Executive Summary

It has become a truism that high-speed Internet connectivity in a 21st century economy is not a mere luxury, but a necessity, nearly as important as electricity. Yet, a common misunderstanding of exactly where the digital divide is located has led to faulty assumptions about where investments need to be made, as if broadband access is a challenge confined primarily in rural America. The actual shape of the problem is different than many elected officials realize.

A lack of fast, reliable, and affordable broadband is also a major problem in urban and suburban America.

Millions of citizens could subscribe for service, if only they could afford it — but they cannot. In fact, most recent municipal broadband systems were built to resolve problems with monopoly excess, not the absence of broadband. As this brief report lays out, many of the places that appear from DC as though they have gigabit services actually have unreliable networks that are not getting the job done.

It’s certainly true that sizable swaths of rural America lack access to broadband — a reality that presents a compelling case for federal and state investments to build networks in rural regions where it is not economical for private companies to do so.

However, solving the connectivity crisis in rural America while neglecting the population centers that rural economies depend on, serves neither.

Cable and telephone company lobbyists and allies regularly warn about “overbuilding” but the greater threat to America — leaving millions of children behind in educational opportunities — is underbuilding. Because the FCC — responding to the demands of the monopoly cable and telephone companies — has refused to collect accurate deployment data, the only level of government that can identify broadband gaps is at the local level. Local governments must be supported by the federal and state governments to resolve these challenges rather than continuing to blindly hand out subsidies to the companies with the best government affairs staff.

The connectivity crisis across the country, created by uncompetitive market conditions, is actually a three-fold challenge, all of which are interconnected: Access, Affordability and Adoption.

Effective legislative efforts to bridge the digital divide must tackle all three challenges. Anything less risks depriving millions of Americans access to equal opportunity in an interconnected global economy.
Introduction

As the nation went into pandemic lockdown in the spring of 2020, bridging the digital divide suddenly took on a new sense of urgency. Almost overnight, calls for universal access to high-speed Internet service went from being an aspirational vision to an ASAP goal, as it became clear broadband access is not a mere luxury but a necessity, nearly as important as electricity. But the actual shape of the problem is different than many elected officials realize.

There is good reason to compare the broadbandification of the nation with the electrification of rural America in the 1930s. However, the analogy has a blind spot in that it implicitly suggests that broadband Internet access is really only a problem in rural America.

The truth is more nuanced and is not confined to rural communities. A lack of access to fast, reliable, and affordable broadband is also a major problem in urban and suburban America.

Millions of citizens could subscribe for broadband service, if only they could afford it — but they cannot. Many of the places that appear from DC as though they have gigabit services actually have unreliable cable networks that are not getting the job done. Most recent municipal broadband systems have been built to resolve problems with monopoly excess, not the absolute absence of broadband.

Digital Divide is Not Urban Vs. Rural, It’s Both

It’s certainly true that sizable swaths of rural America lack access to broadband — a reality that presents a compelling case for federal and state investments to build networks in rural regions where it may not be economical for private companies to do so.

Networks that bring fiber and high capacity wireless to the farm are essential in a world where modern agricultural equipment requires reliable connectivity to operate effectively and efficiently. Still, it’s important to not overlook the economic lifeblood of those very same rural areas: the population centers that ag producers depend on also need to be economically vibrant. Solving the connectivity crisis in rural America while neglecting the towns and cities that rural economies also depend on, serves neither. Yet, the problems in these city and town centers are invisible to many inside the Beltway, and often even within state capitals.

Two cities in Eastern North Carolina — New Bern and Kinston — provide an illustration of just how misleading it is to use FCC data to determine which communities have access to broadband, calling into question the very notion of what it means to be “served.” Both New Bern and Kinston are “served” by a regional monopoly Internet Service Provider, SuddenLink. And yet, officials in both cities have been inundated with complaints about unreliable connectivity, slow speeds, and substandard customer service.

New Bern, the birthplace of Pepsi Cola, is home to approximately 30,000 residents. Situated on the banks of the Neuse River, the city’s largest industries (health care, manufacturing, accommodation and food service) are heavily reliant on telecommunication infrastructure. SuddenLink’s Internet access is crippling this region.

New Bern Mayor Dana Outlaw has been cataloguing those complaints, having established a dedicated web portal on the city’s website to document recurring issues city residents are having with SuddenLink.

In just the past several months, the web portal logged over 215 complaints about SuddenLink’s service, ranging from slower than advertised speeds, outages, and service interruptions of subscribers who paid their bill on time but were charged late fees because the company is frequently slow in processing payments. Those complaints are sent weekly to SuddenLink, the state AG’s office, and state lawmakers.
To make matters worse, local governments in North Carolina are further hamstrung by a state law from 2011 that prohibits municipalities from building their own broadband networks or partnering with the private sector. It’s a scenario that leaves communities like New Bern at the mercy of a monopoly provider under no pressure from competitors to improve.

Mayor Outlaw describes SuddenLink’s broadband service in New Bern as one where senior citizens are unable to adequately access telemedicine and many school students are unable to fully participate in remote learning. The mayor says residents “are sick and tired of being sick and tired.” Yet, viewing New Bern through the Beltway broadband lens of flawed FCC data, it’s a community that appears to be well served by cable service, not as a place where poor connectivity needs to be fixed.

A nearly identical story can be found in the city of Kinston, home to approximately 20,000 residents, 64 percent of whom are African-American. In Kinston, Mayor Don Hardy says not a day goes by that his office doesn’t receive a complaint about SuddenLink’s service.

Mayor Hardy says the most common complaints he hears are identical to what New Bern residents experience: slower than advertised speeds, outages, and service interruptions of subscribers who paid their bill on time but were charged late fees because the company is slow in processing payments. Despite numerous calls to the state Attorney General’s office and meetings with federal and state lawmakers, SuddenLink hasn’t improved the quality of service.

These problems go beyond residential service. Economic development in a city with poor connectivity makes it much more difficult to attract new residents and business. Mayor Hardy notes that whether a community has reliable, affordable, high-performance Internet connectivity is a key factor for people deciding where they want to live. It’s also a consideration for businesses in deciding where to locate operations. Mayor Hardy puts it in blunt terms: “Companies aren’t going to where the Internet sucks.” But, the FCC is focused on tracking where companies say they offer service, not whether it “sucks” or costs too much.

Mayor Hardy is convinced that if SuddenLink had competition “they would turn themselves around very swiftly.” Mayor Outlaw concurs: “To bring in economic development we need gig connections.” The unspoken, but essential point is that they need reliable and affordable service, not just something that checks the “served” box in DC.

**Lack of Competition**

Besides New Bern and Kinston, there are hundreds of other cities across the United States, including a number of major metropolitan areas, where you can find these kinds of poor connectivity/substandard service stories in most markets where monopoly cable and telecom companies operate — whether it be SuddenLink, Charter Spectrum, CenturyLink, Verizon, or AT&T. However, it is often the smaller towns stuck with firms like Frontier or Suddenlink that have the worst problems.

This is the crux of the issue: a lack of appropriate investment in broadband infrastructure. The solution may be robust competition — where it can be supported — or it may be a cooperative or municipal solution that allows for accountability outside of traditional market mechanisms.

The problem starts with restricting who can benefit from federal or state subsidies, as we detailed in this [American Prospect](https://www.americanprospect.org/article/federal-state-subsidies-broadband) article. For example, in California, like many other states, only the most remote rural areas — with connection speeds slower than 6 Mbps down and 1 Mbps up, in California’s case — are eligible for grants. This excludes many rural towns and cities that desperately need reliable, high-performance Internet service. And yet, most federal and state broadband funds go to the likes of AT&T, CenturyLink, and Frontier, which have reaped billions in subsidies despite their abysmal track record of
satisfying their customers. Both rural and urban areas have millions of families lacking service, but only rural areas tend to qualify for government grants to build networks.

Monopoly providers can afford to take their time upgrading services while keeping prices high, because their potential rivals often cannot get a subsidy to build there and compete. Or, as in the case of North Carolina and 16 other states, the law specifically blocks public investment in this essential service.

U.S. government policy does little to foster competition. According to the FCC's deeply flawed broadband maps, 28 million households have only one Internet Service Provider offering at least the minimum broadband speed. And the number of households in areas with more than one ISP offering gig connections is anemic. Only two million households have that choice, or maybe many fewer—the FCC doesn't really know at any granular level. The market is broken, which leaves tens of millions of families and businesses without any recourse from awful service — not from a competitive provider and not from a government regulator. The federal and state governments must intervene to create competition if they want to rely on market forces to ensure people and businesses have the services they need.

“Overbuilding” is a Red-Herring

This is why concerns about “overbuilding” broadband infrastructure are overblown. “Overbuilding” is NOT the problem. The problem is a lack of competition in underbuilt markets.

The cable companies and their defenders are deeply concerned about “overbuilding,” a term of art used to describe government subsidies to a provider in an area that already has some level of service. According to the FCC, communities like Kinston and New Bern are considered “served,” and therefore ineligible for federal broadband funding. To encourage competition there with a subsidy to a new network would be “overbuilding” and unfair. The misapplication of that term has been most clearly articulated in a major study authored for the Benton Institute for Broadband and Society by John Sallet, former FCC General Counsel and Deputy Assistant Attorney General in the Antitrust Division of the US Department of Justice.

Sallet notes: “There is a tendency to call the construction of new, competitive networks in a locality with an existing network ‘overbuilding’—as if it were an unnecessary thing, a useless piece of engineering.”

Sallet goes on to write that “what some call ‘overbuilding’ should be called by a more familiar term: ‘Competition.’ ‘Overbuilding’ is an engineering concept; ‘competition’ is an economic concept that helps consumers because it shifts the focus from counting broadband networks to counting the dollars that consumers save when they have competitive choices.”

The cable and telephone companies complain that it is unfair for the federal and state governments to intervene, arguing that there is plenty of competition everywhere already. Any honest assessment reveals that a few providers control access for a majority of homes and more than 25 years after the Telecommunications Act revisions, there is no hope for real competition to emerge from status quo policies. For well over a decade, the federal and state governments have chosen to accept underbuilding — leaving millions of children without Internet access during the pandemic, among many other harms — rather than upset the cable and telephone monopolies with programs that could result in “overbuilding.”

The Three A’s

The connectivity crisis, created by uncompetitive market conditions, is actually a three-fold challenge,
all of which are interconnected. Call it the Three A’s: Access, Affordability and Adoption.

**ACCESS**

The most obvious obstacle to universal access to broadband is the fact that Internet infrastructure in the United States is a patchwork with a chasm separating the digital haves and have nots. Even in mid-sized to large cities, a cable or telco network may be reliable in some neighborhoods but frequently have problems in another neighborhood.

So how do we know where to invest? The issues with the FCC’s broadband availability data and the wide-spread agreement among experts that the FCC overstates how many Americans have broadband access is well-known in Congress. No need to belabor the point. But those who insist that the federal and state governments should not create competition have a difficult bar to clear because without truly accurate data — which is unlikely to be available anytime soon — the U.S. will continue to under-invest in solving broadband problems for fear of accidentally creating competition.

The federal and state governments simply don’t have the data to know with any real precision exactly how many households and businesses lack broadband access, how reliable the existing service is, the speeds truly delivered, or how affordable it is. And they are not likely to know anytime soon with an FCC that has proven incapable of collecting the relevant data in an accurate manner. Local governments, on the other hand, have a much better sense of reality. Localities have to deal with the people who don’t have adequate service, getting immediate and direct feedback from businesses who can’t seem to get a fast enough connection, home-based entrepreneurs frustrated by frequent outages, school districts whose students can’t fully participate in remote learning, work-from-home parents with uploads speeds that don’t support important Zoom meetings, and senior citizens unable to access telemedicine. Local governments have to be empowered to solve these problems, both by removing the barriers that politically powerful monopolies have created to limit competition, and by delivering funds to them for investments and partnerships.

Improving access requires community involvement because that is the only place where accurate information exists about the problems with broadband access.

**AFFORDABILITY**

The second obstacle to bridging the digital divide is the most obvious and easiest to understand: if reliable, high-speed Internet connectivity is not affordable, it’s not accessible.

Affordability is a major barrier for urban residents in Maryland. According to a recent Abell Foundation study, “a strong majority of disconnected Maryland residents live in the state’s metro counties and Baltimore City. Some 342,000 Maryland homes in Maryland’s metro counties and Baltimore City do not have broadband Internet subscriptions at home and 193,000 do not have a desktop, laptop, or tablet computer.”

In Baltimore alone, the Abell study notes, “two-thirds (68.2%) of low-income households do not subscribe to wireline broadband. In lower income rural counties … 57.8% of low income households do not subscribe to service … Much of this is driven by poverty in Baltimore City. Some 27% of households in the city make $25,000 per year or less and, of these households, just 31.8% subscribe to high speed service (while only) 38.3% have a desktop or laptop computer.”

As noted above, because the federal government does not effectively collect and publicize pricing data, no one can definitively say how much broadband service costs subscribers in various markets across the country and whether those costs are affordable for those without a wireline home Internet connection.
For this reason, it is farcical to consider Baltimore as being “served” in any meaningful way when there are entire neighborhoods that have been left behind.

Prices are a major problem for millions of families. According to a recent report published by Free Press, the average US home Internet bill increased 19 percent between 2016 and 2019. Additionally, when New America analyzed the cost of connectivity in the United States in comparison to Asia and Europe, “we find the highest average monthly prices in the United States. This trend is consistent across different network technologies: cable, DSL, and fiber.”

Within the U.S., the New America report found “substantial evidence of an affordability crisis in the United States.” Examining 290 plans across the country, the study found 118 of those plans advertised promotional prices of $50 and under with only 64 of those plans advertised speeds meeting the current FCC minimum definition for broadband. Furthermore, the study documents how “some ISPs have abandoned low-income neighborhoods in a form of ‘digital redlining,’” while the pandemic exacerbated “a longstanding digital divide that disproportionately affects low-income households and Black, Indigenous, and people of color (BIPOC) communities.”

It should come as no surprise that in a market dominated by regional monopolies, there is a direct correlation between price and competition, as an analysis by Stop the Cap! recently demonstrated. Stop the Cap! found that in areas where there is no competition Internet service subscribers pay up to $40 more for the same or sometimes slower service.

“Spectrum charges a hefty $199.99 compulsory installation fee for gigabit service in non-competitive neighborhoods. Where fiber competition exists, sometimes just a street away, that installation fee plummets to just $49.99,” the analysis notes.

Areas with significant non-adoption that are related to poverty should be eligible for funds that will build networks specifically to address these neighborhoods. Comcast’s Internet Essentials has helped 10 million people in these neighborhoods, but it cannot get the job done alone and other companies seem more interested in maximizing revenue from programs like EBB rather than maximizing the benefits for intended recipients.

The key takeaway is that the term “served” cannot be divorced from affordability without compromising the idea of actually being “served.”

ADOPTION

The last challenge, often overlooked, is adoption, meaning that even if the nation was wired with fiber from border-to-border and sea to shining sea — and even if everyone could afford the cost of connection — there are still those who either don’t know how to use the technology available to them or cannot afford the devices needed to connect.

Working to advance digital literacy and help, especially low-income, communities learn to use the technological tools available to them — or in many instances, provide the digital devices needed to connect — is what advocates in this space refer to as “digital inclusion.” The leading organization engaged on this issue, the National Digital Inclusion Alliance (NDIA), concisely describes what it takes to overcome the adoption challenge, focusing on five elements: “1) affordable, robust broadband Internet service; 2) Internet-enabled devices that meet the needs of the user; 3) access to digital literacy training; 4) quality technical support; and 5) applications and online content designed to enable and encourage self-sufficiency, participation and collaboration. Digital Inclusion must evolve as technology advances. Digital Inclusion requires intentional strategies and investments to reduce and eliminate historical, institutional and structural barriers to access and use technology.”

NDIA emphasizes the need for policies and initiatives that support all five of the above mentioned elements in order to achieve digital equity and ensure that “all individuals and communities have the information technology capacity needed for full participation in our society, democracy and economy. Digital Equity
is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services.”

Federal and state expenditures on broadband have all but ignored digital inclusion for too long. Money for infrastructure is poorly spent if many households are unable to take advantage of it for a lack of digital literacy.

Conclusion and Recommendations

The problems with broadband Internet access in the United States are not limited to rural areas. Indeed, far more people and businesses struggle to get access in areas that supposedly have it than in those that all agree lack the necessary infrastructure.

The federal and state governments should actively work to promote investment in areas that need it by allocating funds to build reliable broadband infrastructure, even if an existing provider may claim to serve the area. Because local communities have the best knowledge of where gaps persist, federal and state funds to build networks should be awarded in a way that prioritizes municipal, electric cooperative, and local broadband initiatives that are focused on solving these poverty-related problems.

For too long, policymakers have asked whether it is fair to the large cable and telephone companies for government to invest in needed solutions if companies already offer services in the area. The appropriate question is: Is it fair for businesses and residents in eastern North Carolina and other rural population centers to be stuck with unaccountable monopolists that use their immense political power to shape state laws that effectively prohibit competition?

Governments must take care when they intervene in markets — but there is no real functioning market for most in broadband Internet access. Further, no market will emerge absent smart government policy. The first step is recognizing that the standard for government intervention has to be based on enterprise and residential needs, not solely based upon whether the FCC has blindly announced an area is served because a company claimed it was.

Effective legislative efforts to bridge the digital divide must tackle all three challenges: access, affordability and adoption. Anything less risks depriving millions of Americans access to equal opportunity in an interconnected global economy.

About the Institute for Local Self-Reliance

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