



September 10, 2024

The Honorable Alan Davidson  
Assistant Secretary of Commerce for Communications and Information  
National Telecommunications and Information Administration  
U.S. Department of Commerce  
1401 Constitution Avenue N.W.  
Washington, D.C. 20230

Dear Assistant Secretary Davidson,

The Illinois Office of Broadband / Illinois Broadband Lab collaboration is grateful for the opportunity to provide feedback on the National Telecommunications and Information Administration's (NTIA) Proposed BEAD Alternative Technology Guidance (ATG). Illinois received a \$1.04 billion allocation through the Broadband Equity Access and Deployment (BEAD) program and is making progress toward launching its subgrantee selection process. Illinois' comments on the Proposed BEAD Alternative Technology Guidance are summarized in the points that follow.

**(1) Illinois appreciates the Alternative Technology Guidance.**

While moving swiftly toward subgrantee selection, Illinois also recognizes that the historic \$1.04 billion investment will not be enough to connect every home with end-to-end fiber. Given this reality, Illinois agrees that Alternative Technologies, in addition to Reliable Broadband Service, will be required to reach universal coverage. With the 365-day clock already underway, Illinois is eager to begin its subgrantee selection process and appreciates the opportunity to comment on the ATG before proceeding. Additionally, given the thorough preparation for and curing of its Initial Proposal Volume II (IPVII), Illinois strongly encourages NTIA to give states the opportunity to incorporate the final ATG without reconsideration of IPVII language or approval.

**(2) The Alternative Technology Guidance should distinguish further between Unlicensed Fixed Wireless (ULFW) and Low-Earth Orbit (LEO) technologies.**

ULFW and LEO should not be considered equal alternatives to Priority Broadband or Reliable Broadband. They are different technologies and impact subgrantee selection and state BEAD administration in different ways. A wide variety of providers offer ULFW, often operating on the local level. In contrast, LEO technology is primarily offered by one provider, often across state lines rather than within them. While current ULFW service can be verified by State Broadband Offices, current LEO capacity cannot. Illinois urges NTIA to recognize these core differences and incorporate them when defining the treatment of ULFW versus LEO in the BEAD program.

**(3) Illinois is in broad agreement with NTIA's proposed approach for Unlicensed Fixed Wireless outlined in the ATG.**

For project areas where no subgrantee has submitted a proposal to deploy Reliable Broadband Service, or where Reliable Broadband Service has been proposed, but at a cost above the Extremely High Cost Per Location Threshold (EHCPLT), Illinois agrees with the path provided as it relates to Unlicensed Fixed Wireless, with certain caveats as detailed below.

In alignment with the guidance, Illinois agrees that prospective subgrantees deploying Alternative Technology projects with BEAD funds must adhere to the obligations set forth in the BEAD Notice of Funding Opportunity (NOFO), as specified in Section 4.3. This ensures that subgrantees using alternative technologies meet the same high standards for service quality and affordability. Within the ATG, Case 2 states that, “If Alternative Technology service is already meeting BEAD program requirements, then BEAD funds are not necessary for those locations and will not be allowed.” The proposal requires that Eligible Entities “gather more information about the sufficiency of the existing service” and “give an Alternative Technology provider that is currently offering services the opportunity to demonstrate... its capability to offer BEAD qualifying services to all locations in the project area.”

Illinois is aligned with the opportunity for Unlicensed Fixed Wireless (ULFW) providers to express interest and demonstrate that they have the capacity to meet BEAD qualifications, including speed, performance, and Illinois’ low-cost service requirement. Case 2 states, “To show technical capacity, existing Alternative Technology providers must demonstrate that they can provide a capacity of at least 5 Mbps or a usage allowance of 2 Terabytes (TBs) per month for each broadband serviceable location (BSL) in the project area within four years.” Illinois agrees that this is one approach to demonstrate technical capacity, but other approaches exist. Reinforcing this, the last sentence of the same paragraph states, “The Eligible Entity may establish other criteria for reviewing technical capability...” Illinois recommends that NTIA update this paragraph to clarify that while one approach to confirming technical capacity is to request that providers demonstrate capacity of at least 5 Mbps, states should have the ability to take other approaches to conducting this due diligence.

NTIA must also recognize that the addition of Alternative Technologies to the BEAD program will require time and energy from State Broadband Offices.

The additional steps suggested in the guidance could impact the tight timelines already established by many states to meet the one-year deadline for submitting the Final Proposal. Requirements such as re-evaluating eligible areas and ensuring BEAD NOFO compliance add complexity. Additionally, the requirement to give existing providers seven days to indicate interest, followed by a 30-day window for documentation, adds further pressure to the timeline. Shortening the 30-day window to better align with other program timelines could help mitigate delays and allow states to meet the deadline while ensuring thorough evaluation and compliance. NTIA should also make Final Proposal timeline extensions available to states that adopt the ATG for ULFW.

Finally, NTIA should also clarify that states are able to run the notice period for Unlicensed Fixed Wireless concurrently to other direct negotiation steps taken as part of Initial Proposal plans. Illinois again urges NTIA to allow states to incorporate ATG without revision of approved IPVILs.

#### **(4) Illinois suggests an alternative, centralized approach for Low-Earth Orbit.**

LEO represents an important technological development that will help BEAD achieve its universal connectivity mandate, particularly in states where the cost of doing business may require a greater mix of technologies. However, Illinois seeks further clarification on whether existing LEO technology meets the BEAD performance standard of 100/20 Mbps with latency no greater than 100 milliseconds, or whether the proposed reserved capacity approach is

designed to improve LEO performance to meet this standard. This raises a question about what the proposed reserve capacity approach contributes to -- additional satellites providing service, greater overall capacity for service, or reduced capacity for other existing or new customers.

Additionally, given the proposed ten-year period of performance for the LEO approach and anticipated increase in private market LEO options during this time, Illinois questions whether the proposed approach would have negative long-term impacts on consumer choice and the availability of reliable, affordable, high-performance alternative technologies.

Should NTIA move ahead with the use of LEO in the BEAD program, Illinois recommends that LEO subgrants be administered on the national level. This recommendation is based on the interstate nature of LEO deployment, service provision, and cost structure. While there is a broad need among states for the use of LEO to achieve universal coverage, there is a relative lack of LEO expertise among State Broadband Offices. (However, Illinois is fortunate to have two consultants with past LEO experience on its team – and this feedback reflects their perspectives.)

A national plan and offering for LEO technologies would ensure the most cost-effective rates for all states and streamline accountability to BEAD standards. Then, states may allocate BEAD funds for LEO capacity based on remaining unserved and underserved locations.

Benefits of this approach may include:

- Bulk Pricing: Yields the potential to drive the most cost-effective price for capacity reservation (and user terminals) due to volume discounts enabled by national demand aggregation.
  - Alignment with Global Network Design: A LEO constellation design is global in nature, meaning any state (or regional) investment can benefit other states where the LEO has a market license.
  - Streamlined Negotiation: Allows for a streamlined negotiation between a single provider and the government.
  - Contract Lifecycle Efficiency: Eliminates duplication of effort associated with negotiating, administering, and evaluating multiple contracts, which otherwise would be done at the state level.
- Procurement Expertise: The NTIA can commission a team of subject matter experts to oversee the procurement process, which otherwise may not be available to all states. This allows a team of experts to thoroughly vet the cost structure for the capacity to ensure the price for a unit is reasonable. Industry experts have knowledge regarding the incremental cost of deploying LEO technology.

A nationally centralized program could offer a range of service packages (from a low-cost option to enterprise level), purchase of user terminals on an adoption basis, and vouchers for every eligible location that must be used within a certain timeframe. A single, uniform contract could stipulate critical factors applicable to all states, such as capacity reservation milestones, matching contribution, reporting requirements, service level agreements, an intake system, and others. Illinois is happy to provide more details on this proposed approach upon NTIA request.

NTIA can also offer states the option to opt out of participation, should they prefer to negotiate rates independent of the federal government.

If, however, the BEAD mandate for universal coverage and NTIA final ATG requires states to administer subgrants directly to LEO provider(s), then Illinois' recommendations outlined in point 3 above should also be applied to LEO technology. Specifically, assurance that LEO offerings must meet the obligations of the BEAD program in terms of speed, performance, and affordability, with a clear and consistent method, plus time and expertise, to conduct this due diligence.

**(5) Illinois recommends that NTIA coordinate with other federal broadband programs to ensure all Broadband Serviceable Locations – during and after BEAD – can access sufficient coverage.**

Given the strong likelihood that the proposed ten-year LEO subgrant period of performance will overlap considerably with additional federal funding opportunities and commitments, Illinois also recommends that NTIA pursue alignment with the Federal Communications Commission (FCC) Rural 5G and Rural Digital Opportunity Fund (RDOF) Phase II programs to address anticipated on-going access challenges for BSLs which:

- Are not covered by Priority or Reliable Broadband Service in states' Final Proposals;
- Are affected by existing or defaulted enforceable federal commitments; and
- Were connected to Reliable Broadband Service, but the service provided has no clear evidence of reliability.

Overall, there must be ongoing consideration and planning for how states and NTIA ensure reliable coverage on all BSLs following Final Proposal and BEAD subgrantee deployment.

Given the high stakes of delivering on the BEAD mandate, Illinois looks forward to continuing its strong working relationship with NTIA and toward our shared goals of universal access to affordable, reliable, high-performance internet for all.

Sincerely,

Devon Braunstein  
Director, Illinois Office of Broadband  
Illinois Department of Commerce and Economic Opportunity