

Create Independent Broadband Data for Public Accountability

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The federal government has invested over \$100 billion in broadband programs over the past three decades, including the \$42 billion **Broadband Equity, Access, and Deployment (BEAD)** Program now underway. Investments of this scale require sufficient data infrastructure for Congress and states to assess whether these programs are achieving their intended goals, from guiding funding decisions before deployment to auditing outcomes after. Spending without investment in such data infrastructure is spending without accountability.

What's Missing in Existing Broadband Data Infrastructure?

The Broadband DATA Act (2020) directed the FCC to build a National Broadband Map tracking availability at the address level, replacing an older system that counted an entire census block as “served” if even one household had service. The new map is a major improvement, but providers supply all of the underlying data.

The mechanism is straightforward: providers file coverage claims with the FCC twice a year, reporting the addresses where they offer service and the speeds available. These filings directly determine which locations are classified as “served,” “underserved,” or “unserved.” That classification, in turn, determines which locations are eligible for BEAD funding. Providers thus have a direct financial interest in what the map shows: overstating coverage can make a competitor’s territory appear “served,” blocking it from receiving federal investment, while selectively reporting can steer subsidies toward preferred areas. No one independently verifies at the population scale whether these claims reflect what consumers can actually purchase.

The Connect America Fund: What Independent Auditing Revealed

Our research team at UC Santa Barbara and UC Berkeley developed a new tool, the Broadband Plan Querying Tool (BQT), that bridges this data gap by directly querying what providers advertise to their potential customers at the population scale. We used this tool to audit over 500,000 addresses that received federal subsidies through the Connect America Fund (CAF), a \$10 billion predecessor to BEAD.¹ We independently checked what these providers certified against what they actually offer to consumers at each funded address.

Connect America Fund Independent Audit	
Addresses audited	500,000+ across 15 states
Service is actually available at certified addresses	Only 55%
Met federal speed (10/1 Mbps) requirements	Only 33%

Nearly half the addresses that providers certified as “served” had no service available at all. Only a third met the program’s speed requirements. It is worth noting that one major provider collected roughly \$1 billion in CAF subsidies yet met federal standards at only 16% of its funded addresses, systematically ignoring the most remote rural communities the program was intended to serve.

The oversight mechanisms existed, but they relied on the same self-reported data collection mechanisms, without a thorough independent verification at scale. Our independent verification caught the gap, but only after the damage was done, years after providers received the money.

Affordability and Quality Data Do Not Exist at the Federal Level

The broadband map primarily tracks a single dimension: whether a provider claims to offer service at an address. The federal government does not meaningfully track two additional dimensions that directly affect

whether investment produces real connectivity: what broadband costs (affordability) and whether service actually performs as advertised (quality).

Pricing data matters as it dictates broadband affordability. Our recent analysis of broadband pricing across four states found that 65 to 85 percent of BEAD-eligible communities face prices that exceed affordability thresholds relative to local incomes.² We also found that where cable providers face no fiber competition, they charge monopoly prices; where fiber enters, prices drop up to 30 percent.⁴ Without pricing data, we cannot identify which communities are stuck paying monopoly rates or assess whether federal investment is actually lowering costs.

Quality data matters because availability alone does not guarantee usable service. Even speed tiers do not truly reflect users' experienced broadband quality. The FCC's Measuring Broadband America program, launched over a decade ago, placed hardware probes in several thousand homes to measure actual performance. That approach was valuable but limited in scale. Advances in measurement technology now make it feasible to assess broadband quality at the population scale with minimal overhead. Periodic, address-level measurement of all three dimensions would let Congress and states see whether public dollars are producing meaningful connectivity.

Policy Recommendations

Congress is already building an oversight framework. Recent bills create the scaffolding: the Accelerating Broadband Permits Act (S. 4448) directs the Commerce Department to develop tracking tools for BEAD grant recipients; the MAP Act (S. 2585) calls for a Government Accountability Office (GAO) review of the Broadband Funding Map. Independent data would make them more effective. I offer three concrete recommendations:

First, S. 4448's tracking tools should incorporate independent, address-level verification of availability, pricing, and service tiers at BEAD-funded locations. Our team has already demonstrated this capability across 100+ providers and over one million addresses.^{3,4} The approach is automated and scalable, and the cost is small relative to the \$42 billion already appropriated. This is actionable now.

Second, the Broadband DATA Act should be extended to require providers to report pricing and plan-tier information alongside availability. Additionally, this self-reported data should be independently audited periodically for veracity through sustained investment in independent broadband data infrastructure.

Third, the FCC should develop standardized broadband quality metrics as part of its broadband assessment authority under Section 706 of the Telecommunications Act (which requires the FCC to define broadband standards and annually assess whether deployment is reaching all Americans). This would be the next generation of the Measuring Broadband America program, updated for current measurement technology that enables continuous, population-scale assessment rather than sampling a few thousand homes. Congress should incorporate quality metrics into the Broadband DATA Act framework through a defined roadmap, so that the map eventually reflects not just whether service is claimed, but whether it actually works.

Investing in independent broadband data infrastructure will bring accountability to multi-billion-dollar programs and improve the efficacy of well-intentioned interventions designed to make performant broadband access work for all Americans.

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¹ Manda et al., "Assessing the Efficacy of the Connect America Fund," ACM SIGCOMM, 2024.

² Koduru et al., "Assessing the Distributional Impact of the BEAD Challenge Process," TPRC, 2025.

³ Gupta, "What We Can't See, We Can't Fix," Benton Institute for Broadband & Society, 2026.

⁴ Paul et al., "Decoding the Divide: Analyzing Disparities in Broadband Plans," ACM SIGCOMM, 2023.