Guiding Principles & Legislative Checklist for Broadband Subsidies

President Joe Biden in November 2021 signed the Infrastructure Investment and Jobs Act. Among other provisions, the law allocated $42.45 billion toward last-mile broadband development, with the National Telecommunications and Information Administration (NTIA) directed to administer those funds through the newly created Broadband Equity, Access & Deployment (BEAD) program. The BEAD program will provide broadband grants to states, who may then subgrant the money to public and private telecommunications providers.

Serious analysis of the proper roles for government and the private sector in reaching the unserved is a necessary prerequisite for successful rollout of broadband-infrastructure spending. Public investment in broadband infrastructure should focus on the cost-effective provision of Internet access to those who don't have it, rather than subsidizing competition in areas that already do.

Principles

Principle 1: Focus on the Truly Unserved

➡ The BEAD program requires states to prioritize reaching truly unserved areas first. An "unserved area" is defined as one that has either no Internet access or only has access at speeds of less than 25/3 Mbps.

➡ The BEAD program does, however, allow states to issue subgrants to fund infrastructure in "underserved areas," which are defined as locations that do not have 100/20 Mbps service available. A state can do this once it certifies that it "will ensure coverage" to "all unserved locations."

➡ Upgrading the connection speeds of households that already have more than 25/3 Mbps service may distort investment and divert funds that could otherwise be used to provide the unserved with Internet access.

Program/Spending Check

• Are authorities using up-to-date information to determine a priority list of the state's truly unserved areas—i.e., those with connection speeds of 25/3 Mbps or less?

• Are authorities making every effort to prioritize subgrants to areas deemed unserved based on the best available data?

• To avoid duplicative efforts, are authorities taking into account subsidies previously allocated for buildout?

• To avoid overbuilding, are authorities relying on the Federal Communications Commission's (FCC) broadband maps and the infrastructure bill's recommendations?

Principle 2: Maximize the Impact of Subsidies

→ The BEAD program requires all subgrantees to provide at least 100/20 Mbps service to be eligible for funding. Some advocates, however, push for higher levels of service, up to gigabit speeds. Typical consumers are sufficiently served by 100/20 Mbps service. Moreover, requirements for symmetrical service (such as 100/100 Mbps) make buildout far more expensive without providing commensurate benefits (consumers need more download capacity than upload capacity).

→ Increased funding does not always yield proportionate increases in consumer utility. Once speeds exceed "typical" use, the marginal value of faster connections declines. Funds invested in providing excessive speeds (relative to need) could instead be used to expand network access to more households overall.

→ For example, adding another competitor to a territory where multiple providers already supply 75/25 Mbps connections will yield dramatically less social welfare than new entry to a territory with one incumbent that provides only 30/10 Mbps speeds.

→ To allow program administrators to evaluate whether subgrantees are serving the public interest in the most cost-effective way, data-collection processes should be standardized.

Program/Spending Check

- In setting spending priorities, do administrators take account of the practical utility that additional investment in an underserved area is likely to yield?

- Is the subgrant program using a competitive-bidding model that appropriately weights the costs and benefits of deployment in a given area?

- Are subgrants allocated according to an objective set of criteria that systematically prioritizes areas with fewer ISPs and lower levels of speed?

- Are states working together to standardize forms, data-collection processes, and metrics that would allow administrators to evaluate program effectiveness?

Principle 3: Work in Tandem with Private Investment

→ The BEAD program allows states to fund infrastructure projects in underserved areas that already have one or more service providers. Subsidizing entry into these markets may encourage overbuilding in ways that can depress returns to incumbent providers.

→ Given that this overbuilding comes via a one-time funding source, the long-term effect can be to drive incumbent providers out of the market, leaving consumers with worse access than they currently have. Authorities should therefore carefully consider the long-term investment effects of subsidizing new entry into particularly hard-to-reach markets.

→ Government spending on broadband deployment also can have other distortionary effects. In particular, when contingencies are placed on subgrants—such as requiring "net-neutrality" style obligations— investment incentives can be undermined.

Program/Spending Check

- Do the economics of a particular underserved market suggest that one-time government spending will result in problematic overbuilding?

- Do the subgrant requirements refrain from imposing unnecessary conditions on providers, such as net neutrality or labor obligations?

Principle 4: Tread Carefully with Government–Owned Networks

→ The BEAD program requires that states cannot exclude "cooperatives, nonprofit organizations, public-private partnerships, private companies, public or private utilities, public utility districts, or local governments" from their subgrant program. But while government-owned networks (GONs) can't be excluded from the process, that does not mean they should receive preferential treatment.

→ A core limitation of GONs is that they are not subject to the same profit and loss signals that drive private providers. While some advocates believe this insulation from market pressure allows them to reach more individuals, it also means that GONs can be run at a loss indefinitely. This means that ongoing operations must be cross-subsidized from other municipal services, increasing tax burdens and removing accountability for the GON and taxpayers. The track record of GONs across the United States bears out that they are frequently a net waste of scarce social resources that crowds out private investment.

Program/Spending Check

- Are municipal-broadband providers and other forms of GONs treated as a preferred option or as the only possible option in truly hard-to-reach areas?

- Are there transparency requirements for planned GONs that will require that they reveal the full extent of their cross-subsidization and the burden they place on taxpayers?

Principle 5: Technological Neutrality

→ There are various reasons why certain locations may remain unserved. The geographical characteristics of a given territory, for example, may make it prohibitively expensive for providers to profitably reach and serve. While additional funding certainly helps bridge the gap in such areas, it does not change the underlying economics. What is typically needed, even with increased funding, is a technologically flexible approach that considers each location's unique characteristics. This means that one-size-fits-all solutions—such as mandating fixed-fiber connections—is unlikely to be the most efficient approach. Moreover, ongoing supply-chain shortages, labor shortages, and federal "buy American" requirements can mean that otherwise appropriate technologies may be cost-prohibitive to deploy in a timely manner.

→ Providers should be free to employ the technologies most appropriate to a given location's characteristics, so long as they offer the required quality of service. In practice, funds should be made available for any mix of wired or wireless applications deemed to provide a reasonably similar customer experience.

→ The recent Notice of Funding Opportunity from the NTIA appears to prioritize wired technologies, but specifies that in certain circumstances states "may consider funding [alternative] services[.]"

Program/Spending Check

- Are subgrant requirements focused on the quality and performance of deployment without requiring specific technological solutions?

Principle 6: Remove Barriers to Deployment

→ Deployment projects may be delayed by excessive red tape or similar impediments. Providers need timely access to rights-of-way and other approvals from local governments. They also need timely and cost-efficient access to both privately owned poles, as well as poles owned by electrical co-ops and other municipal entities. Access to efficient approvals, rights-of-way, and utility poles are critical to ensure that deployment is not delayed or frustrated completely. The FCC is currently examining how to streamline the necessary negotiations and timelines associated with this process for investor-owned poles. Other sorts of pole owners, however, would still be able to frustrate the deployment process. State authorities should be mindful that these delays can generate significant costs, and should have a process in place to ensure that providers can deploy in a timely and cost-efficient manner.

Program/Spending Check

- Does proposed spending look at ways to remove barriers to deployment that may delay projects and render them unnecessarily costly?

Principle 7: Encourage Adoption

→ Many states already have almost complete adoption of broadband, particularly densely populated areas like New Jersey, Maryland, and Connecticut. For those states, pouring money into physical infrastructure may not offer the best return on investment.

→ But the BEAD program also allows funds to be used to encourage adoption. States that can demonstrate they have a plan in place to reach all unserved and underserved locations can devote funds to non-deployment activities. These include user training, remote learning, telehealth services, digital literacy, coding training, and digital navigators.

Program/Spending Check

- Has the state reached all unserved and underserved locations?

- Are there other uses of the funding that would help to achieve equitable outcomes for a wide variety of populations?