CommonwealthofKentucky

Broadband Equity, Access, and Deployment Program (BEAD)

Program Procedures and Monitoring Plan

August 2025



Program Procedures and Monitoring Plan Contents

Section	Description	
_	Plan Background & Objectives	
1	Introduction to the BEAD Monitoring and Procedures document that includes	
	information on BEAD funding, policy references, and other introductory information.	
	Program Overview	
2	The Program Overview provides information on the source of funding, eligible	
	entities and networks, and target areas.	
	Program Requirements	
	This section contains critical information that was required during the application	
3	phase that carries over into the provisional and subgrantee phase. There is also	
	information regarding expectations around financial, project, technical, and grants	
	management.	
	Subgrantee Obligations and Post-Award Monitoring	
4	This section contains information subgrantees must be aware of and adhere to in	
4	order to participate in the completion of the Final Proposal and in order to receive	
	and maintain grant funding.	
	Performance Measures	
	NTIA has the expectation that all Eligible Entities (States and Territories) and	
5	subgrantees (those receiving BEAD funding) will test the technical performance of	
	the BEAD network. This section contains information regarding the conduction of	
	these performance measures.	
_	Definitions	
6	This section contains all currently, NTIA approved definitions of terms associated	
	with the BEAD funding program.	
7	Appendices	
,	All relevant and cited appendices	

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1. Plan Background & Objectives

In 2021, Congress passed the Infrastructure and Jobs Act (IIJA)¹, which launched the Broadband Equity, Access, and Deployment (BEAD) program and other related programs. The BEAD program, administered by the National Telecommunications and Information Administration (NTIA), will distribute \$42.45 billion to advance high-speed internet access through infrastructure deployment across all 56 states and U.S. territories.

Details of the BEAD program are outlined in the <u>NTIA's Notice of Funding Opportunity (NOFO)</u> and further refined in the <u>BEAD Restructuring Policy Notice</u> (RPN) published on June 6, 2025. This notice modified or replaced certain requirements initially presented in the original BEAD NOFO.

The BEAD Monitoring Program Plan establishes procedures for Kentucky's BEAD Program and is consistent with the guidelines of the National Telecommunication and Information Administration (NTIA) and is in line with material presented in Kentucky's Initial Proposal. It is structured to meet statutory, regulatory, and program requirements including:

- 47 U.S.C. § 1702 (Infrastructure Investment and Jobs Act BEAD enabling statute)
- Applicable 2 C.F.R. Part 200 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards)
- The BEAD Notice of Funding Opportunity (NOFO)
- The BEAD Program Restructuring Policy Notice
- BEAD Program: Performance Measures for BEAD Last-Mile Networks
- BEAD Policy and Waiver Notices
- The General Terms and Conditions for the BEAD Program
- The Department of Commerce Standard Terms and Conditions
- Kentucky's BEAD Subgrantee Agreements and Specific Award Conditions applicable to each individual award

Throughout the document, entities applying to the Program are referred to as "applicants" or "subgrantees" depending on which stage of the process is being discussed.

¹ Office of the Federal Register, National Archives and Records Administration. "Public Law 117 - 58 - Infrastructure Investment and Jobs Act". Government. U.S. Government Publishing Office, November 14, 2021. https://www.govinfo.gov/app/details/PLAW-117publ58.

2. Program Overview

2.1 Sources of Funds and Allocation

The Kentucky Office of Broadband Development (The Office) is implementing Kentucky's BEAD Program using funds allocated to the Commonwealth of Kentucky through the BEAD program authorized by IIJA. Kentucky was allocated \$1.086 billion to deploy broadband to unserved and underserved locations and eligible CAIs. Actual funds awarded varied depending on the amount requested in applications received, the need of proposed projects for grant support, and the requirements of NTIA, U.S. Department of Commerce. Projects that were selected by the Office for provisional award through the Program were included in Kentucky's Final Proposal and were subject to NTIA review and approval.

2.2 Eligible Entities

Subgrantees must have and maintain a current statement of existence from the Kentucky Secretary of State and a Letter of Good Standing from the Kentucky Tax division. They must have no prior default or significant violations under any federal, state, or local broadband expansion funding program, and no suspension or debarment as a vendor by the Commonwealth of Kentucky or any Federal agency within three years prior to filing an application with the Office for Program funding. Projects proposed by eligible applicants were subject to review and possible approval, denial, or modification under the Review Guidelines. Eligible entity types include cooperatives, nonprofit organizations, public-private partnerships, private companies, public or private utilities, public utility districts, or local governments.

2.3 Eligible Networks

Funded projects must deliver broadband with speeds of not less than 100 Mbps for downloads and 20 Mbps for uploads in accordance with the FCC's 80/80 metric. Funded Network connections to eligible Community Anchor Institutions (CAIs) shall be capable of delivering service at speeds not less than 1 Gigabit per second for downloads and 1 Gigabit per second for uploads. Eligible Entities shall ensure that such connections can be used to provide business data services. The RPN eliminated the "Fiber Preference" section of the original NOFO and permits selection from all qualifying technologies

2.4 Target Areas

Eligible project geographies are defined by Census Black Groups (CBGs). Project applications may include one or multiple contiguous or non-contiguous block groups. By including a CBG in an application, the prospective subgrantee committed to serving no less than 95% of the eligible unserved or underserved BSLs contained within that CBG if awarded.

3. Program Requirements

3.1 Grant Award Requirements

3.1.1 Fixed Amount Subawards

Kentucky's BEAD Program will issue fixed amount subawards. Payments under the Kentucky BEAD program will be milestone-based payments. This will allow for streamlined "cost reasonableness" review and disbursement policies in lieu of traditional invoice-based reimbursement and relief from federal cost principles, procurement standards, and property standards for BEAD subgrants.

Grant recipients may only use awarded federal funds and any non-federal cost share committed to an award to pay for allowable costs under the BEAD Program. In addition, costs must be reasonable, necessary, allocable, and allowable for the proposed project or other eligible activity and conform to generally accepted accounting principles.

3.1.2 Match Requirement

Subgrantees must commit a match of at least 25% of the total cost for each of its Proposed Projects. However, the Office may waive a portion of the match that is proportionate to the number of Target Locations that fall within High-Cost areas, as defined in Section 60102(a)(2)(G) of the Infrastructure Investment and Jobs Act of 2021.

- Subgrantees were required to commit to matching funds at the time of application.
- The Office will allow in-kind match as permitted in Section III.B.4. of the NOFO, which states that matching funds may be provided in the form of either cash or in-kind contributions, so long as such contributions are made consistent with the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards set forth at 2 C.F.R. Part 200.
- In-kind contributions, which may include third-party in-kind contributions, are non-cash donations of property, goods or services, which benefit a federally assisted project, and which may count toward satisfying the non-federal matching requirement of a project's total budgeted costs when such contributions meet certain criteria. In-kind contributions must be allowable and allocable project expenses.

• A subrecipient's matching funds must be spent on eligible expenditures.

3.1.3 Eligible Expenses

Eligible expenses under Kentucky's BEAD program must be directly related to the initial investment associated with installing new broadband facilities and/or upgrading existing broadband facilities as a one-time capital improvement project. Eligible project activities and costs include:

- 1. Network and access equipment costs.
- 2. Outside plant costs.
- 3. Reasonable make-ready and one-time pole attachment costs, excluding recurring pole attachment payments.
- 4. Equipment shelter, land, site preparation, and site restoration costs;

 Note: Capital expenditures for general purpose equipment, special purpose equipment, and improvements to land, buildings, or equipment which materially increase their value are unallowable except with the prior written approval by the Office. These must be included as a separate line item in approved project budgets.²
- 5. Customer premises equipment: Funding only covers up to the network demarcation point (e.g., NID or ONT).
- 6. Professional services, including engineering and project management costs involved in designing and constructing the Proposed Project.
- 7. Other upfront costs: Includes any other upfront costs not covered in other categories, such as permits, required licenses, sales tax applicable to new equipment purchases, temporary warehousing expenses required exclusively for materials and equipment to be installed as part of the funded project and miscellaneous minor material; and
- 8. Long-term leases, defined as leases for a duration longer than 1 year, of facilities required to provide broadband service on the Proposed Project.³
- 9. Internal labor costs incurred as part of eligible project activities are only reimbursable up to the proportion of employees' time spent exclusively on project activities during the period for which reimbursement is sought.

 When seeking reimbursement, applicants must submit such costs as line-items and provide supporting documentation for the expense. Supporting documentation shall include time spent by each employee on project activities, total time spent by each employee during the period for which reimbursement is sought, and an hourly cost that may include employee salary, itemized payroll taxes and benefits. Indirect costs are notreimbursable for subgrantee internal labor expenditures.

Costs that appear excessive and/or without justification and costs not considered eligible

² Further regulations regarding the acquisition, disposition, and overall accounting for property and equipment are delineated in 2 CFR § 200.439

³ NTIA, "Notice of Funding Opportunity: Broadband Equity, Access, and Deployment Program" https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf, page 14.

will not be reimbursed. Costs ineligible for the Program may not be paid for with matching funds committed to an award.⁴

Ineligible costs include:

- Internal administrative activities.
- Fundraising activities.
- · Computers or office equipment.
- Vehicles or construction tools, including but not limited to cable trailers, fiber fusion splicers, fiber mechanical splicing devices, fiber splicing trailers, OTDRs, speed testing devices, hand tools (hammers, shovels, hoes, rakes, wrenches), pole climbing equipment, construction devices (Lashers, rollers, winches, chain hoists, beckets, lay-up sticks, measuring wheels, measuring sticks, traffic cones, construction traffic control signage), and cable reel stands;
- Equipment owned or leased by the customer, including routers and modems, and any other costs beyond the network interface point,
- Operating expenses, including monthly accounting and legal services;
- Software and IP Addresses;
- Expenses incurred prior to the start date of the period of performance or any existing inventory purchased prior to the program launch date;
- Short-term operating leases;
- Payment of interest or principal on outstanding debt instruments, or other debt service costs;
- Fees or issuance costs associated with the issuance of new debt;
- Satisfaction of any obligation arising under or pursuant to a settlement agreement, judgment, consent decree, or judicially confirmed debt restructuring plan in a judicial, administrative, or regulatory proceeding;
- To support or oppose collective bargaining, whether directly or indirectly;
- To purchase or support any covered communications equipment or service (as defined in Section 9 of the Secure and Trusted Communications Network Act of 2019);
- To purchase or support fiber optic cable and optical transmission equipment manufactured in the People's Republic of China unless a waiver is received from the Assistant Secretary.
- Profits, fees, or other incremental charges above actual cost incurred by the Applicant.

Projects must serve Eligible Locations. Facilities that are needed to deliver last-mile broadband service to Eligible Locations and incidentally cover non-eligible locations are reimbursable, but expenditures solely to benefit non-eligible locations are not reimbursable. Customer drops, installations, and equipment at non-eligible locations are not eligible for reimbursement.

⁴ BEAD NOFO, page 82.

3.2 Financial Management

3.2.1 Financial Capacity and Sustainability

Subgrantees must demonstrate the level of financial capacity that they have to support awarded projects in Kentucky and must demonstrate that projects that they may be awarded are financially sustainable.

3.2.2 Letter of Credit

Applicants choosing to use a letter of credit must obtain and submit a letter from an eligible bank or credit union, as defined in this section, committing to issue an irrevocable standby letter of credit in the required form to the applicant. The letter shall at a minimum provide the dollar amount of the letter of credit and the issuing bank's agreement to follow the terms and conditions of the model letter established by the Office. To this end, the Office will provide applicants with a model letter of credit.

An entity that is acceptable for the letter of credit is:

- 1) Any United Statesbank
 - a) That is insured by the Federal Deposit Insurance Corporation, and
 - b) That has a bank safety rating issued by Weiss of B- or better; or
- 2) Any United States creditunion
 - a) That is insured by the National Credit Union Administration, and
 - b) That has a credit union safety rating issued by Weiss of B- or better; or
- 3) CoBank, so long as it maintains assets that place it among the 100 largest United States Banks, determined on the basis of total assets as of the calendar year immediately preceding the issuance of the letter of credit and it has a long-term unsecured credit rating issued by Standard & Poor's of BBB- or better (or an equivalent rating from another nationally recognized credit rating agency); or
- 4) The National Rural Utilities Cooperative Finance Corporation, so long as it maintains assets that place it among the 100 largest United States Banks, determined on basis of total assets as of the calendar year immediately preceding the issuance of the letter of credit and it has a long-term unsecured credit rating issued by Standard & Poor's of BBB- or better (or an equivalent rating from another nationally recognized credit rating agency); or
- 5) Any non-United States bank:
 - a) That is among the 100 largest non-U.S. banks in the world, determined on the basis of total assets as of the end of the calendar year immediately preceding the issuance of the letter of credit (determined on a U.S. dollar equivalent basis as of such date).
 - b) Has a branchoffice:

- i) Located in the District of Columbia; or
- ii) Located in New York City, New York, or such other branch office agreed to by the Commission, that will accept a letter of credit presentation from the Administrator via overnight courier, in addition to in-person presentations.
- c) Has a long-term unsecured credit rating issued by a widely recognized credit rating agency that is equivalent to a BBB- or better rating by Standard & Poor's; and
- d) Issues the letter of credit payable in United States dollars.

Prior to executing any subgrantee agreement, each applicant using a letter of credit that has been provisionally awarded shall obtain an irrevocable standby letter of credit that meets the requirements established in the model letter of credit and documentation and in a value of no less than 10% of the subaward amount. The provisional subgrantee must commit to maintain the letter of credit in the amount of 10% of the subaward until it has demonstrated to satisfaction of the Office that it has completed the buildout of 100% of locations to be served by the project or until the period of performance of the subaward has ended, whichever occurs first.

The applicant will also be required to provide, with its letter of credit, an opinion letter from legal counsel clearly stating, subject only to customary assumptions, limitations, and qualifications, that in a proceeding under Title 11 of the United States Code, 11 U.S.C. § 101 et seq. (the "Bankruptcy Code"), the bankruptcy court will not treat the letter of credit or proceeds of the letter of credit as property of the subgrantee's bankruptcy estate under Section 541 of the Bankruptcy Code.

3.2.3 Performance Bond

Applicants choosing to use a performance bond must submit a letter from a company holding a certificate of authority as an acceptable surety on federal bonds as identified in the U.S. Department of Treasury Circular 570 committing to issue a performance bond to the prospective subgrantee. The letter shall at a minimum provide the dollar amount of the performance bond.

Prior to executing any subgrantee agreement, each provisionally awarded subgrantee using a performance bond shall obtain a performance bond that meets these requirements, is satisfactory in all respects to the Office, and in a value of no less than 10% of the subaward amount. The provisional subgrantee must commit to maintain the performance bond in the amount of 10% of the subaward until it has demonstrated to satisfaction of the Office that it has completed the buildout of 100% of locations to be served by the project or until the period of performance of the subaward has ended, whichever occurs first.

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

3.3 Cost Management

3.3.1 Affordability

Subgrantees cannot charge long-drop fees, special connection fees, or any other non-recurring fees to users that subscribe to either of the plans discussed in this section.

3.3.2 Low-Cost Service Option

Subgrantees are required to offer not less than one low-cost broadband service option for eligible subscribers. An eligible subscriber is defined as any household seeking to subscribe to broadband internet access service that is eligible for FCC's Lifeline Program⁵.

It is important to note that IIJA is prohibited from regulating rates charged for broadband services. The low-cost option is the provider's program rate for such service but must provide service equal to or greater than 100/20 Mbps and latency performance of no more than 100 milliseconds. Subgrantees that had pre-existing programs that met these requirements were able to propose existing plans as part of their grant proposals.

3.4 Project and Operations Management

3.4.1 Technical and Operational Capability

Subgrantees must certify and demonstrate that they are technically and managerially qualified to complete and operate any awarded project and that they will use an appropriately skilled workforce.

3.4.2 Construction Timeline

Subgrantees must deploy the planned broadband network and begin providing service to each customer that subscribes to broadband service within the project area within four years of the date of execution of the subgrant agreement. Awards to selected projects will be made after NTIA's approval of Kentucky's Final Proposal for the BEAD program.

 $^{^{\}rm 5}$ Lifeline eligibility criteria are defined in 47 CFR §54.409.

Limited extension of completion deadlines may be granted, if requested, and after consultation and approval by NTIA.

3.4.3 Compliance with Industry-Standard Practices

Applicants must demonstrate a plan for compliance with—and the technical knowledge, experience, and capacity to meet—industry-standard network resiliency, hardening, and risk mitigation practices. These should address, at a minimum:

- Flooding
- Extreme temperatures
- Tornadoes and Severe ThunderstormWinds
- To address these, applicants will be required to meet, at a minimum, the following standards:
- Telcordia Blue Book Manual of Construction Procedures SR-1421
- FEMA Building Science Resource Library
 - FEMA P-348 Protecting Building Utility Systems from Flood Damage
 - FEMA P-2181 Flood Mitigation Handbook for Public Facilities
 - FEMA P-2062 Guidelines for Wind Vulnerability Assessments of Existing Critical Facilities
- Kentucky State, Regional, and local Hazard Mitigation Plans.

If applicants cannot meet any of these standards because of factors outside of their control, such as requirements imposed by pole owners that differ from these standards, applicants will have the opportunity to provide a clear explanation for why this is the case. the Office will evaluate the explanation given to determine whether any exception should be provided to ensure the standards are met to the greatest extent possible.

Grantees will be required to provide the Office with a disaster recovery and mitigation plan for approval, as described further in Section 7.17.

3.4.4 Certification of Compliance with Relevant Laws and Regulations

Subgrantees must comply with all applicable federal, state, and local laws and regulations. These include, **but are not limited to**:

- Build America, Buy America Act (BABA)
- Secure and Trusted Communications Networks Act
- Clean Air Act
- Clean Water Act
- Kentucky Transportation Cabinet (KYTC) Permitting Policies⁶

⁶ https://transportation.ky.gov/Organizational-Resources/Policy%20Manuals%20Library/Permits.pdf

 KYStateHistoricPreservation(SHPO)Section106 consultation requirements⁷

Furthermore, applicants/subgrantees must certify that they agree to refrain from undertaking any construction activities until the applicant/subgrantee or its contractors/subcontractors have submitted all applicable permits and clearances to the Office. For instance, before the Office provides a subgrantee with the notice to proceed with construction, discussed in Section 7.3, the subgrantee must submit and receive approval from the Office on all permits and clearances required for construction.

The following subsections detail some of these laws and regulations as they relate to the program, including steps beyond certification that applicants must take to demonstrate compliance as a part of their applications to the Office. Note that the information in this section should not be considered exhaustive, and it is the responsibility of applicants to ensure full compliance with all laws and regulations.

3.4.5 Build America, Buy America Act (BABA)

Subgrantees must comply with BABA and will be required to provide further information supporting these compliance plans. Some of the most vital provisions of BABA include:

- Iron and Steel Products: That all iron and steel products utilized by the applicant or any contractors and subcontractors in its Proposed Project have undergone all manufacturing processes, from the initial melting state through the application of coatings, in the U.S. unless a waiver is granted.
- Manufactured Products: That all manufactured products, including fiber optic
 cables used in its BEAD funded project such products were (a) manufactured in
 the U.S. and that the manufactured products contain U.S. components
 comprising greater than 55% of the total cost of all components of the
 manufactured product.
- Construction Materials: For construction materials, the applicant and its contractors must certify that construction materials including but not limited to non-ferrous metals; plastic and polymer- based products (including polymers used in fiber optic cables); glass (including optic glass); lumber; and drywall used by the applicant, and any contractors and subcontractors have undergone all manufacturing processes domestically.
- Limited General Applicability Waiver: In August 2023, DOC published a Limited General Applicability Waiver for the BEAD program outlining which construction components would be covered under a waiver of the BABA

⁷ https://heritage.ky.gov/compliance/Pages/overview.aspx

requirements.14

DOC waives the Buy America Preference for all electronics in BEAD program projects, except for the following four categories of electronics:

- Optical Line Terminals (OLTs) and Remote Optical Line Terminals (rOLTs)
- OLT Line Cards
- Optic Pluggables
- Optical Network Terminals/Units (ONT/Us) and Optical Network Units

For these 4 categories, DOC waives the 55 percent cost of components requirement and provides specific guidance regarding manufacturing processes that must occur in the United States for these categories to be considered "produced in the United States."

3.4.6 Secure and Trusted Communications Networks Act

Applicants are prohibited from obligating or expending loan or grant funds to procure or obtain, extend a contract to procure or obtain, or enter a contract to procure or obtain equipment, services, or systems that use "covered telecommunications equipment" produced by:⁸

- Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
- Video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
- Telecommunications or video surveillance services provided by such entities or using such equipment.
- Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the FBI, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a foreign country.

For the full list of "covered equipment or services" published by the FCC, Applicants should consult the published list available at https://www.fcc.gov/supplychain/coveredlist.

3.4.7 Labor Standards and Protection

Applicants should demonstrate a record of/ plans to follow Federal labor and employment laws and certify their compliance with such laws with the Office.

⁸ https://www.commerce.gov/sites/default/files/2024-02/BABA%20Waiver%20Signed.pdf

3.5 Compliance and Communication

Effective compliance and communication are vital components of the successful management and implementation of BEAD-funded projects. Subgrantees are required to adhere to all statutory and regulatory requirements set forth in the BEAD NOFO and program guidelines. Clear communication channels are established to facilitate transparency and accountability, ensuring all stakeholders are consistently informed about project progress and compliance.

3.5.1 Compliance with Grant Agreement and Cooperationwith Subgrantee Obligations

Subgrantees must enter into a Grant Agreement (GA) with the Office. Additionally, subgrantees must comply with reporting requirements and post-award monitoring to maintain continued eligibility for disbursement of grant funds. Additional terms may be required by NTIA/Department of Commerce. All projects will include a retainer equal to 10% of awarded funds to be withheld until project completion and until all close-out documents and reporting requirements are submitted and approved. To the extent necessary, the Office reserves the right to create additional requirements that provisional subgrantee must fulfill prior to disbursement offunds.

3.6 Environmental Impact

3.6.1 National Environmental Policy Act

The National Environmental Policy Act (NEPA) requires the NTIA to analyze the potential environmental impacts of projects funded under the BEAD Program. NEPA review will be required for every project funded through the BEAD Program and must be completed before any awarded project canbegin.

Levels of Environmental Review

- Categorical Exclusion (CATEX): CATEXs are issued for defined actions that the agency has determined do not individually or cumulatively have a significant effect on the environment. An analysis of the environmental considerations of the proposed actions must be completed by NTIA to determine whether a CATEX can apply.
- Environmental Assessment (EA): An EA will be prepared for projects that do not qualify
 for a CATEX, and when the significance of the project's environmental impact is not
 clearly established. Should environmental analysis find a project to have no significant
 impacts on the quality of the environment, a Finding of No Significant Impact (FONSI)
 is issued. If environmental analysis finds that actions could have significant impact,
 an EIS would be required.

• Environmental Impact Statement (EIS): An EIS will be prepared for projects when the action will likely have a significant effect on the environment. This is the most comprehensive form of NEPA analysis. The final decision is documented in a Record of Decision (ROD), which codifies the final decision made, whether to approve the project or not, and the basis for that decision.

Subgrantees may use the NTIA's Permitting and Environmental Information Application⁹ and Permitting and Environmental Information Tool (APPEIT)¹⁰ to identify environmental considerations in a project area. The NTIA Permitting and Environmental Information Application provides access to data from multiple publicly available sources, including federal review, permitting, and resource agencies. The application may be used for informational purposes and is intended to assist users with preliminary identification of areas that may require permits or planning to avoid potentially significant impacts to environmental resources subject to the National Environmental Policy Act (NEPA) and other statutory requirements.

3.6.2 Environmental and Historic Preservation

The National Environmental Policy Act (NEPA) and the National Historical Preservation Act (NHPA) require that NTIA analyze the potential environmental impacts of projects funded under the BEAD Program. NEPA analysis will be required for every project funded through the BEAD Program—regardless of who owns the land that must be accessed—and must be completed before any awarded project can begin. An expanded fact sheet on NEPA and NHPA can be found here.

Applicants must certify that they will comply with NEPA and NHPA and provide any required materials as a part of the application process. Preliminary awardees will be required to complete an environmental questionnaire during post-award as part of the grant agreement materials before any pre-construction activities may begin. Materials may include information beyond what is required as a part of the Proposed Project creation process, outlined in Section 4.1, suchas:

 Detailed information on how each Proposed Project will be implemented. As an example, this may include details on ground disturbance area and depth and installation of features such as concrete pads, equipment sheds, or emergency

⁹ https://www.commerce.gov/sites/default/files/2024-02/BABA%20Waiver%20Signed.pdf

¹⁰ ArcGIS Pro Permitting and Environmental Information Tool (APPEIT) Project Package https://nbam.ntia.gov/content/37fa42c6313e4bdb9d8a9c05d2624891/about

- generators with specified fuel storage capacity.
- Maps and photos, including ground-level and aerial photographs, with project boundaries, sites, routes, and activities clearly marked.

4. Subgrantee Obligations and Post Award Monitoring

Subgrantees must comply with post-award monitoring and reporting requirements to maintain continued eligibility for disbursement of grant funds. Subgrantees are responsible for active technical, financial, and project management of awarded projects through their own staff and or by hiring and managing well-qualified contractors. Subgrantees should also expect to cooperate with technical and financial monitoring and review provided by the Office contractors and staff.

4.1 Notice to Proceed with Exempt Activities (NTPE)

Prior to a subgrantee making any eligible expenditures, a written NTPE from the Office will be required. As part of this process, subgrantees must provide the Office, as part of their Grant Disbursement Agreement, required documentation including but not limited to debarment review forms, project bank accounts, environmental compliance requirements, and audit compliance plans. Once the NTPE is issued, subgrantees may then begin pre- construction activities, which involves expenditures on "soft cost" items such as engineering functions, permit applications/right-of-way practices, and associated logistical efforts.

4.2 Engineered Design and Notice to Proceed with Construction (NTPC) Requirements

Following the issuance by the Office of an NTPE, but prior to requesting the NTPC, subgrantees must submit an engineered design to the Office. Included in this NTPC process, the Office requires subgrantee to provide copies of any DOH permits, any other applicable permits, clearances, applicable Dig Once Notifications, pole attachment agreements, and applicable bonds as well. Should a subgrantee's project occur on private property or property outside of the ROW, the Office requires the subgrantee to provide evidence of any required easements or clearances as well. For projects requiring underlying municipal, county, or State, or Federal agency approvals, the Office requires subgrantees to submit evidence of suchdocumentation.

Furthermore, the Office shall provide subgrantees with specific Engineered Design Requirements detailing guidelines for the designs required to be submitted. Included in this process, and to request an NTPC from the Office, subgrantees must provide a Network Design Certification form, a Design Project Checklist, and a Detailed Design Checklist. the Office requires designs to be prepared under the review of a Professional Engineer (PE), or an engineer with substantial demonstrated experience provided NTIA does not issue guidance contrary to this. the Office requires credentials to be submitted as part of this.

4.3 Grant Funds Disbursement and Management

Subgrantees are expected to maintain eligibility for grant funds disbursement through proper financial management and adhering to criteria outlined in the grant agreement.

4.3.1 Invoice Submittals

Subgrantees must adhere to the following guidelines regarding invoice submittals:

- 1. Subgrantees must provide proof of payment to vendors and lien waivers prior to submitting invoices.
- 2. Subgrantees must submit invoices in a sequential order corresponding to the subgrantee's matching funds report or grant disbursement form.
- 3. In cases where an invoice is not 100% used in a single matching funds report or grant disbursement, subgrantees must include a clear running total marked up on the invoice.

4.3.2 Grant Disbursement Requests

The Office requires from subgrantees submission of proof of expenditures on eligible costs for review prior to reimbursement and requires lien waivers for each invoice greater than or equal to \$2,500.

Generally, to be eligible for grant disbursements, subgrantees:

- 1. Must comply with post-award monitoring and reporting requirements.
- 2. Are responsible for active technical, financial, and project management of the awarded project.
- 3. Must cooperate with technical and financial monitoring and review.
- 4. Shall submit engineered designs to the Office prior to reimbursement.
- 5. Shall submit proof of expenditures on eligible costs for review prior to reimbursement.

4.3.3 Budget Amendments

Upon full execution of a subgrantee's grant agreement with the Office, an established budget from the approved Project will be used for monitoring project fund expenditures. Any changes to this budget, including expense category shifts, will require submission of

a proposed budget amendment. Upon approval by the Office, this will serve as the new budget baseline. The ability to make budget amendments is subject to the Office approval and guidance and/or approval from NTIA.

4.3.4 Clawback/Recoupment of Funds

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

The Office will also reserve the right to disallow costs and recover funds disbursed based on audit or review, even following closeout of the Grant Agreement with subgrantees. The Office will specify that failure to substantially meet performance measures may result in suspension of reimbursement payment, termination of the Grant Agreement with the Office, and/or prohibit the subgrantee from being eligible to apply for future allocations until such time as the failures are resolved. The Office shall provide notice and an opportunity for subgrantees to cure any failures or deficiencies within 30 days or such other reasonable time as may be specified in the notice. If the subgrantee should fail to cure during the designated period, the Office shall have the discretion to take one or more actions, such as:

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

Regarding recapture provisions in the subgrantee agreement with the Office, the Office shall reserve the right to recapture funds remaining due to cost underruns.

4.4 Reporting and Compliance Requirements

4.4.1 Compliance with Federal Funds Obligations

In general, recipients and subrecipients of federal funds must comply with IIJA/BEAD funding recipient obligations, in addition to reporting obligations. Subgrantees should expect to comply with requirements of other applicable federal statutes, regulations, and executive orders applicable to recipients of federal funds. Applicants should consider how and whether certain aspects of these requirements may apply.

Subgrantees will be subject to audit or review by the NTIA, the Department of Commerce Office of Inspector General, or another authorized federal agency at any time.

Subgrantees will comply with the reporting requirements above as set forth in the BEAD NOFO as well as comply with obligations as set forth in 2 CFR Part 200 and the Department of Commerce Financial Assistance Standard Terms and Conditions.

Regarding the 2 CFR Part 200 Uniform Guidance, there may be different requirements for Internet Service Provider (ISP) subgrantees under fixed amount awards versus non-ISP subgrantees concerning property acquired with federal awards, treatment of program income, procurement, and other items pending further guidance by the NTIA. NTIA has advised Eligible Entities such as the Office to proceed as though the exceptions to those requirements will apply to subgrantees. As such the Office intends to avail subgrantees of the 2 CFR Part 200 exceptions and adjustments that NTIA has proposed to apply in the BEAD program. These requirements will be outlined in compliance guidance that will be communicated through the Office website and grant agreement materials. As part of the transparency and accountability requirements of the Program, subgrantees will also establish and widely publicize telephone numbers and email addresses for the subgrantees' internal ethics office (or comparable entity) for the purpose of reporting waste, fraud, or abuse in the Program.

Subgrantees are required to report any instances of fraud, waste, or abuse to the U.S. Department of Commerce Office of Inspector General (OIG).

The Office and subgrantees alike will be subject to the whistleblower rights and remedies established under 41 USC § 4712, wherein subgrantee employees may not be discharged, demoted, or otherwise discriminated against as a reprisal for disclosing information the employee reasonably believes to be evidence of gross mismanagement, waste, abuses of authority and dangers to public safety, violations of law, rule, or regulations related to a federal contract or grant. Applicants will be required to inform employees and contractors in writing of these whistleblower rights.

This is not a comprehensive list of federal funding obligations. Subgrantee obligations are more fully described in the Office's Guide to Reporting and Compliance Obligations for Kentucky BEAD Broadband Investment Plan Subrecipients. Applicants should review this Guide as well as the applicable guidance provided, and requirements as identified by the NTIA and the Department of Commerce.

4.4.2 Timely Subgrantee Reporting Mandates

As an exhibit to its grant agreement with subgrantees, the Office will require a form that complies with the BEAD NOFO's regular financial and performance reporting requirements for subgrantees. The Office will specify in its grant agreement and compliance guidance materials that subgrantees submit the information in this form on at least a semi-annual basis or greater frequency to the Office for the duration of the subgrant.

In addition to the periodic reporting requirements communicated to subgrantees, the Office shall also convey any record retention requirements and shall build into its grant agreements with subgrantees the requirement that subgrantees provide any necessary information to the Office as may be requested to fulfill any additional annual performance reporting requirements as well.

4.4.3 Record Retention

Regarding record retention requirements, the Office will prescribe that subgrantees retain financial records, supporting documents, and any other records pertinent to the grant agreement for a period of five years from the date of submission of the final expenditure report or payment of final invoice.

As part of the subgrantee's participation in the program, it will allow the Office, along with the NTIA/Commerce, Inspector General, Comptroller General, State Auditors, program auditors, and other duly authorized representatives, the right of timely and unrestricted access to books, documents, papers, or other records as well as reasonable access to past and present personnel for purposes of audits, examinations, and other grant program monitoring activities.

Regarding closeout, the Office may condition closeout of the subgrantee award on receipt of the subgrantee's final semi-annual report, confirmation that all monitoring and audit findings have been formally addressed and resolved, and receipt of a final project audit or review. The Office requires subgrantees to provide any outstanding financial, performance, or other required reports within 90 days after the end date of the period of performance.

4.4.4 Audits/Monitoring

Regarding audits and monitoring, the Office will require subgrantees to agree as a condition of the award and as part of subgrantees' grant agreement with the Office that subgrantees will cooperate with both the Office and NTIA/Department of Commerce with respect to any audit of the Office's programs or the award. Additionally, the Office will require subgrantees to review, understand, and comply with the Kentucky State Accountability requirements of the Kentucky Code Section 12-4-14, as applicable.

4.4.5 Civil Rights Compliance

The Office certifies that its selection of subgrantees will account for and satisfy each of the following authorities:

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

4.4.6 Speed Testing

The Office generally shall require of subgrantees compliance with the standards and testing protocols for speed and latency established by the FCC in prior grant programs, requiring of subgrantees that such testing be performed from the customer premises of an active subscriber to a remote test server at an end-point consistent with the requirements for a Commission-designated Internet Exchange Point (IXP). ¹¹

4.4.7 Cooperation with State Broadband Mapping

Subgrantees must agree to provide information about broadband availability, pricing, and speeds in response to data collection requests from the Office on an annual basis. Information must be reported statewide at the address level for all broadband networks operated by the subgrantee. The Office intends to coordinate information requested with required reporting under the Federal Communications Commission's Broadband Data Collection initiative to minimize reporting burdens.

¹¹ Department of Commerce, "Tailoring the Application of the Uniform Guidance to the BEAD Program; Request for Comments, July 5, 2023, 88 FR 42918. https://www.govinfo.gov/content/pkg/FR-2023-07-05/pdf/2023-14114.pdf

4.5 Cybersecurity and Supply Chain Risk Management

4.5.1 Cybersecurity

Prior to allocating any grant funds to subgrantees, the Office will require a subgrantee to attest that:

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

4.5.2 Supply Chain Risk Management (SCRM)

Prior to allocating any grant funds to subgrantees, the Office will require each prospective subgrantee to attest that:

- 1. The prospective subgrantee has a SCRM plan (referenced as "the plan" for the duration of this subsection) in place that is either:
 - a. operational, if the prospective subgrantee is already providing service at the time of the grant; or
 - b. ready to be operationalized, if the prospective subgrantee is not yet providing service at the time of grant award;'
 - The plan is based upon the key practices discussed in the NIST publication NISTIR 8276, Key Practices in Cyber Supply Chain Risk Management: Observations from Industry and related SCRM guidance from NIST, including NIST 800-161, Cybersecurity Supply Chain Risk Management Practices for Systems and Organizations and specifies the supply chain risk management controls being implemented.
 - 3. The plan will be reevaluated and updated on a periodic basis and as events warrant.

4. The plan will be submitted to the Office prior to the allocation of funds. If the subgrantee makes any substantive changes to the plan, a new version will be submitted to the Office within 30 days. The Office is required to provide a subgrantee's plan to NTIA upon NTIA's request.

To the extent a subgrantee relies in whole or in part on network facilities owned or operated by a third party (e.g., purchases wholesale carriage on such facilities), such subgrantee will be required to obtain the above attestations from its network provider with respect to cybersecurity practices and supply chain risk management practices.

4.5.3 Disaster Recovery and Preventative Maintenance Plans

Before network turn-up, subgrantees must provide and receive approval from the Office on a Disaster Recovery and Preventative Maintenance Plan. the Office may request future edits to these plans to account for changing weather conditions within the Commonwealth of Kentucky.

5. Performance Measures

Eligible Entities and subgrantees must ensure that BEAD funded networks comply with the speed, capacity, latency, and availability performance standards outlined in the BEAD NOFO and IIJA. Eligible Entities must confirm that each subrecipient's measurement report adheres to these requirements in their Semiannual Report (SAR) to NTIA.¹²

5.1 Measurement Obligation

All Eligible Entities and Subgrantees have an obligation to administer the Federal award in accordance with the formal agreements and related expectations. This includes ensuring compliance with the network performance standards described in the NOFO.

The subgrantee's obligation to provide broadband service meeting these network performance standards continues for the duration of the Federal Interest Period¹³, and the performance reporting obligations apply only during the period of performance. Performance testing much

¹² BEAD Program: Performance Measures for BEAD Last-Mile Networks Policy Notice Primer.

¹³ See Policy Notice: Tailoring the Application of the Uniform Guidance to the BEAD Program, p. 9, https://broadbandusa.ntia.doc.gov/sites/default/files/2023-

^{12/}BEAD_Policy_Notice_of_Uniform_Guidance_Part_200_Exceptions_Related_Issues.pdf (describing the Federal Interest Period). Accordingly, under certain circumstances, an Eligible Entity may have legitimate basis to request a subgrantee to provide performance data demonstrating its compliance with these performance standards after closeout. This Public Notice does not address any such situation nor the factual circumstances that might warrant such a request.

be conducted annually during the period of performance, with Eligible Entity summarizing results in the SAR.

5.2 Technical Performance Testing

Technical testing of the BEAD funded networks must be conducted (once operational) to measure performance.

5.2.1 Testing Subjects

A subgrantee must test a random sample of their active subscribers in each state for each committed speed tier and technology. These sample sets should come from the National Broadband Map, using locations reported to the FCC Broadband Data Collection (BDC). NTIA has provided the following table (also available as part of the Performance Measures Policy Notice & Primer issued on Friday, September 19, 2025, and available here):

Active Subscribers	Minimum Number of Test Locations
50 or fewer	5 locations
51 – 500	10% of locations
500 or greater	50 locations
Test Locations per Active Subscriber Count	

5.2.2 Timing of Testing

Network performance testing must be done annually throughout the period of performance for inclusion in the first SAR of the year and prior to subgrant close-out. Reporting deadlines will be set to allow subgrantees sufficient time to complete testing and enable review and inclusion in SAR. Speed and latency tests should be conducted at their designated intervals over one week (including weekends) between 6:00pm and 12:00am local time.

5.3 Measurement Methodology

There are three methods that can be deployed to measure network performance. It is important to note that for privacy and reproducibility reasons these are active measurements, meaning that devices or software are sending packets to servers located at the edge of the provider network.

The methods are:

- 1. Standardized CPE WAN Management Protocols (CWMP)
- 2. Software included on a supplied residential gateway; or

3. Network measurement devices installed at subscriber locations. Please note: Subgrantees must obtain subscriber consent to deploy separate measurement specific hardware on customer premises.

5.4 Speed Testing

A speed test is a single measurement of download or upload speed of at least 15 seconds duration between a test subject location and a specific remote server. ¹⁴

The test must be conducted once per hour, at the beginning of each hour, for one week.

80% of measurements must be at or above 80% of the committed speed, with a minimum of 80 megabits per second (Mbps) download and 16 Mbps upload for Broadband Serviceable Locations (BSLs), as part of the subgrantee agreement.

Subgrantees must submit the data defined in the Policy Notice Primer to ensure speed test compliance.

5.5 Latency Testing

A latency test is a roundtrip measurement of either a single User Datagram Protocol (UDP) packet or group of three Internet Control Message Protocol (ICMP) or UDP packets sent simultaneously. Subgrantees must submit the data to the Eligible Entity in their measurement reports to ensure latency testing compliance.

- The test must be conducted once per minute for one test hour
- 95% of measurements must be at or below 100 milliseconds

5.6 Availability/Reliability Tests

Subgrantees must include a narrative response in their measurement reports to demonstrate availability/reliability compliance. This response is submitted to the Eligible Entity, who can request additional information if needed.

Outages lasting over 48-hours, regardless of if they were reported by subscribers, over the selected 365-day period must be reported.

5.7 Transparency and Reporting

Subgrantees are obligated to comply with all grant award and monitoring requirements. A key element is reporting performance data and the transparency of that information.

¹⁴ NTIA adopts a minimum testing duration of 15 seconds based on recommendation from the FCC, with the purpose of eliminating confusion about valid speed test durations.

To comply with transparency and reporting requirements subgrantees are required to:

- Document methods, standards, and parameters used in measuring network performance in each submission, denoting changes.
- Submit this documentation in a measurement report to the Eligible Entity for publication on their website.
- Retain data for inspection by the Eligible Entity or NTIA during the period of Performance.
- Provide an official certification of accuracy for their measurement report.

5.8 Compliance

A Subgrantee is compliant if they perform all the following:

- Meet all four thresholds (Download, Upload, Latency, Reliability).
- Use a compliant testing methodology.
- Report measurement results to the Eligible Entity on time and in the required CSV format, using a separate file for each technology and speed tier.
- Comply with transparency requirements.

6. Definitions

"Active subscriber" The term "active subscriber" means a household or business at a BEAD location that is currently subscribing to broadband service delivered over the BEAD Funded Network.

"Application" means Subgrantee's approved Kentucky BEAD Grant Program application.

"Assistant Secretary" means the Assistant Secretary of Commerce for Communications and Information and NTIA Administrator.

"Award Funds" means Grant Funds and Matching Funds (i.e., all the funds associated with this Agreement).

"BABA" means the Build America, Buy America Act, which as part of the Infrastructure Investment and Jobs Act, Pub. L. 117-58, 135 Stat. 429, 70901-70927, establishes domestic content procurement preference requirements for Federal financial assistance projects for infrastructure, including the BEAD Program, consistent with Section 70912(2) of the Infrastructure Act.

"BEAD location" The term "BEAD location" means a broadband serviceable location (BSL) served by a Funded Network.

- **"BEAD NOFO"** means the BEAD Program Notice of Funding Opportunity issued by NTIA on May 13, 2022 (Funding Opportunity Number NTIA-BEAD-2022) .
- **"BEAD Program"** means the Broadband Equity, Access, and Deployment Program, authorized by the Infrastructure Investment and Jobs Act of 2021, Division F, Title I, Section 60102, Public Law 117-58, 135 Stat. 429 (November 15, 2021).
- **"Broadband Service"** has the meaning given the term "broadband internet access service" in Section 8.1(b) of title 47, Code of Federal Regulations, or any successor regulation.
- **"CAI"** means a community anchor institution as identified in the post_challenge_cai.csv.
- **"Closeout Date"** is the date when the Office determines Subgrantee has satisfied all state and federal reporting requirements related to the Project and completes close out of this award pursuant to 2 CFR 200.344.
- **"Committed speed tier"** The term "committed speed tier" means the lowest combination of download and upload speeds that a provider has committed to deliver for a specific BEAD project as part of its subgrant conditions. Committed speed tier may not be less than 100 Mbps downstream and 20 Mbps upstream.
- "DOC" means the United States Department of Commerce.
- **"DOC ST&Cs"** means the Department of Commerce Financial Assistance Standard Terms and Conditions (Nov. 12, 2020) available at

https://www.commerce.gov/sites/default/files/2020-11/DOC%20Standard%20Terms%20and%20Conditions%20-%2012%20November%202020%20PDF_0.pdf

- **"End User"** means a Broadband Serviceable Location included within the scope of Subgrantee's Application.
- **"Eligible Subscriber"** means any household seeking to subscribe to broadband internet access service that is eligible for the FCC's Lifeline Program.
- **"Federal Grant Officer"** means the NIST grant officer identified on Kentucky's BEAD Program CD-450.
- **"Funded Network"** means a broadband network deployed and/or upgraded with BEAD Program funds.7
- **"Federal Interest Period"** is the period during which Subgrantee will hold in trust for the beneficiaries of the BEAD Program all real property and equipment acquired or improved in connection with this Agreement. The Federal interest in all real property and equipment acquired or improved as part of this Agreement will start upon acquisition or improvement thereof and continue for 10 years after the year of the Closeout Date. For example, if this

award is closed out in 2027, regardless of the month, the Federal Interest Period will last until December 31, 2037.

"Grant Date" is the date of the last signature when all Parties have fully executed this Agreement.

"Grant Funds" means the BEAD funding awarded for this Project as identified in Attachment 1 (the Total Amount of the Federal Award committed to Subgrantee by the pass-through entity).

"Initial Proposal" means Kentucky's BEAD Initial Proposal, as approved by NTIA on June 17, 2024, and as it may subsequently be amended, available at https://broadband.ky.gov/BEAD/Pages/Initial-Proposal.aspxhttps://connect.la.gov/bead/.

"LCSO" or "**Low-Cost Service Option"** refers to the requirement that Subgrantees offer eligible subscribers a low-cost service option. An eligible subscriber is defined as any household seeking to subscribe to broadband internet access service that is eligible for FCC's Lifeline Program¹⁵.

The low-cost option is the provider's program rate for the service, which must be equal to or greater than 100/20 Mbps with latency performance of no more than 100 milliseconds.

"Matching Funds" means funds or in-kind contributions provided by Subgrantee or the Office to meet the BEAD Program's non-federal match requirement

"Middle Mile Infrastructure" A) means any broadband infrastructure that does not connect directly to an end-user location, including a CAI; and (B) includes—(i) leased dark fiber, interoffice transport, backhaul, carrier-neutral internet exchange facilities, carrier-neutral

submarine cable landing stations, undersea cables, transport connectivity to data centers, special access transport, and other similar services; and (ii) wired or private wireless broadband infrastructure, including microwave capacity, radio tower access, and other services or infrastructure for a private wireless broadband network, such as towers, fiber, and microwave links (per BEAD NOFO, pgs. 13-14).

"NEPA" is the National Environmental Policy Act of 1969 (42 U.S.C. 4321, et seq.)

"NHPA" is the National Historic Preservation Act of 1966 (16 U.S.C. 470, et seq.)

"NIST" is the National Institute of Standards and Technology, the entity within the United States Department of Commerce that administers BEAD Program grant.

"NTIA" is the National Telecommunications and Information Administration, the entity within the United States Department of Commerce responsible for implementing the BEAD Program.

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¹⁵ Lifeline eligibility criteria are defined in 47 CFR §54.409.

- "Office" means the Kentucky Office of Broadband Development.
- "Pass-through Entity (PTE)" Means the Eligible Entity Recipient of the BEAD award (i.e. the Department), or any subgrantee or subrecipient of the Department that provides a subaward to a subrecipient to carry out part of a federal program.
- **"Program Income"** is income directly generated by a supported activity or earned because of the federal award during the period of performance.
- **"Project"** means the planned and actual installation of broadband facilities and the provision of Qualifying Broadband Service as described in Subgrantee's Application.
- "Project Completion Criteria" are the minimum criteria for project completion set forth in Attachment 3 [Subgrantee's approved Application (and any material changes approved by the Office, if applicable)]
- **"Project Property"** means real property or equipment acquired or improved using Award Funds.
- **"Sample set"** The term "sample set" is the collection of all test subjects within the same state or territory, served by the same provider using the same broadband technology subject to the same committed speed tier.
- **"Subaward"**, as defined in the Federal Uniform Guidance for Federal Awards, 2 CFR 200.1 ("Uniform Guidance"), means an award provided by a pass-through entity to a subrecipient for the subrecipient to carry out part of a federal award received by the pass-through entity. It does not include payments to a contractor, beneficiary, or participant.
- "Subgrantee/Subrecipient" means an entity that receives Grant Funds.
- **"Test subject"** The term "test subject" means an active subscriber who has been randomly selected and chosen to participate in network performance measurement.
- **"UGPN"** is the Uniform Guidance Policy Notice published by NTIA on December 26, 2023, titled "Policy Notice: Tailoring the Application of the Uniform Guidance to the BEAD Program."

7. Appendices

Appendix A: Application Review and Award

A.1 Application Information Requests

During the pre-application or full application review process, the Office (including through its contracted technical reviewers) may request clarification from applicants regarding information submitted, additional supporting documentation, or opportunities to cure minor deficiencies in the application materials. The Office may also make requests for clarification or additional supporting documentation related to application materials.

The Office may initiate a request through the messaging function within the grant portal to the primary contact listed in the application. Requests will include a deadline to respond to the request, which will typically be between one and four business days. Responses to requests will become part of the application. Requests related to some elements of a proposal that exceed the timeframe to respond may result in deferral or denial of a funding decision for the Project.

The Office may review submitted applications based solely on information submitted by the applicants by the application deadline, without making additional requests. If made, requests will be to further the Office's interests in considering a broad range of applications and bringing improved broadband to as many eligible locations as possible in a technically sound and cost-effective manner.

A.2 Project Scoring

Provisional awards will be selected from Proposed Projects from qualified applicants meeting program eligibility requirements. The Office invited all eligible prospective subgrantees to participate in the "Benefit of the Bargain" application process that ran July 7, 2025, through July 28, 2025. Applicants that had previously applied for funds had the benefit of "application rollover", meaning that their original proposal was carried forward in the process and reopened to allow for revisions following the RPN. Subgrantees that joined the process as new applicants had the opportunity to complete new applications.

The application changes were prepared with the consideration that the Primary Scoring Criteria was "Minimal BEAD Program Outlay." To determine Minimal Program Outlay, the Office considered three factors:

- 1. The total BEAD funding required for the project (the total project cost minus the applicant's proposed match).
- 2. The cost per BSL of the project (the total BEAD funding that will be required to complete the project divided by the number of BSLs the project will serve); and
- 3. The combination of the proposals with the lowest overall cost to the Program.

In addition, secondary criteria were evaluated when a project proposed a project cost within 15% of the lowest-cost proposal received for that same general project area on a per BSL basis. If so, competing applications were evaluated to determine comparison on speed of deployment, speed of network, and preliminary/provisional subgrantee status.

A.2.1 Scoring Criteria

Applications will be scored using the approved BEAD Scoring Rubric.

A.2.2 Project Prioritization

The previous definitions and references from the NOFO regarding Project Prioritization and 'Priority Broadband Project' have been stricken and replaced with the following as per the RPN:

A.3 Provisional Award Process

The Provisional Award Process is a key step in completing the full application process for Kentucky's application for BEAD support to maximize internet availability in the Commonwealth.

The Office utilized the project prioritization referenced in A.2.2 and provisionally awarded the best-ranked combination of eligible projects in each Target Region. Limits to this process included the capacity of applicants and the overall budget.

Key points regarding the process:

- Provisional awards exceeding the total available funds will not be made.
- A reserve fund may be required to fund projects in eligible locations that do not have an eligible project.
- Eliminating provisionally awarded Projects that would only serve CAI Target Locations, starting with those having the highest grant cost per Target Location.
- Requesting that applicants modify their provisionally awarded Projects to remove CAIs
 if it appears that removal of the CAIs would materially change the grant cost of the
 provisionally awarded Project.
- Eliminating provisionally awarded Projects that would only serve underserved Target Locations, starting with those having the highest grant cost per Target Location.

- Substituting the alternative Projects that remove underserved locations from provisionally awarded Projects with a mixture of unserved and underserved locations and less than 80% unserved locations.
- Eliminating provisionally awarded Projects that would only serve 80% or more unserved Target Locations, starting with those having the highest grant cost per Target Location.
- Substituting the alternative Projects that remove underserved locations from provisionally awarded Projects with a mixture of unserved and underserved locations and less than 80% unserved locations.
- Eliminating provisionally awarded Projects that would only serve 80% or more unserved Target Locations, starting with those having the highest grant cost per Target Location.

A.4 Potential Award Pro Forma Review

After preliminary award decisions, the Office will require provisional subgrantees to complete a final pro forma cash flow analysis for an 8-year period based on the provisionally awarded Proposed Projects, which will be similar in form and content to the pre-application pro forma cash flows. In addition, the Office will require provisional subgrantees to submit a business plan for the provisionally awarded Projects that includes a plan for marketing and customer acquisition and standing up any new or additional required operational capabilities in the prospectively awarded Projects. the Office will allow provisional subgrantees 21 days to complete these analyses, which may be extended at the Office's discretion. It will review these to confirm sustainability of the prospective project prior to final award.

A.5 Provisional Subgrantee Letters of Credit or Performance Bond

As noted in Section 3.7, prior to entering any subgrantee agreement, each applicant that has been provisionally awarded shall obtain an irrevocable standby letter of credit or performance bond that meets the requirements established in the model letter of credit and documentation and in a value of no less than 10% of the subaward amount. At this step, the provisional subgrantee must obtain an actual letter of credit or performance bond as opposed to the banks, credit unions, or eligible bond issuer's commitment to issue the letter of credit or performance bond that is required during the application process.

The provisional subgrantee will also be required to provide with its letter of credit an opinion letter from legal counsel clearly stating, subject only to customary assumptions, limitations, and qualifications, that in a proceeding under Title 11 of the United States Code, 11 U.S.C. §

101 et seq. (the "Bankruptcy Code"), the bankruptcy court will not treat the letter of credit or proceeds of the letter of credit as property of the subgrantee's bankruptcy estate under Section 541 of the Bankruptcy Code.

A.6 NTIA Approval of Kentucky BEAD Final Proposal

Awards are subject to NTIA's approval of Kentucky's BEAD Final Proposal. The Office will submit its Final Proposal after completion of application review and Project selection.



Appendix. B: Examples of Network Resiliency- Related Considerations

Flood Prone Areas:

Building in areas that are prone to flooding presents a unique challenge when trying to preserve the longevity and usefulness of a network asset. While weighing the factors that could put an asset at risk, planning and taking the appropriate measures will ensure that this asset has a prolonged life span. The following lists considerations that should be considered when planning to deploy in flood prone areas.

- 1. Consult the regional hazard mitigation plan and local authorities to identify any known problem areas within the Regional Planning Districts.
- 2. Review Kentucky Flood Map to identify if any unserved, underserved, or CAI falls within a FEMA defined Special Flood Hazard Area (SFHA).
- 3. Have an emergency preparedness plan in place to deploy resources before and after a major rain event.
- 4. Consult FEMA P-348, Edition 2 Protecting Building Utility Systems from Flood Damage.
 - 5. Perform hydrological survey to determine the best course of action for building constructing new infrastructure.
 - 6. Identify higher areas on the flood plain, when possible, for route planning.
 - 7. Deploy buried infrastructure.
 - a. When deploying manholes or handholes, plan for drainage to expedite water draining, install covers that can be tightly sealed during flood events, and use non-corrosive materials.
 - b. Ensure conduits are water-resistant, and where conduits penetrate vaults, handholes, buildings or risers, the proper seal must be used to prevent waterinfiltration.
 - 8. Anchor and HardenInfrastructure.
 - Foundations need to provide stability to withstand hydrological flow pressures.
 - b. Use concrete footings that are the correct size and depth to prevent movement.
 - c. Reinforce bases with steel or composite materials to enhance their strength and resistance to water movement.
 - d. When using tie downs. Implement a system that connects to nearby structures or anchor points to prevent movement.
 - 9. Consider the following when deploying electrical components:
 - a. Install at a height recommended per local zoning regulations and guidelines.
 - b. If a component is installed outdoors or has the potential to be submerged

- in water, please ensure that the components are placed in a waterproof enclosure of cabinet.
- c. When possible, choose electrical components that are rated for flood prone environments.
- d. If components are exposed to flood waters, please use NEMA rated 6 or 6p type enclosures if possible.
- 10. Consider the following when deploying cabling or passive components:
 - a. Fiber optic cabling and other water-resistant materials are preferred.
 - b. Redundant pathways need to be built in and out of the flood area.
 - c. Use IP68 rated connectors and components.
- 11. Consider the following when deploying buildings, communication huts, or tower locations:
 - a. Building on higher ground is preferred.
 - b. If the building is constructed in or near a flood area, dry floodproofing measures need to be implemented to protect equipment and cabling.
 - c. Risers need to be installed on the most sheltered side of the building, on the downstream side of columns, pilings, and posts.
 - d. Enclose cabling in conduits to prevent damage from water.
 - e. Surround racking, equipment, and generators with dry flooding measures such as raised flooring.
 - f. Install electrical wiring using corrosion-resistant raceway systems that facilitate replacement of conductors exposed to flooding.
 - g. Electrically isolating components installed in areas subject to flooding from components at higher elevations.
 - h. Installing separate branch circuits or feeders that are isolated from the rest of the electrical system and protected using ground fault circuit interrupters (GFCIs).
 - i. Use non-corrosive materials.

Landslide Mitigation

When constructing new infrastructure in areas prone to landslides it's important to evaluate and plan out the potential risks and threats to the newly constructed network assets. By taking the necessary precautions, this will significantly diminish the impact of these risks, thus ensuring the resilience and longevity of the constructed infrastructure. Below are some high-level recommendations made by the Office.

- 1. Consult the regional hazard mitigation plan and local authorities to identify any known problem areas within the Regional Planning Districts.
- 2. Review Kentucky Flood Map Landslide layer to identify the following:
 - a. Unserved, Underserved, or CAI location that fall nearby landslide activity areas.
 - b. Cabling routing of new infrastructure nearby landslide prone areas.
- 3. Develop an emergency responseplan.
 - a. Set up a list of personnel, processes, and procedures that allow your team to quickly act in the event of a landslide event.
 - b. Conduct regular trainings to ensure team members are prepared and can act.
 - c. Establish contingencies to reroute network traffic and service disruptions to prevent extended outage windows.
- 4. Consult with geotechnical engineering and planning personnel about the following to come up with cost effective measured for more resilient infrastructure:
 - a. Native vegetation placement.
 - b. Drainage improvements such as installing permeable membranes.
 - c. Slope stabilization practices such as retaining walls and lessening slopes.
 - d. Debris removal.
 - e. Design foundations that can withstand ground movement and ensure stability.
- 5. Constructing redundant routes to mitigate major outages.

Snowstorm / Ice Mitigation

Snowstorms are a common occurrence within the Commonwealth of Kentucky. With warming temperatures ice might become an emerging threat to infrastructure as the weather transition between snow/sleet and ice begins to creep north. Below are some high-level recommendations made by the Office.

- 1. Consult the regional hazard mitigation plan and local authorities to identify any known problem areas within the Regional Planning Districts.
- 2. Develop an emergency responseplan.
 - a. Set up a list of personnel, processes, and procedures that allow your team to quicklyact.
 - b. Conduct regular trainings to ensure team members are prepared and can act.
 - c. Establish contingencies to reroute network traffic and service disruptions to prevent extended outagewindows.
 - d. Have adequate spare parts, tools, and personnel to address outages.
 - e. Ensure that you have adequate backup generators and fuel to restore services.
- 3. Establish preventive maintenanceplans.
 - a. Perform vegetation maintenance to prevent overgrowth from impacting the infrastructure.
 - b. Conduct regular inspections of the OSP plant to ensure infrastructure is in good standing:
 - i. Check to make sure cable plant is not sagging and pole attachments are secure to poles.
 - ii. Inspect cables and conduits for any vulnerabilities.
 - iii. Wireless components are secure to towers or poles and that there is no signs of damage or corrosion.
- 4. All aerial plant must be constructed utilizing the latest version NESC parameters. The plant should meet or exceed the current standard.
- 5. Proper insulation must be used on any cabinets or building sites.
- 6. De-icing treatments can be used on critical infrastructure.
- 7. Tower infrastructure must be reinforced to withstand heavy loading and extreme ice.