OVERCOMING BEAD OBSTACLES
Session 1: Finding Credible Technical Expertise
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Finding Credible Technical Expertise: Questions and Considerations

May 2, 2023

Jennifer Holtz
Vice President, Regulatory Affairs
BEAD Regulatory Considerations

- BEAD is a pass-through grant
- State = Eligible Entity; Provider/Co-Op = Sub-Grantee
- States are establishing BEAD State Action Plans now
- States will prioritize areas that lack speeds of 25/3; 100/20 “served”
- States will favor applications with strong support from community anchor institutions
- 25% match from Eligible Entity, Subgrantee, or both
  - Cannot use USF
  - May use funds from a federal regional commission/ authority and broadband funds under the Families First Coronavirus Response Act, the CARES Act, the Consolidated Appropriations Act, 2021, and ARPA to the extent permitted by those laws
Sub-Grantee Qualifications

**Competence, Managerial and Financial Capability**
- Certifications
- Letter of Credit
- Audited Financial Statements
- Sustainability/Pro Forma Analyses of Proposed Project

**Technical and Operational Capability**
- Network design, diagram, project costs, build out timeline and milestones, capital investment schedule
- Professional Engineer certified
- Certification of timely filed Form 477 and BDC
- Explain enforcement action or civil litigation
- Disclose pending or planned public funding disclosure
- NIST-based Cyber and Supply Chain Plans
Post-Award Requirements

Network Capabilities

• Speed and latency tests from the customer premises; speeds no less than 100/20

• Each Funded Network’s outages should not exceed, on average, 48 hours over any 365-day period except in the case of natural disasters or other force majeure occurrence

Deployment Requirements

• Begin service not later than four years after receiving subaward

• Deployment project with fiber, conduit, or roadway must include interspersed conduit access points at regular & short intervals for interconnection

Service Obligation

• Offer at least one low-cost broadband service option; no data usage caps or unjust or unreasonable network mgmt. practices.; reasonable and non-discriminatory

• Public awareness campaigns; interconnection and wholesale access

• NIST-based Cyber and supply chain risk management plans must be operational or ready to be operational
Thank You.

Do you still have questions? Learn more at jsitel.com, and connect with us.

Jennifer Holtz

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JEFF REIMAN

PRESIDENT

- THE BROADBAND GROUP
- TBG NETWORK SERVICES

www.broadbandgroup.com
IMPORTANCE OF CONNECTIVITY

“The business model defines the network architecture.”

- Patrick Thibeault

SENIOR VP & CTO, THE BROADBAND GROUP
BUSINESS PLANNING PRIORITIES

▪ Business Structure Options
  ▪ Own & Operate, Own, Facilitate (P3)

▪ Network Design Priorities
  ▪ Distributed Split, Centralized Split

▪ Construction Considerations
  ▪ Aerial vs. Underground

▪ Market Research

▪ Investment Grade Financials

▪ Inspection
  ▪ 10-15 minor/major issues per mile (not to specification)
  ▪ Lowers restoration costs, decreases costly construction errors
  ▪ 20-year network vs 50-year network
THANK YOU
Finding Credible Technical Expertise: Questions and Considerations

ENGINEERING

Quentin Flippin, PE – Director of Engineering Vantage Point Solutions

May 2nd, 2023

Vantage Point
EMPLOYEE OWNED
BEAD Application Requirement

Prospective subgrantees must submit a network design, diagram, project costs, build-out timeline and milestones for project implementation, and a capital investment schedule evidencing complete build-out and the initiation of service within four years of the date on which the entity receives the subgrant, all certified by a professional engineer, stating that the proposed network can deliver broadband service that meets the requisite performance requirements to all locations served by the Project. An Eligible Entity shall not approve any grant for the deployment or upgrading of network facilities unless it determines that the materials submitted to it demonstrate the prospective subgrantee’s technical capability with respect to the proposed project.
Who will be your professional engineer (PE)?

- BEAD will require
  - PE certification for grant applications
- States will likely require
  - PE oversight of design, implementation, and closeout of projects
- PE certification helps ensure accuracy of application statements and
- What is a Professional Engineer (PE)?
  - 4 year degree, work under a PE for 4 years, two competency exams, earn license through state licensure board
  - Must be competent in area they are certifying
- Choose your PE partner early. Not just a rubber stamp
Does your proposed design meet state BEAD program requirements?

- Watch for requirements such as “simultaneously provide minimum bandwidth to all subscribers” or “symmetrical speeds”
  - May require reduced FTTP split ratios or next generation electronics
  - Will affect oversubscription assumptions on RF design
  - Impacts uplink and transport sizing
Engineer for the long haul – One bite at the funding apple

- Design network for tomorrow’s bandwidth needs – Low Latency, Symmetrical and high capacity
- Consider OSP fiber a 25yr + investment
  - Does your design allow for location growth over this timeframe?
  - Is there spare for special high capacity customers?
- What is the useful life of RF equipment you are planning?
- Is the design based on proprietary vendor product or is it universal in nature?
- How will your design accommodate future electronic changes?
  - Cabinets versus huts, central office planning
- CapEx and OpEx Trade off.
More than half of all people think technology will transform the way the next ten years.

The trend is for 25% or more to be working remotely in the next five years.

In the next decade, approximately 75% of jobs will have technological skills requirements.
THE ROADSIDE IS BUSY!
COMMUNITY COLLEGES AND TRADE SCHOOLS OFFER FIBER SPLICING TRAINING
THE WAY TO GET STARTED IS TO QUIT TALKING AND BEGIN DOING.

Walt Disney