

**Kentucky  
BEAD Program  
Procedures**



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## Introduction

In 2021, Congress passed the Infrastructure Investment and Jobs Act (IIJA)<sup>1</sup>, which launched the Broadband, Equity, Access and Deployment (BEAD) program and Digital Equity program, among others.

This document establishes the program procedures for Kentucky's BEAD Program. 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.

This program 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.

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<sup>1</sup> 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>.

# 1. Definitions

"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 of 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 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).

"BEAD NOFO" means the BEAD Program Notice of Funding Opportunity issued by NTIA on May 13, 2022 (Funding Opportunity Number NTIA-BEAD-2022)

"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.

"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](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.

"Federal Grant Officer" means the NIST grant officer identified on Kentucky's BEAD Program CD-450.

"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.aspx>.

"LCSO" means the Low-Cost Service Option specified in Kentucky's approved Initial Proposal Volume II.

"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.

"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 as a result 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.

"Qualifying Broadband Service" to a location that is not a CAI is Reliable Broadband Service with (i) a speed of not less than 100 Mbps for downloads; and (ii) a speed of not less than 20 Mbps for uploads; and (iii) latency less than or equal to 100 milliseconds. "Qualifying Broadband Service" to a CAI is Reliable Broadband Service with (i) a speed of not less than 1 Gbps for downloads and uploads alike and (ii) latency less than or equal to 100 milliseconds. "Reliable Broadband Service" means broadband service that the Broadband DATA Maps show is accessible to a location via: (i) fiber optic technology; (ii) Cable Modem/Hybrid fiber-coaxial technology; (iii) digital subscriber line (DSL) technology; or (iv) terrestrial fixed wireless technology utilizing entirely licensed spectrum or using a hybrid of licensed and unlicensed spectrum.

"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.

"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."

## 2. Program Overview

### 2.1 Source of Funds and Allocation

The Kentucky Office of Broadband Development will implement 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 CAls. Actual funds awarded will vary 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 selected by the Office for provisional award through the Program will be included in Kentucky's Final Proposal, which is subject to NTIA review and approval.

### 2.2 Eligible Entities

Applicants must have a current statement of existence from the Kentucky Secretary of State and a Letter of Good Standing from the Kentucky Tax division. Applicants 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 are 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.<sup>2</sup> 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. Broadband service must be provided by fiber-optic technology; cable modem/hybrid fiber-coaxial technology; digital subscriber line (DSL) technology; or terrestrial fixed wireless technology utilizing entirely licensed spectrum or using a hybrid of licensed and unlicensed spectrum.

### 2.4 Target Areas

Eligible project geographies will be defined by Census Block Groups (CBGs). Project applications may include one or multiple contiguous or non-contiguous block groups. By

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<sup>2</sup> FCC. Measuring Fixed Broadband – Twelfth Report, January 6, 2023.

<https://www.fcc.gov/reports-research/reports/measuring-broadband-america/measuring-fixed-broadband-twelfth-report>

including a CBG in an application, the prospective subgrantee commits to serving no less than 95% of the eligible unserved or underserved BSLs contained within that CBG if awarded.

## 2.5 Program Phases

The subgrantee selection process will have three phases. All materials provided by applicants must be submitted through an application portal provided by the Office. Materials provided by any other manner may not be considered for review.

1. **Pre-Qualification - Pre-Application.** The application process begins with a pre-application process that serves as a pre-qualification process and notifies the Office of Broadband Development of an applicant's interest in the Kentucky BEAD Program. Applicants will submit pre-applications outlining the technical, financial, and managerial capability of the applicants. The pre-application phase will expedite the review process by collecting the majority of information that applies to all applications.
2. **Full Application.** The list of eligible locations was determined by the state challenge process. Eligible locations have been published and are grouped by Census Block Group. Pre-qualified Applicants may submit full applications.
3. **Award Phase.** Following review of project applications, deconfliction, and revision of applications, the Office will submit the list selected projects to the NTIA as part of the Final Proposal. Following the approval of the Final Proposal, the Office will issue subgrantee agreements to the subawardees selected.

### **3. Program Requirements**

#### **3.1 Construction Timeline**

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

#### **3.2 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.

#### **3.3 Match Requirement**

Applicants 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.

A subrecipient's matching funds must be spent on eligible expenditures. Applicants must commit to matching funds at time of application; no contingent matching sources are allowed. 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.

The rules governing allowable in-kind contributions are detailed and encompass a wide range of properties and services. Applicants are encouraged to thoroughly consider potential sources of in-kind contributions that, depending on the particular property or service and the applicable federal cost principles, could include:

- Employee or volunteer services;
- Equipment;
- Supplies;
- Indirect costs;
- Computer hardware and software; and
- Use of facilities.

In the broadband context this could include, consistent with federal cost principles:

- Access to rights of way;
- Pole attachments;
- Conduits;
- Easements; or
- Access to other types of infrastructure.

### 3.4 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.<sup>3</sup>
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.<sup>4</sup>

<sup>3</sup> Further regulations regarding the acquisition, disposition, and overall accounting for property and equipment are delineated in 2 CFR § 200.439.

<sup>4</sup> 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.

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 not reimbursable for subgrantee internal labor expenditures.

Costs that appear excessive and/or without justification and costs not considered eligible will not be reimbursed. Costs ineligible for the Program may not be paid for with matching funds committed to an award.<sup>5</sup>

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, becketts, lay-up sticks, measuring wheels, measuring sticks, traffic cones, construction traffic control signage), and cable reelstands;
- 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)<sup>6</sup>;

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<sup>5</sup> BEAD NOFO, page 82.

<sup>6</sup> See 47 U.S.C. § 1608 and FCC Covered List at <https://www.fcc.gov/supplychain/coveredlist>.

- 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.<sup>7</sup>
- 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.

### 3.5 Technical and Operational Capability

Applicants 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.

### 3.6 Financial Capacity and Sustainability

Applicants 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 will be financially sustainable.

### 3.7 Letter of Credit or Performance Bond

Applicants must obtain and submit either a letter of credit or performance bond. The letter of credit or performance bond must meet the requirements of the BEAD program as NTIA set forth in the BEAD Program of Notice of Funding Opportunity,<sup>8</sup> and its subsequent conditional programmatic waiver of these requirements<sup>9</sup>, as implemented by the Office.

#### 3.7.1 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 States bank
  - 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 credit union

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<sup>7</sup> BEAD NOFO, page 88.

<sup>8</sup> BEAD NOFO, p. 72-73

<sup>9</sup> <https://broadbandusa.ntia.gov/funding-programs/policies-waivers/BEAD-Letter-of-Credit-Waiver>

- 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 branch office:
    - 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.

### 3.7.2 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.

## 3.8 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.

### 3.8.1 Low-Cost Service Option

Applicants must certify and present their plan for a low-cost service option that will be provided to those who qualified for the Federal Communications Commission’s (FCC) Affordable Connectivity Program (ACP).<sup>10</sup> This plan must be offered and marketed to all such potential subscribers within a Proposed Project. As a part of this, each applicant must also present their specific planned offering and are encouraged to creatively develop this plan to suit their business model provided it meets the minimum requirements included herein. These minimum service requirements include speed and latency requirements that must be met in accordance with the FCC’s 80/80 metric<sup>11</sup>. That is, if the Office or any other entity assigned by the Office tests the end user speeds of these plans, the requirements will only be met if 80% of tests meet or exceed 80% of the required speeds and 95% of latency measurements must

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<sup>10</sup> Eligibility criteria for the Affordable Connectivity Program are available here: <https://www.affordableconnectivity.gov/do-i-qualify/>.

<sup>11</sup> FCC. Measuring Fixed Broadband – Twelfth Report, January 6, 2023. <https://www.fcc.gov/reports-research/reports/measuring-broadband-america/measuring-fixed-broadband-twelfth-report>

be at or below 100 milliseconds round trip. For instance, if the Office runs 100 speed tests at a selection of locations that subscribe to low-cost broadband service plans, then at least 80 of those speed tests must meet 80% of the speed requirements and 95 latency measurements must meet requirements.

Subgrantees must include in their offerings a plan that meets the following specifications.

1. **Total cost.** The plan must not exceed a cost of \$65 per month, inclusive of all taxes, fees, and charges.
2. **ACP participation.** Plan must allow the end user to apply ACP subsidy to the service price.
3. **Offering time period.** The plan must be offered for at least ten years from service turn-up.
4. **Price increases.** Applicants are only permitted to increase prices of this plan: a) commensurate to year-over-year changes in the Consumer Price Index for All Urban Consumers: All Items Less Food & Energy (also known as Core CPI) as defined by the U.S. Bureau of Labor Statistics; or b) due to new or increased government mandated taxes and fees imposed on the consumer, not providers.
5. **Service characteristics.** The plan must provide the greater of (a) typical download speeds of at least 100 Mbps and typical upload speeds of at least 20 Mbps, or the fastest speeds the infrastructure is capable of if less than 100 Mbps/20 Mbps or (b) the performance benchmark for fixed terrestrial broadband service established by the FCC pursuant to Section 706(b) of the Communications Act of 1934, as amended. For the purposes of these specifications, "typical" download or upload speeds mean that 80% of speed tests must demonstrate at or above 80% of such speeds. Furthermore, 95% of latency tests must demonstrate no more than 100 milliseconds of latency. The plan must not be subject to data caps, surcharges, or usage-based throttling and is only subject to the same acceptable use policies to which subscribers to all other broadband internet access service plans offered to home subscribers by the participating subgrantee must adhere.
6. **Upgrades permitted.** In the event the subgrantee later offers a low-cost plan with higher speeds downstream and/or upstream, it can permit eligible subscribers that are subscribed to a low-cost broadband service option to upgrade to the new low-cost offering at no cost. By way of example, if a customer is subscribed to a low-cost broadband service option that provides service at 100/20 Mbps and the customer's service provider offers a new low-cost broadband service option at 200/20 Mbps after the FCC issues a new report pursuant to section 706(a) of the Communications Act of 1934, as amended, the customer would be allowed to upgrade to the 200/20 Mbps offering at no charge.

### 3.8.2 Middle Class Affordability

Affordability of broadband services from BEAD-funded networks for middle-class households is a priority for the Commonwealth. Broadband service providers are encouraged to ensure

that broadband services offered to prospective customers in the BEAD-awarded area are affordable and reasonably accessible to middle class households. In addition to plan costs being a primary scoring criterion for applications, the following recommendations and requirements listed below will promote affordability of services for middle class households.

1. Low-Cost Service Option: As detailed in Section 3.8.1 above, providers participating in the BEAD program are required to offer to eligible customers a Low-Cost Service Option.
2. Special Construction Costs: For some Kentucky residents, connecting to internet service is unaffordable because the distance to their home exceeds an internet service provider's standard connection drop length from a roadway or easement containing telecommunications infrastructure. The cost incurred by homeowners to extend broadband infrastructure to these locations, referred to as special construction costs, range from a few hundred to a few thousand dollars depending on the distance and cost to connect the location. Subgrantees will be prohibited from charging special construction charges for a minimum of twelve months after broadband service is made available to a BEAD-funded location. Subgrantees will not be permitted to charge any fees to subscribers for these line extensions during the subgrant agreement period of performance, except for the regular connection fees associated with any connection made on the network.

## 3.9 Network Resiliency, Risk Mitigation, Hardening, and Scalability

### 3.9.1 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 Thunderstorm Winds

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.

### 3.9.2 Additional Resiliency and Scalability

The Office strongly recommends that applicants meet or exceed any resiliency-related recommendations developed by the federal, state, and local agencies and factor scalability into their designs. As detailed in Section 5.2.4, projects demonstrating sufficient resiliency and scalability may receive consideration for these measures in project scoring.

### 3.9.3 Certification of Compliance with Relevant Laws and Regulations

Applicants must certify that they will 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 Policies<sup>12</sup>
- KY State Historic Preservation (SHPO) Section 106 consultation requirements<sup>13</sup>

Furthermore, applicants must certify that they agree to refrain from undertaking any construction activities until the applicant 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.

### 3.9.4 Build America, Buy America Act (BABA)

Applicants must certify that they will 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

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<sup>12</sup> <https://transportation.ky.gov/Organizational-Resources/Policy%20Manuals%20Library/Permits.pdf>

<sup>13</sup> <https://heritage.ky.gov/compliance/Pages/overview.aspx>

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 requirements.<sup>14</sup>

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.”

Not waived:::

### 3.9.5 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 into a contract to procure or obtain equipment, services, or systems that use “covered telecommunications equipment” produced by:<sup>11</sup>

- 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

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<sup>14</sup> <https://www.commerce.gov/sites/default/files/2024-02/BABA%20Waiver%20Signed.pdf>

- 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>.

### 3.9.6 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 can begin.

#### 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 Mapping Information application<sup>15</sup> and tool<sup>16</sup> 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

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<sup>15</sup> [NTIA Permitting and Environmental Information Application](#)

<sup>16</sup> ArcGIS Pro Permitting and Environmental Information Tool (APEIT) Project Package  
<https://nbam.ntia.gov/content/37fa42c6313e4bdb9d8a9c05d2624891/about>

significant impacts to environmental resources subject to the National Environmental Policy Act (NEPA) and other statutory requirements.

### 3.9.7 Environmental and Historic Preservation Act

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](#).<sup>12</sup>

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, such as:

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

### 3.9.8 Labor Standards and Protection

Applicants must certify that they will comply with all applicable labor standards and protections. Furthermore, applicants must provide information on, among other related topics, how they plan to follow strong labor standards, such as wages and local hire provisions, past compliance with fair labor practices, and other information about their workforce or the workforce of their contractors and subcontractors. Section 3.6 details the information required beyond certification, which are required as part of the pre-application process.

### 3.9.9 Civil Rights Compliance

Applicants must agree by contract or other binding commitment to abide by the nondiscrimination requirements set forth in the following legal authorities, to the extent applicable, and to acknowledge that failure to do so may result in cancellation of any award and/or recoupment of funds already disbursed:

- Title VI of the Civil Rights Act
- Title IX of the Education Amendments of 1972
- The Americans with Disabilities Act of 1990
- Section 504 of the Rehabilitation Act of 1973
- The Age Discrimination Act of 1975



- Any other applicable non-discrimination law(s)

### 3.9.10 Minority Business Enterprises/Women's Business Enterprises/Labor Surplus Area Firms Inclusion (MBE/WBE/LSA)

Applicants must certify and information demonstrating an actionable plan to comply with this requirement and subcontract to MBE/WBE/LSAs when possible. Supporting materials that clearly exhibit implementation of such plans will be required as part of the ongoing reporting and compliance procedures. To assist in this process, the Kentucky Small Business Development Center (SBDC) will be developing a list of MBE/WBE/LSA vendors and suppliers across the State. The Small Business Administration (SBA) and Minority Business Development Agency (MBDA) may also offer assistance. Applicants must take affirmative steps to ensure compliance with this requirement, including, but not limited to:

- **Solicitation Lists:** Placing qualified small and minority businesses and women's business enterprises on solicitation lists. Example: Applicants may incorporate the list provided by the SBDC into their solicitation lists.
- **Potential Source Solicitation:** Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources. Example: Applicants can solicit required goods or services from those listed as offering them in the SBDC's database.
- **Division of Total Requirements:** Whenever economically feasible and in compliance with procurement regulations, dividing total requirements into smaller tasks or quantities to permit maximum participation by small and minority businesses and women's business enterprises. Example: Secure assistance from the SBA, MBDA, and SBDC to divide requirements into smaller tasks or quantities and identify MBE/WBE/LSAs that can participate.
- **Establishing Delivery Schedules:** Establishing delivery schedules that encourage participation by MBEs and WBEs. Example: Work directly with some of the MBE/WBEs included in the SBDC's database to establish delivery schedules that encourage their participation.

## 3.10 Compliance with Grant Agreement and Cooperation with 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 of funds.

Draft subgrantee agreement appendix



## 4. Application Review and Award

### 4.1 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.

### 4.2 Project Scoring

Provisional awards will be selected from Proposed Projects from qualified applicants meeting program eligibility requirements ("Eligible Projects"). The Office seeks to make a provisional award for all project areas for which an Eligible Project was submitted, subject to the availability of program funds. The Office will score Proposed Projects using its NTIA approved scoring rubric and use project scoring to select a provisional subgrantee when there are multiple Eligible Projects for the same project areas.

#### 4.2.1 Project Prioritization

When there are multiple Eligible Projects for the same project area, the Office will provisionally award Projects using the following prioritization method:

- First, to "Priority Projects," i.e., those that propose to use end-to-end fiber technology,
- Second, to "Non-Priority Projects" i.e., those that propose to use a Reliable Broadband Service Technology other than end-to-end fiber technology, and
- Third, to "Non-Priority Projects" i.e., those that do not propose to use a Reliable Broadband Service Technology but otherwise meet the program technical parameters.

Reliable Broadband Service technologies is defined as broadband service using:

- fiber-optic technology;
- cable modem/hybrid fiber-coaxial technology;
- digital subscriber line (DSL) technology;
- terrestrial fixed wireless technology utilizing entirely licensed spectrum or using a hybrid of licensed and unlicensed spectrum

#### 4.2.2 Selection Among Projects with Different Ranking Levels

Eligible Projects with a higher priority level will be preferred to those that have a lower priority level, with some limited exceptions.

In the event that 1) all Eligible Projects competing for a project area exceed the Extremely High Cost Per Location Threshold and 2) at least one eligible applicant proposing a Non-Priority Project has a grant cost per location lower than all eligible Priority Projects, the Office will provide all applicants proposing Priority and Non-Priority Projects an opportunity not exceeding five business days to revise the cost of their Projects to reduce the subsidy required. If no revised Priority Projects are lower than either the Extremely High-Cost Threshold or the Projects of Non-Priority applicants, the Office will make a provisional award to a Non-Priority applicant. The Office will only make a provisional award to an applicant not proposing a Reliable Broadband Service technology if no other eligible applicants can provide service at or below the Extremely High-Cost Per Location Threshold.

At its discretion, the Office may provisionally award projects which exceed the Extremely High-Cost Threshold, if sufficient funding is available to achieve program goals.

#### 4.2.3 Selection Among Projects with the Same Priority Level

If there multiple Eligible Projects are proposed for a project area that have the same priority level, the score determined by Kentucky's NTIA Approved Scoring Rubric will determine the selection of competing Projects. Both Priority and Non-Priority Projects may achieve a maximum score of 100 points. Points will be awarded as described in the rubric based on materials submitted with the project application. The criteria differ slightly between Priority and Non-Priority Projects.

The Office will evaluate the scores of competing Eligible Projects with the same ranking level within the same Target Region. the Office will score each of the Proposed Projects and normalize them based on the number of Target Locations in each. the Office will generate a list of possible combinations of Eligible Projects to cover the entire Target Region without any overlapping Target Areas. the Office will then combine the scores of the Eligible Projects within each combination and will then select the combination with the highest weighted score as that Target Region's provisionally awarded Projects.

#### 4.2.4 Scoring Criteria

Applications will be scored using the approved BEAD Scoring Rubric. [\(insert appendix link\)](#)

### 4.3 Provisional Award Process

After determining the rank of each Proposed Project, the Office will begin the provisional

award process. In general, the Office will seek to provisionally award the best-ranked combination of Eligible Projects in each Target Region. However, the ability to do this in every Target Region may be limited by the Capacity of applicants and the overall Program Budget.

#### 4.3.1 Program Budget and the Extremely High-Cost Threshold

Provisional awards exceeding the total available funds will not be made. The Office may also reserve an estimated amount of funds that may be required to fund projects to serve eligible locations that do not have an Eligible Project.

To ensure that the total amount granted does not exceed the amount available, the Office will establish an Extremely High-Cost Threshold. The Extremely High-Cost Threshold is a grant cost per eligible location above which the Office may consider projects with a non-priority or alternate technology with a lower cost per eligible location. (See 4.2.1 [Project Prioritization](#)).

After establishing a set of provisionally awarded Projects, if the total expected costs exceed the total Program budget, then the Office will lower the Threshold by \$1,000 dollars and repeat the above process. This will continue until either the total cost of the Program stays within the Program budget or until the Extremely High-Cost Threshold hits a floor that the Office will establish. If the expected costs still exceed the Budget once the Minimum Threshold is reached, the Office will take these additional steps as necessary to meet the Budget in the following order:

- 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.

#### 4.4 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.

#### 4.5 Provisional Subgrantee Letters of Credit or Performance Bond

As noted in Section 3.7, prior to entering into 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 bank's, credit union's, 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.

#### 4.6 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.

## 5. 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.

### 5.1 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.

### 5.2 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.

### 5.3 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 such documentation.

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 in order 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.

## 5.4 Invoice Submittals

Subgrantees must adhere to the following guidelines with regard to 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; and
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.

## 5.5 Grant Disbursement Requests

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

Generally, in order 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; and
5. shall submit proof of expenditures on eligible costs for review prior to reimbursement.

## 5.6 Compliance Reporting

Subgrantees must submit to the Office a regular report, at least semiannually, for the duration of the subgrant to track the effectiveness of the use of funds provided. Each report shall describe each type of project and/or other eligible activities carried out using the subgrant and the duration of the subgrant.

the Office may add additional reporting requirements or increase the frequency of reporting with the approval of the Assistant Secretary and must make all subgrantee reports available to NTIA upon request. The report must, at minimum:

1. include a list of addresses or location identifications (including the Broadband Serviceable Location Fabric established under 47 U.S.C. 642(b)(1)(B)) that constitute the service locations that will be served by the broadband infrastructure to be constructed and the status of each project;
2. identify new locations served within each project area at the relevant reporting intervals, and service taken (if applicable);
3. identify whether each address or location is residential, commercial, or a community anchor institution;

4. describe the types of facilities that have been constructed and installed;
5. describe the peak and off-peak actual speeds of the broadband service being offered;
6. describe the maximum advertised speed of the broadband service being offered;
7. describe the non-promotional prices, including any associated fees, charged for different tiers of broadband service being offered;
8. list all interconnection agreements that were requested, and their current status;
9. report the number and amount of contracts and subcontracts awarded by the subgrantee disaggregated by recipients of each such contract or subcontracts that are MBEs or WBEs;
10. provide materials demonstrating compliance with proposed MBE, WBE, and LSA solicitation plans;
11. include any other data that would be required to comply with the data and mapping collection standards of the Commission under Section 1.7004 of title 47, Code of Federal Regulations, or any successor regulation, for broadband infrastructure projects; and
12. include an SF-425, Federal Financial Report and meet the requirements described in the Department of Commerce Financial Assistance Standard Terms and Conditions (dated November 12, 2020), Section A.01 for Financial Reports.

Subgrantees must provide regular reports to ensure that both they and the Office meet all reporting requirements as prescribed in NTIA/Commerce BEAD program guidelines. The Office shall build reporting forms conforming to BEAD program requirements and provide compliance guidance to subgrantees regarding requirements and methods of submittal to the Office.

Included in such reporting shall be guidance related to required, regular labor reporting for projects over \$5 million in expected total costs as detailed in the BEAD NOFO.

For projects meeting the \$5 million labor reporting threshold, subgrantees may provide a certification that, for the relevant project, all laborers and mechanics employed by contractors and subcontractors in the performance of such project are paid wages at rates not less than those prevailing for the corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work in the civil subdivision of the State in which the work is to be performed, as determined by the U.S. Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (commonly known as the "Davis-Bacon Act").

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

- the number of employees of contractors and sub-contractors working on the project;
- the number of employees on the project hired directly and hired through a third party;
- the wages and benefits of workers on the project by classification; and
- whether those wages are at rates less than those prevailing as determined by US



Secretary of Labor in accordance with subchapter IV of chapter 31 of Title 40, United States Code ("Davis- Bacon Act").

Subgrantees must maintain sufficient records to substantiate the above information upon request.

In addition, for projects meeting the \$5 million expected cost threshold, subgrantees may provide a certification that the projects include a project labor agreement, meaning a pre-hire collective bargaining agreement consistent with section 8(f) of the National Labor Relations Act (29 U.S.C. 158(f)). If the subgrantee does not provide such a certification, the subgrantee must provide a project workforce continuity plan, detailing:

1. how the subgrantee will ensure the project has ready access to a sufficient supply of appropriately skilled and unskilled labor to ensure high-quality construction throughout the life of the project, including a description of any required professional certifications and/or in-house training;
2. how the subgrantee will minimize risks of labor disputes and disruptions that would jeopardize timeliness and cost-effectiveness of the project;
3. how the subgrantee will provide a safe and healthy workplace that avoids delays and costs associated with workplace illnesses, injuries, and fatalities, including descriptions of safety training, certification, and/or licensure requirements for all relevant workers (e.g., OSHA 10, OSHA 30);
4. whether workers on the project will receive wages and benefits that will secure an appropriately skilled workforce in the context of the local or regional labor market; and
5. whether or not the project has completed a project labor agreement.

Finally, for projects meeting the above BEAD expected cost thresholds, subgrantees will be required to report on whether the project prioritizes local hires.

## 5.7 Ready to Serve Review/Field Review

the Office generally conducts "ready-to-serve" review(s) for each project. This process ensures that any new BEAD-funded constructed networks are compliant with construction/engineering standards and meet the BEAD program's minimum speed and service requirements. During these reviews, the Office's consulting engineers reconcile invoices with as-builts or other design details to confirm project alignment with approved construction plans and spending estimates. When projects approach 50% completion, the Office may schedule and perform desktop and field reviews with subgrantees. At the 100% completion point, the Office will schedule and perform desktop and field reviews with subgrantees.

Additionally, as part of this field review process, the Office's technical reviewers will verify the consistency of the plant observed with the project's scope as defined in subgrantee's contracting materials with the Office and note general quality observations. the Office's field validation team may conduct field review reports at the midpoint and will conduct one at project completion, following which the team will prepare reports identifying any discrepancies or issues with the constructed network, with the subgrantees given a prescribed period of time to cure or provide proof of corrective actions taken to remedy any



issues. Applicants will also be required to retain and submit to the Office optical time domain reflectometer (OTDR) and, if capable, intelligent optical link mapper (iOLM) fiber traces. To be considered acceptable for the Office approval, these tests must be, at a minimum, passing. the Office may provide guidelines for submitting OTDR/iOLM fiber traces.

Upon a project's completion, the Office requires subgrantees to submit a closeout package with required documentation for review and approval of the final 10% of the grant retained which the Office will release following approval of all closeout documentation and final field reviews.

## 5.8 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).<sup>17</sup>

## 5.9 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 on the basis of 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 submit an application 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 a

reimbursement request that is consistent with the progress made in complying with the project plan as of the date of the expiration of the cure period.

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

## 5.10 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.<sup>18</sup> 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.

## 5.11 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.

## 5.12 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.

## 5.13 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; and
- Executive Order 13798, Promoting Free Speech and Religious Liberty

## 5.14 Cybersecurity and Supply Chain Risk Management

### 5.14.1 Cybersecurity

Prior to allocating any grant funds to subgrantees, the 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; and
4. The plan will be submitted to the Eligible Entity prior to the allocation of funds. If the subgrantee makes any substantive changes to the plan, a new version will be submitted to the Eligible Entity within 30 days.

### 5.14.2 Supply Chain Risk Management (SCRM)

Prior to allocating any grant funds to subgrantees, the 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;
2. The plan is based upon the key practices discussed in the NIST publication NISTIR 8276, Key Practices in Cyber Supply Chain Risk Management: Observations from

Industry and related SCRM guidance from NIST, including NIST 800-161, Cybersecurity Supply Chain Risk Management Practices for Systems and Organizations and specifies the supply chain risk management controls being implemented;

3. The plan will be reevaluated and updated on a periodic basis and as events warrant; and
4. The plan will be submitted to the 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 the Office within 30 days. The 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.

## 5.15 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.<sup>17</sup> These requirements will be outlined in compliance guidance that will be communicated through the 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

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<sup>17</sup> 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>

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).<sup>18</sup>

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.<sup>21</sup>

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.

## 5.16 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.

## 5.17 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.

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<sup>18</sup> The OIG reporting hotline is available at: <https://www.oig.gov/pages/hotline.aspx>.

## 6. Appendices

### Appendix A. 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 taken into account 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 water infiltration.
8. Anchor and Harden Infrastructure.
  - a. 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 or 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 response plan.
  - 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 measures 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 response plan.
  - a. Set up a list of personnel, processes, and procedures that allow your team to quickly act.
  - 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.
  - 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 maintenance plans.
  - 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.

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