (CWA), and
- Other applicable federal, state, and local environmental laws and regulations.

Subgrantee Selection Process

PBDA's subgrantee selection process obligated applicants to consider required permitting in their application. The BEAD program guidelines³ required applicants to prepare cost estimates for planning, design, and engineering that include environmental, historical, and cultural reviews, including permitting related to NEPA. Further, the program guidelines advised applicants that successful applications are subject to a Special Award Condition "requiring full compliance with all applicable federal, state, and local permitting laws and regulations including, but not limited to, environmental reviews, rights-of-way acquisition, historic preservation, utility coordination, and construction permits." ⁴ The guidelines also required applicants to account for permitting timelines and compliance with applicable federal, state, and local permitting requirements in proposed project planning and budget assumptions.

PBDA's BEAD online application submission required applicants to complete a notarized 'Planning and Permitting Approval' affidavit to certify that they shall secure the necessary planning and permitting approvals prior to beginning construction on an awarded project.⁵ The application process also required applicants to submit a list of anticipated permits and an associated project timeline.

Preliminary Reviews

After submitting its Final Proposal, PBDA will use the publicly available APPEIT,⁶ as well as the layers from the NTIA Permitting and Environmental Information Application⁷ that are incorporated into APPEIT to identify areas of potential significant environmental impacts and legal, regulatory, and jurisdictional overlaps for any of its provisionally awarded projects. It will also assist in planning potential mitigation and compliance measures for projects in those areas. PBDA will also rely on the expertise of its NEPA specialist and work with the provisional awardees to begin collecting documentation and using the APPEIT to conduct preliminary and high-level reviews that will ensure its awarded subgrantees support a timely NEPA review process upon approval of its Final Proposal by NTIA.

As part of its monitoring process, each subgrantee contract will include Special Award Conditions that obligate a subgrantee to ensure a timely review of environmental impacts of each awarded project and compliance with environmental, historical, and cultural requirements. Subgrantees will only be reimbursed for properly documented expenses associated with these activities upon completion of the NEPA review process for their projects.

Award Approval and ESAPTT

Upon NITA's approval of its Final Proposal and awarded projects and through the monitoring process, PBDA will require each awarded subgrantee to develop a NEPA milestone schedule to include key permit and authorization deadlines and descriptions.⁸ This schedule will include deadlines, and descriptions for the completion of consultations, NEPA and Section 106 reviews, and submission of NEPA documentation.

PBDA will also begin to use NTIA's Environmental Screening and Permitting Tracking Tool (ESAPTT)⁹ to screen its awarded projects for environmental impact, facilitate document exchange, expedite NEPA determinations and approvals, and track projects' requirements and timelines. PBDA will work with its NEPA specialist to input a project description and map of each of its awarded projects into ESAPTT to receive initial guidance regarding the required documentation and analysis that will be necessary for the NEPA review of each awarded project.

After receiving the preliminary requirements from ESAPTT, PBDA will request data, descriptions, analysis, research, and planning information to create the required NEPA review documentation for input into ESAPTT, working with the NEPA specialist as required. PBDA will work with its subgrantees to support the use of NEPA Best Management Practices¹⁰ to create mitigation measures to avoid or minimize potential environmental impacts from the project as it works with subgrantees to conduct the required screening and documentation of their projects.

Throughout this process, PBDA will consult its NEPA specialist, its Federal Program Officer, and the appropriate NTIA representatives to ask questions and receive guidance.

ESAPTT- Categorical Exclusions

As part of the ESAPTT documentation process, PBDA will consult the NTIA list of Categorical Exclusions (CE) that describe situations that should not raise extraordinary circumstances and will not require any further NEPA review.¹¹ Projects that involve activities with minimal or no environmental impact, such as minor upgrades, maintenance, or non-intrusive installations, are more likely to qualify for a CE.

Using documentation gathered from subgrantees, PBDA will complete the NTIA CE questionnaire as part of the ESAPTT process to provide documentation that identifies the scope of the awarded projects and to identify and select applicable CEs. PBDA will also complete an additional ESAPTT questionnaire to identify any extraordinary circumstances in environmentally sensitive areas that may be present in an awarded project and to propose mitigation commitments to avoid significant environmental impacts.

For each project with a CE determination, PBDA will certify and transmit a Draft NEPA Decision Memo to NTIA through ESAPTT. ESAPTT will review the Draft NEPA Decision Memo and produce a Final NEPA Decision Memo. PBDA will coordinate with NTIA to expedite and process automated NEPA approvals from ESAPTT so that a subgrantee may begin construction.

ESAPTT- Environmental Assessments

PBDA acknowledges that some of its awarded projects may require further analysis through an Environmental Assessment (EA) or, although unlikely, an Environmental Impact Statement where ESAPTT determines there are extraordinary circumstances. The [NTIA NEPA Guidance Document](#), at Appendix C,12 provides examples of the types of extraordinary circumstances that may be present in a project and may require that project to undergo an EA.

When an EA is required, PBDA will use the Tiered Environmental Assessment Template, provided by NTIA, to support and streamline the necessary environmental review process. PBDA's write up of the Tiered Template will also consider the programmatic NEPA review using the FirstNet Programmatic Environmental Impact Statement (PEIS) and those areas where the Pennsylvania Revalidation Memo recommended updates or changes of the FirstNet PEIS necessary to address new, unique, or state-specific environmental review requirements and any additional requirements to address special conditions or mitigations.

Where these EAs are required, PBDA will work with the subgrantee and NTIA to restructure the project or conduct the necessary review. PBDA will then conduct monitoring and compliance activities to support the subgrantee's compliance of NTIA's final determination.

National Historic Preservation Act

PBDA will also apply the requirements of the Advisory Council on Historic Preservation (ACHP) to each awarded project to comply with the National Historic Preservation Act (NHPA) Section 106, in consultation with the Pennsylvania State Historic Preservation Office (SHPO) within the Pennsylvania Historical and Museum Commission (PHMC). The Section 106 consultation process requires that documentation be included as part of the environmental project file and be adequately summarized in the NEPA document. PBDA has developed a subgrantee orientation package to guide subgrantees through the Section 106 documentation required by PBDA.

PBDA will supervise the preparation of these documents using retained environmental professionals meeting the Secretary of the Interior's Professional Qualifications Standards.

PBDA will coordinate with the subgrantee and NTIA when it seems likely that there may be ACHP involvement on a project (e.g., potential adverse effect or likely need for an agreement document pursuant to Section 106). The subgrantee will initiate a Section 106 Process through standard processes that begin with defining a project and working with PHMC and stakeholders to identify and resolve any adverse effects of the project on historic and culturally sensitive properties.

If federal agencies are involved, PBDA will notify NTIA so that it may initiate agency-to-agency consultations to provide necessary information and mitigation plans.

PBDA will ensure that the Section 106 process will proceed efficiently and conclude before construction begins. Documentation may include a cultural resources survey, determination of effect, and, if any adverse effects are found, an agreement with consulting parties.

Endangered Species Act

Where necessary, PBDA will also work with the US Fish and Wildlife Service (FWS) as a non-federal representative to determine if it will be necessary for PBDA to conduct a review of any awarded project under the Endangered Species Act (ESA). PBDA will use the online Information for Planning and Consultation (IPaC) tool to identify areas within awarded projects that have listed species and protected critical habitat boundaries. PBDA will also review NTIA and FWS lists of broadband

activities that are expected to have “no effect” on listed species or designated critical habitats and are therefore exempt from the ESA Section 7 consultation.¹³

PBDA will document the results from the IPaC tool and the “no effect” list. If a specific project requires an ESA review, it will use the Determination Keys (DKeys) process to conduct a streamlined and efficient review that will provide a determination of whether a project will have “no effect” or “may affect” or “not likely to affect”. In rare circumstances - which PBDA will work proactively with its subgrantees to avoid - an in-person consultation with FWS may be required. PBDA will ensure that any mitigation measures or modifications resulting from such consultations, as mandated by FWS and the ESA, are fully enforced through its compliance and monitoring processes.

Monitoring and Compliance

PBDA will prepare a standard operating procedure (SOP) to monitor and track subgrantee compliance efforts with NEPA- and NHPA-related requirements and commitments to mitigation measures. This SOP will provide a structured and transparent operational framework for PBDA to ensure compliance by its subgrantees, as well as to support its own obligations as a joint lead agency, throughout the period of performance. A subgrantee contract will require PBDA to approve subgrantee requests for any changes to an awarded projects’ scope, technology, deployment methods, route and infrastructure. As part of this approval process, PBDA will determine if the requested changes will trigger the need for additional environmental reviews of the project.

- **Joint Lead Agency Responsibility Summary: A statement of the Eligible Entity’s understanding of its obligations as a joint lead agency to implement NEPA requirements under 42 U.S.C. 4336a and a description of the Eligible Entity’s plan to prepare and/or supervise the preparation of all required environmental analyses and review documents.**

PBDA will serve as a joint lead agency in its capacity as the state agency administering the BEAD program in accordance with 42 U.S.C. 4336a(a)(1)(B) and carry out the duties described in 42 U.S.C. 4336a(a)(2). PBDA will fulfill its role and obligations as it collectively implements the BEAD NEPA review process with NTIA and enforces NEPA requirements for its BEAD program awarded projects. To successfully serve as a joint lead agency with NTIA, PBDA will build its knowledge and capacity to support the NEPA review and enforcement processes through internal training and external resources with NEPA training and experience.

PBDA will use qualified NEPA professionals to certify the sufficiency of subgrantee NEPA documentation, by supervising subgrantee’s preparation of draft documents, independently reviewing those drafts, and verifying that draft documents meet the requirements of NEPA, and other environmental regulations. PBDA will then submit this documentation to NTIA through ESAPTT. Once PBDA receives the NTIA decision documents, it will advise subgrantees about commencing construction.

PBDA will monitor the work by subgrantees to implement any required conditions or mitigation measures for its BEAD-awarded projects. PBDA will not allow deployment work to begin on any awarded project until it has received the required NTIA NEPA determination of a Categorical Exemption, Record of Decision, or Finding of No Significant Impact.

PBDA and its NEPA qualified professionals will develop subgrantee webinar highlighting the information required by ESAPTT. The webinar materials will provide information about EHP requirements, the process for collecting information, and their relationship to other permitting

requirements. Materials will also consider NTIA best practices for mitigation in engineering and route designs.

PBDA and its NEPA qualified professionals may also offer office hours and one-on-one consultations to subgrantees to support the development of required documentation.

- **Description of FirstNet Regional PEIS Evaluation: Identification of the relevant First Responder Network Authority (FirstNet) PEIS chapter pertinent to the Eligible Entity, and a concise evaluation of the sufficiency of the environmental analysis contained in the relevant FirstNet Regional PEIS (see Sample evaluation memo), updating any information necessary for the NEPA analysis contained in the FirstNet Regional PEIS to apply to the Eligible Entity's subgrant broadband deployment projects.**

PBDA worked with its environmental consultant to assess the FirstNet Regional Programmatic Environmental Impact Statement (FirstNet PEIS) according to NTIA guidance and prepared its FirstNet Regional Programmatic Environmental Impact Statement Revalidation for Pennsylvania.

¹⁴ To prepare this memorandum, PBDA and its environmental consultant reviewed the PEIS (September 2017) and the ROD (November 2017) for the East Region as well as the Amended ROD for the East Region (August 2018) with a focus on Volume 10 - Chapter 12: Pennsylvania.

Pennsylvania's PEIS Revalidation memo dated August 12, 2025 (see Appendix I) includes PBDA's evaluation of whether the FirstNet analysis remains valid to support decision-making for BEAD-funded infrastructure projects. The evaluation considered factors such as environmental setting, environmental circumstances, environmental impacts, and best management practices for a variety of potential environmental resource categories, as listed in the PEIS.

PBDA's memo identifies a series of changes from the original PEIS, addressing environmental and other conditions such as water resources, socioeconomic and environmental justice, air quality, climate change, human health and safety, wetlands, biological resources, visual resources, cultural resources, wildlife, fisheries and aquatic habitats, and threatened and endangered species.

Based on the review of the East Regional PEIS (Chapter 12: Pennsylvania), PBDA, in conjunction with its environmental consultant, has determined that the analysis remains valid for use in subsequent environmental documents. Further, PBDA will work with NTIA to ensure that recent federal Executive Orders that impact federal environmental review regulations, processes, and policies as they relate to sections of the FirstNet PEIS regarding environmental justice, climate change and socioeconomic diversity are consistent with ESAPTT.

PBDA anticipates that broadband infrastructure deployment-related activities for projects will be covered by the actions described in the FirstNet PEIS. In all cases, project scopes will be reviewed as part of the NEPA review process. If the documentation submitted to ESAPTT, at any time, determines that any subgrantee project is not sufficiently covered by the FirstNet Regional PEIS, additional analysis will be conducted by environmental subject matter experts working with NTIA staff to determine whether a supplemental environmental assessment is required to address identified gaps or deficiencies, as described above.

- **Specific Award Conditions (SACs) Description: A description of the Eligible Entity's current or planned use of SACs and/or other strategies to ensure proper procedures and approvals are in place for disbursement of funds while projects are awaiting final NEPA approval. For example, this may include utilizing an EHP-focused SAC attached to subgrantee awards that are anticipated to require ground-disturbing activities.**

The subgrantee contract will include Specific Award Conditions outlining a subgrantee's EHP obligations and supporting the timely completion of environmental reviews. The contract will include the required elements for its subgrantees, as specified in the NTIA's [BEAD General Terms and Conditions Section 13](#).

The contract further requires subgrantees to maintain records throughout the grant performance period that are sufficient to demonstrate compliance with EHP requirements and to provide these records to PBDA. As further enforcement of the EHP obligations, subgrantees that fail to comply with these provisions may be subject to withholding of funds, repayment obligations, or other remedies.

Requirement 16: Prohibition on Excluding Provider Types

16.1 (Y/N) Does PBDA certify that it did not exclude cooperatives, nonprofit organizations, public-private partnerships, private companies, public or private utilities, public utility districts, or local governments from eligibility for a BEAD subgrant, consistent with the requirement at 47 U.S.C. § 1702(h)(1)(A)(iii)?

Yes- PBDA certifies that during its subgrantee selection process, it did not exclude cooperatives, nonprofit organizations, public-private partnerships, private companies, public or private utilities, public utility districts, or local governments from eligibility for a BEAD subgrant.

Requirement 17: Waivers

17.1 If any waivers are in process and/or approved as part of the BEAD Initial Proposal or at any point prior to the submission of the Final Proposal, list the applicable requirement(s) addressed by the waiver(s) and date(s) of submission. Changes to conform to the BEAD Restructuring Policy Notice should be excluded. If not applicable to PBDA, note 'Not applicable.'

Not applicable.

17.2 If not already submitted to NTIA, and PBDA needs to request a waiver for a BEAD program requirement, upload a completed Waiver Request Form here. If documentation is already in process or has been approved by NTIA, PBDA does NOT have to upload waiver documentation again.

Not applicable.

Appendix: PA PEIS Memorandum

FirstNet Regional Programmatic Environmental Impact Statement Revalidation – Pennsylvania

MEMORANDUM FOR THE RECORD

On October 27, 2017, the First Responder Network Authority published a Notice of Availability for the Final Regional Programmatic Environmental Impact Statement (PEIS) dated September 2017. The Record of Decision (ROD) for the East Region is dated November 2017 and the Amended ROD for the East Region is dated August 2018. The National Telecommunications and Information Administration (NTIA) was a Cooperating Agency on the analysis and is conducting this revalidation of the original analysis performed in accordance with requirements for reevaluation of programmatic documents older than 5 years in Section 108 of the National Environmental Policy Act (NEPA), as amended by the Fiscal Responsibility Act of 2023. The Pennsylvania Broadband Development Authority is a joint lead agency for NEPA for the Broadband Equity Access and Deployment (BEAD) Program. This revalidation of Volume 10 - Chapter 12: Pennsylvania will describe any changes to the proposed action, regulatory setting, or areas of concern or sensitivity identified in the original PEIS analysis and determine whether NTIA may still rely on it for purposes of subsequent environmental documents.

Changes in Environmental Setting

12.1.4 Water Resources

12.1.4.6 Floodplains

The PEIS cites that there were 25 communities in Pennsylvania participating in the National Flood Insurance Program (NFIP) Community Rating System (CRS) as of May 2014. The number of participating communities in Pennsylvania was 38 as of 2024⁵. Participation in this program is intended to reduce flood risk by implementing community floodplain management activities that exceed the minimum NFIP requirements.

12.1.9 Socioeconomics and 12.1.10 Environmental Justice

The PEIS includes information pertaining to socioeconomics and environmental justice within these sections. Based on Executive Order 14151 of January 20, 2025, Ending Radical and Wasteful Government DEI Programs and Preferencing, discussions of socioeconomics and environmental justice are no longer required for NEPA⁶.

12.1.12 Air Quality

12.1.12.2 Specific Regulatory Considerations

Some air quality standards have changed since the PEIS was prepared. For example, the PM2.5 National Ambient Air Quality Standards (NAAQS) were recently revised, the Pennsylvania Ambient Air Quality Standards (PAAQS) were tightened, and some new pollutants were added to the list of

⁵ <https://www.fema.gov/floodplain-management/community-rating-system#participating>

⁶ <https://www.whitehouse.gov/presidential-actions/2025/01/ending-radical-and-wasteful-government-dei-programs-and-preferencing/>

Hazardous Air Pollutants (HAPS) in 2022. Also, the PEIS references the Pennsylvania Department of Environmental Protection document “Air Quality Permit Exemptions,” which was revised on July 1, 2021⁷.

12.1.12.3 Environmental Setting: Ambient Air Quality

The PEIS includes a table and a figure of nonattainment areas in Pennsylvania as of January 30, 2015. There have been some changes in attainment status (PM2.5, ozone, and CO NAAQS) and standards (PM2.5 and ozone NAAQS) since that time. The PEIS also refers to the 2005 U.S. Environmental Protection Agency guidelines for air quality modeling. The *Guideline on Air Quality Models* was revised, per U.S. Environmental Protection Agency rule on November 29, 2024⁸.

12.1.14 Climate Change

The PEIS includes information pertaining to climate change within this section. Based on Executive Order 14162 of January 20, 2025, Putting America First in International Environmental Agreements⁹, discussion of climate change is no longer required for NEPA.

12.1.15 Human Health and Safety

12.1.15.4 Environmental Setting: Contaminated Properties at or Near Telecommunications Sites

The PEIS cites 344 RCRA Corrective Action Sites (excluding sites identified as “construction complete”) as of September 23, 2015, and the number has changed to 353 as of January 15, 2025¹⁰. The PEIS cites 1,168 TRI reporting facilities in Pennsylvania as of September 2015 with Pennsylvania ranked 9 of 56 states and territories based on total releases per square mile. As of 2020, this changed to 1,071 TRI facilities with Pennsylvania ranked 12 of 56¹¹. This illustrates that some of the hazardous waste statistics have increased while others have decreased since PEIS publication. Regardless, the findings and assessment of impacts summarized in the PEIS remain valid.

Changes in Environmental Circumstances

12.1.4 Water Resources

12.1.4.2 Specific Regulatory Considerations

Two additions are recommended to Table 12.1.4-1 Relevant Pennsylvania Water Laws and Regulations. The following text should be added to the “Clean Water Act (CWA), Section 404” row:

⁷<https://greenport.pa.gov/elibrary//GetDocument?docId=3791499&DocName=01%20AIR%20QUALITY%20PERMIT%20EXEMPTIONS.PDF%20%20%3cspan%20style%3D%22color:green%3b%22%3e%3cspan%3e%20%3cspan%20style%3D%22color:blue%3b%22%3e%3cspan%3e>

⁸ <https://www.federalregister.gov/documents/2024/11/29/2024-27636/guideline-on-air-quality-models-enhancements-to-the-aermod-dispersion-modeling-system>

⁹ <https://www.whitehouse.gov/presidential-actions/2025/01/putting-america-first-in-international-environmental-agreements/>

¹⁰ <https://cimc.epa.gov/ords/cimc/f?p=121:10>

¹¹ https://enviro.epa.gov/triexplorer/tri_factsheet.factsheet_forstate?pstate=PA&pyear=2020&pParent=TRI&pDataSet=TRIQ1

“Pennsylvania State Programmatic General Permit-6 (PASPGP-6) allows applicants to obtain both USACE Section 404 permits and State water obstruction and encroachment permits through a joint application submitted to the Pennsylvania DEP for most projects requiring these permits in the Commonwealth. PASPGP-6 went into effect on July 1, 2021, following the expiration of PASPGP-5. PASPGP-6 will expire on June 30, 2026. Activities authorized under PASPGP-6 that have commenced construction or are under contract to commence construction will remain authorized provided the activity is completed within 12 months of the date of the PASPGP-6 expiration.”

Additionally, a row should be added just below this (and above the “Water Quality Certification” row) to detail Chapter 105 regulations.

Dam Safety and Encroachments Act, Chapter 105	Pennsylvania DEP	In accordance with Chapter 105 of the Dam Safety and Encroachments Act, a permit is required for projects involving the construction, modification, or relocation of any dam, water obstruction, or encroachment.
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12.1.4.6 Floodplains

E.O. 14030 – signed in May 2021 – reinstated the implementing instructions set forth in E.O. 13690, referenced under Table 12.2.4-1. The PEIS remains valid. However, the associated best management practices and mitigation measures (Chapter 17) may warrant some revision, for example, by adding more specific flood mitigation requirements such as minimum elevation of broadband infrastructure that is placed within a 100-year-flood zone.

12.1.5 Wetlands

The PEIS notes that discharges to “waters of the U.S.” (WOTUS) are subject to the provisions of Section 401 of the Clean Water Act (CWA). This remains an accurate statement. The PEIS does not specifically define WOTUS. Therefore, the May 25, 2023, Supreme Court ruling in Sackett v. EPA – which resulted in a change to the definition of WOTUS – does not impact the environmental setting or circumstances as described in the PEIS.

12.1.6 Biological Resources

12.1.6.3 Vegetation

Nuisance and Invasive Plants

The PEIS discusses noxious weeds and invasive plants. The latest state and federal listings of noxious weeds can be found on the Pennsylvania Department of Agriculture website¹². Likewise, the latest listing of invasive plants in Pennsylvania can be found on the Pennsylvania Department of Conservation and Natural Resources website¹³.

¹² <https://www.pa.gov/agencies/pda/plants-land-water/plant-industry/noxious-weeds-and-controlled-plants/controlled-plant-noxious-weed-lists.html>

¹³ <https://www.pa.gov/agencies/dcnr/conservation/wild-plants/invasive-plants.html>

12.1.6.6 Threatened and Endangered Species

The PEIS focuses on the U.S. Fish & Wildlife Service and has citations to its Information for Planning and Consultation (IPaC) system, which can be used to query threatened and endangered species. Rather than using the U.S. Fish & Wildlife Service's IPaC to query the records of a single agency, projects in Pennsylvania have the advantage of using the Pennsylvania Natural Diversity Inventory (PNDI).¹⁴ The PNDI system queries the records of all four jurisdictional authorities in Pennsylvania: the U.S. Fish & Wildlife Service, the Pennsylvania Game Commission, the Pennsylvania Department of Conservation and Natural Resources, and the Pennsylvania Fish and Boat Commission. Any species listings that may have changed since the PEIS was published will be captured when a PNDI is run for a specific project location.

12.1.8 Visual Resources

12.1.8.4 Visually Important Historic Properties and Cultural Resources

The PEIS cites the number and types of properties listed on the National Register of Historic Places (NRHP) in text and map formats and notes that these resources may be considered visually sensitive. The NRHP evolves frequently, so the PEIS text and map are out of date. However, visual impacts to cultural resources will be evaluated on a project-specific/site-specific basis through consultation with the State Historic Preservation Office using the latest available data at that time.

World Heritage Site

The PEIS discusses the only World Heritage site in Pennsylvania at time of publication: Independence Hall in Philadelphia. Two additional sites have been designated in Pennsylvania since then: Frank Lloyd Wright's Fallingwater house in Fayette County (2019) and Moravian Church Settlements in Bethlehem (2024)^{15,16}.

12.1.8.5 Parks and Recreation Areas

State Parks and Forests

The PEIS cites 120 state parks in Pennsylvania at the time it was written. There are now 124 state parks in Pennsylvania. The latest listing of state parks can be found on the Pennsylvania Department of Conservation and Natural Resources website¹⁷.

12.1.11 Cultural Resources

The PEIS provides information about properties listed on the NRHP in tabular and map formats. The NRHP evolves frequently, so the PEIS table and map are out of date. However, impacts to cultural resources will be evaluated on a project-specific/site-specific basis through consultation with the State Historic Preservation Office using the latest available data at that time. It should also be noted that the Pennsylvania Cultural Resources Geographic Information System (CRGIS) described in the PEIS has been replaced with Pennsylvania's State Historic and Archaeological Resource Exchange (PA-SHARE).

¹⁴ <https://conservationexplorer.dcnr.pa.gov/content/environmental-review>

¹⁵ <https://www.historicbethlehem.org/world-heritage/top-10-things-to-know/#2-pennsylvania-is-now-home-to-three-world-heritage-sites>

¹⁶ <https://whc.unesco.org/en/interactive-map/>

¹⁷ <https://www.pa.gov/agencies/dcnr/recreation/where-to-go/state-parks.html>

12.1.14 Climate Change

12.1.14.2 Applicable Statutes and Regulations

The PEIS cites climate change laws and studies relevant as of 2017. Subsequently, “Executive Order 2019-01 established a Pennsylvania climate goal of a 26% reduction in net GHG emissions statewide by 2025 and an 80% reduction by 2050, from 2005 levels. It also reestablished the GreenGov Council to assist state agencies in incorporating environmentally sustainable practices into policy and planning decisions.” Additionally, the Pennsylvania Department of Environmental Protection submitted *Pennsylvania’s Priority Climate Action Plan* (March 1, 2024) to the U.S. Environmental Protection Agency, proposing actions to reduce greenhouse gas emissions.¹⁸ While the PEIS can be updated to cite this recent Executive Order and plan, the findings and assessment of impacts summarized in the PEIS remain valid. Based on Executive Order 14162 of January 20, 2025, Putting America First in International Environmental Agreements, discussion of climate change is no longer required for NEPA.

12.1.15 Human Health and Safety

12.1.15.4 Environmental Setting: Contaminated Properties at or Near Telecommunication Sites

The Pennsylvania Department of Environmental Protection issued a *Management of Fill Policy*, revised on January 16, 2021, related to the classification and management of fill materials.

Changes to Environmental Impacts of the Project

12.2.6 Biological Resources

12.2.6.4 Wildlife

The PEIS states (pg. 12-315, Birds, 1st sentence) that “The direct removal of most migratory bird nests is prohibited under the MBTA.” Consider revising this to “The direct removal of most active migratory bird nests is prohibited under the MBTA.”

12.2.9 Socioeconomics and 12.2.10 Environmental Justice

The PEIS includes information pertaining to socioeconomics and environmental justice within these sections. Based on Executive Order 14151 of January 20, 2025, Ending Radical and Wasteful Government DEI Programs and Preferencing, discussions of socioeconomics and environmental justice are no longer required for NEPA.

12.2.14 Climate Change

The PEIS includes information pertaining to climate change within this section. Based on Executive Order 14162 of January 20, 2025, Putting America First in International Environmental Agreements, discussion of climate change is no longer required for NEPA.

¹⁸ <https://www.pa.gov/agencies/dep/residents/climate-change.html>

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

Chapter 17 BMPs and Mitigation Measures

17.4 Water Resources

See “Changes to Environmental Circumstances” (12.1.4.6 *Floodplains*) above.

17.6 Biological Resources

17.6.2 Wildlife

17.6.2.2 Project-Type Specific BMPs and Mitigation Measures

On March 1, 2021, the U.S. Fish & Wildlife Service released an updated “*Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning*.”¹⁹ The PEIS incorporates the recommended best practices from the 2013 version of this document.

17.6.3 Fisheries and Aquatic Habitats and 17.6.4 Threatened and Endangered Species

The PEIS does not specify new submarine cables under the “Project-Type Specific BMPs and Mitigation Measures.” The general BMPs and mitigation measures in these sections remain valid and include many of the measures but consider directly incorporating the Conservation Measures set forth in the applicable Fisheries Management Plans for the Region.

Recommendation

Based on a thorough review of the East Regional PEIS (Chapter 12: Pennsylvania), PBDA has determined that the analysis remains valid, with the updates as noted above, for use in subsequent environmental documents.

¹⁹ <https://www.fws.gov/media/recommended-best-practices-communication-tower-design-siting-construction-operation>



Commonwealth of Pennsylvania