

SHLB Coalition Recommendations for Congressional Legislation on Broadband Infrastructure

July 9, 2021 – Final

The SHLB Coalition is dedicated to solving the digital divide by investing in high-capacity future-proof technologies that serve anchor institutions¹ and their surrounding communities. One of the biggest problems in U.S. broadband policies has been **underbuilding, not overbuilding**. The U.S. needs to make significant investments both for **deployment to unserved and underserved markets** and for **digital inclusion to promote broadband adoption**. SHLB respectfully asks Congressional negotiators to include the following provisions in any broadband infrastructure package:

1. **Require recipients of broadband funding to provide gigabit connectivity for community anchor institutions.**

Community anchor institutions provide essential services to their communities but are often overlooked in broadband deployment plans. Anchor institutions are the gateway to the community. The [National Broadband Plan](#) Goal #4 called for anchor institutions to have gigabit connectivity by the year 2020, a goal that we have not yet reached. A SHLB [study](#) suggests that connecting anchor institutions to fiber will cost between \$13 billion and \$19 billion. Congress should appropriate significant funding to connect all community anchor institutions to gigabit speeds or greater, and should require that recipients of broadband deployment funding serve the anchor institutions in their service areas in addition to residential and small business consumers.

2. **Require recipients of broadband funding to deploy high-bandwidth, future-proof technologies that can be shared with the community at affordable rates.**

Programs that disburse public funding should include public benefits. Too often in the past, government funding programs have awarded funding to organizations that promise public benefits that never come to pass. The SHLB Coalition put together the attached 2-page document to suggest that publicly-funded broadband networks should be open to interconnection to promote retail competition and provide affordable rates for consumers. This broadband funding should be awarded through an open application process on a technology neutral basis that allows all non-profit and for-profit organizations to compete for funding.

3. **Appropriate \$2 billion to the FCC's Rural Health Care program.**

The Rural Health Care program is the smallest of the four Universal Service Fund (USF) programs and has been underfunded for several years despite increasing demand. The COVID pandemic led to a surge in virtual telemedicine visits which has strained resources; this trend will continue beyond the pandemic. Unfortunately, many healthcare providers do not have enough bandwidth to transmit electronic medical records and engage in telemedicine visits simultaneously. Urban/rural consortia, internal connections and medical devices are vitally important to ensuring equality of access to telemedicine in all areas of the country. The SHLB Coalition [estimates](#) that telehealth networks will need almost *\$20 billion in broadband upgrades over the next five years*. Appropriating \$2 billion now, along with improvements to the processing of RHC applications, will put the program on the right path to improving our nation's quality of healthcare, especially in rural markets.

¹ Community Anchor Institutions include schools, libraries, healthcare providers, community colleges and other institutions of higher education, public housing, community centers and other public community support organizations.

4. Provide increased funding for Middle Mile broadband infrastructure.

While much of the focus is on the so-called “last mile” infrastructure to connect residents to broadband, there is often a shortage of high-capacity middle mile broadband infrastructure to connect communities back to the Internet. Investing in last mile connections will be useless without adequate, affordable and accessible middle mile broadband for Internet service providers. Middle mile funding should also include funding for “[The Minds We Need](#)”, a proposal developed by our nation’s research and education networks to fund middle mile connectivity and associated software and tools to connect all remaining community colleges. This proposal will allow our scientific and engineering talent to flourish.

5. Ensure that communities and pole owners provide fair and non-discriminatory access to poles to promote broadband deployment.

The process of adding new broadband infrastructure to existing poles is complex, costly, time-consuming and inconsistent, often creating needless obstacles, extra cost, and delays to bringing broadband to the communities that need it most. Some pole owners inequitably demand that new attachers pay the entire cost of replacing the pole, even in cases when the pole is beyond its useful life. The SHLB Coalition has developed a set of [Pole Attachment Principles](#) (see attached) that we urge Congress to adopt. The principles would promote fair and non-discriminatory access to poles, including a recommendation to provide funding to pole owners to expedite pole replacement.

6. Broadband Mapping programs should include anchor institutions.

Most broadband mapping programs focus on residential broadband but leave out the community anchor institutions. Future mapping proposals should make sure that the broadband capacity for anchor institutions is measured so that we know how to track progress and target funding for anchor institutions in the future. This is a simple, common sense change. Policy makers and regulators must also use multiple broadband mapping data sets to analyze and improve the accuracy of their data and not solely rely on the data they collect from the traditional industry providers and/or a third party challenge process.

7. Support funding for Digital Equity.

The SHLB Coalition strongly supports additional funding for the Digital Equity Act, for the [Emergency Broadband Benefit](#) (EBB) program, for the [Emergency Connectivity Fund](#) (ECF) program, and for a permanent program to defray the cost of broadband subscriptions, devices and skilling. These programs provide important support for low-income, disadvantaged and other communities on the wrong side of the Digital Divide.

8. Ensure Broadband Networks are Secure.

Anchor institutions have experienced a growing rate of cyber attacks against their networks. We urge Congress to ensure broadband infrastructure programs connecting anchor institutions also recognize the need for network security and provide the flexibility to secure these connections today.

For more information, contact John Windhausen, SHLB Coalition Executive Director, at jwindhausen@shlb.org.

Common Sense Solutions for Closing the Digital Divide

Missed Opportunities

The lack of high-capacity and affordable broadband continues to constrain American prosperity in many portions of the country, a deficit particularly acute in urban and rural areas. Tens of millions of rural and urban households still rely on decrepit, 1950s-era copper cables that cannot support high-speed broadband.

The private sector has made significant investments in broadband deployment in communities with high population density and household incomes. However, areas with low population density and/or low household incomes require much greater government support. State and federal government programs have made incremental progress to fill the broadband gap over the past 10 years, but those programs often lack sufficient resources and sometimes lack rigorous oversight and enforcement.

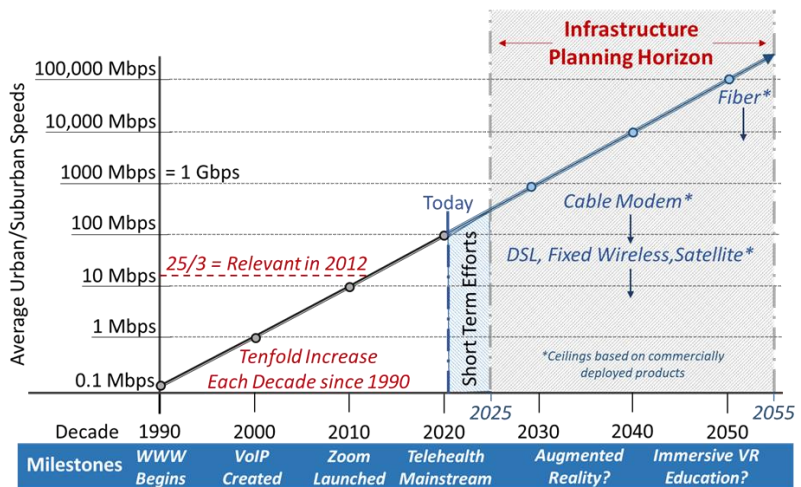
America needs a comprehensive national effort to build affordable, high-capacity networks connecting all anchor institutions, business and residential consumers over the next five years. For instance, we should ensure that all anchor institutions have at least gigabit capacity, as called for in the National Broadband Plan. Broadband policies should foster deployment of open and high-capacity broadband “to and through” anchor institutions to make broadband affordable for residential consumers.

While some industry members express concern about overbuilding, the SHLB Coalition believes underbuilding is a much bigger concern. This brief proposes a common sense path forward that invests in long-term middle mile and last mile broadband networks using an open and competitive application process, enforcing rigorous build-out requirements, and ensuring consumers have digital literacy skills and affordable prices.

Thinking Long-Term

We must deploy network infrastructure will support projected growth for the next thirty years. Such “future-proof” networks often cost much less over their lifetime short-lived incremental solutions. One-capital investments in scalable broadband infrastructure can significantly improve broadband providers’ long-term profitability and sustainability.

With demand increasing tenfold per decade, we will need networks capable of reaching speeds of 100 gigabits per second (see chart) in the near future. While this sounds extraordinary, the pace of technological change does not seem to be slowing. Higher upload speeds will be crucial for interactive applications.



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Three Principles for Broadband Expansion

A. Invest in Robust Broadband Infrastructure

Federal broadband funding programs should

- Be open to any entity, including, but not limited to, government entities, schools, libraries, healthcare entities, Internet Service Providers (ISPs), institutions of higher education, electric cooperatives, non-profit research and education networks, and broadband cooperatives. Non-profit research and education networks have a particularly successful track record of serving anchor institutions' needs for cost effective, high-quality and scalable broadband service.

- Focus on future-proof networks that can handle Internet traffic for the next 30-40 years.
- Include funding for both unserved *and* underserved areas. Even if “basic” broadband is available to residential consumers, funding may still be necessary to deploy multi-gigabit broadband to anchor institutions in the same area.
- Promote public-private partnerships with proper oversight to ensure proper use of funds.
- Invest in both last-mile networks and middle mile networks, including neutral, localized peering facilities and community points-of-presence.
- Award funding to yield the best value based on capacity, reliability and viability, not just lowest cost. For instance, anchor institutions have unique needs for high-performance networks that strategically manage network traffic and optimize access to cloud services.
- Give anchor institutions high priority, both because they provide essential Internet services to the community, and because they serve as gateways to extend service to the surrounding residences.
- Adopt a “technology-neutral” approach to meeting the long-term requirements, while recognizing that some technologies may be better suited for certain customers or areas than others.

B. Create Competition to Spur Innovation and Protect Consumers

- Recipients of government broadband funding often block funding from other government programs even where it is needed. No recipient of government funding should be awarded a monopoly.
- Federally-funded broadband networks should be open to interconnection and sharing, enabling multiple retail providers to compete on an equal footing. For instance, fiber providers receiving federal funding should make a healthy percentage of fiber strands available to other providers on non-discriminatory terms and conditions (necessitates an ongoing enforcement mechanism).
- No state or local law should prohibit non-traditional providers such as municipalities, anchor institutions or non-profits from receiving funding and offering broadband services. Status as an Eligible Telecommunications Carrier (ETC) should not be required.

C. Require Accountability and Transparency

- Require broadband providers that claim to serve an area to provide subscriber information and end-to-end performance testing results.
- Release funding in tranches based on verified completion of project milestones, availability, and speeds with public partner or other third-party inspections and verification.
- Require full public transparency from funding agencies and recipients, including detailed quarterly project schedules and monthly reporting of locations passed/served.
- Recipients of federal funding to provide residential broadband should be required to offer an affordable price option for low-income consumers. These rates should be published and transparent.
- Create service level commitments for recipients tied to capacity, reliability, and end-user support.
- Levy substantial penalties on providers that overstate broadband availability, costs, or speeds.

In addition to expanding the reach of broadband, programs should also fund:

- Local broadband needs assessment and project development;
- Digital literacy programs and low-cost connectivity options; and
- More granular broadband maps down to individual service locations and including anchor institutions.
- Cybersecurity solutions to protect the integrity of anchor institution networks against ransomware and other cyber-attacks.

**POLE ATTACHMENT PRINCIPLES
TO EXPEDITE BROADBAND DEPLOYMENT
TO ANCHOR INSTITUTIONS AND THEIR COMMUNITIES**

June 28, 2021

The policies governing access to utility poles can have a significant impact on the pace of broadband deployment to unserved and underserved markets. Providing a consistent framework, while recognizing the variety of circumstances that affect local pole attachment costs, can help to streamline the pole attachment process and expedite broadband deployment to anchor institutions and their surrounding communities. The SHLB Coalition urges policy-makers and pole owners to incorporate the following principles into their pole attachment policies.

1. All Pole Owners Should Be Subject to Comparable Rules Governing Pole Access.

- All pole owners should be required to offer reasonable rates, terms and conditions for pole access, with the goal of parity between the rules governing investor-owned utilities (IOUs) and those applicable to other pole owners, including cooperatives and municipalities.
- Although the FCC regulates IOUs, many utility poles are owned and operated by other entities, including cooperatives and municipalities, not currently regulated by the FCC.

2. Electric and Telephone Easements and Public Rights of Way Should Be Made Available for Broadband.

- In jurisdictions where easements and public rights of way for electric or telephone infrastructure are limited to electric and/or telephone wires, they should be expanded to encompass broadband and communications facilities as well.

3. Rates, Terms and Conditions for Pole Access Should Be Just, Reasonable, Predictable, and Prompt.

- State and local governments should use their authority over access to poles to apply the FCC's rules regarding pole access and make-ready for all pole owners -- including IOUs, municipal utilities and cooperatives. FCC rules are well-developed, have received extensive consideration by an expert agency, and have been the subject of input from all stakeholders. This includes "self-help" remedies and "one-touch make-ready" options that allow attachers to proceed promptly and safely without unnecessary delays. State and local governments should be incentivized to implement these FCC rules and policies.
- Timelines and application procedures for accessing poles, including for the completion of make-ready work, should be predictable and prompt and should provide some flexibility. Denials of access must be specific and reasonably based upon safety, reliability, engineering, or capacity considerations.
- If a pole owner requires a written agreement to attach to poles, it should be required to negotiate such agreements in good faith, including updating those agreements to incorporate reforms to pole attachment rules that occur during the contract term.

4. Pole Attachment Rates, Terms and Conditions Should be Non-discriminatory and Rates Should be Cost-based.

- Federal, state and local regulators should ensure that pole owners do not use their ownership of key facilities to impede broadband competition.

- In general, pole owners should be required to extend comparable rates, terms and conditions of access to everyone—including those rates, terms and conditions that are provided to their own affiliates, their business partners, and for the purpose of deploying their own networks.
- In general, pole attachment rates should reflect actual costs – non-recurring charges should reflect the actual immediate costs of make-ready work, and recurring rates should reflect a portion of the actual long-term costs of pole installation, maintenance, ownership and replacement.

5. To support broadband deployment, federal, state and local infrastructure funding should be made available to help defray pole make-ready and pole replacement costs.

- Funding should be made available to pole owners and broadband providers to help jumpstart the deployment of broadband infrastructure in unserved areas of the country. Such funding will help to reduce the costs associated with broadband deployment, thereby increasing the accessibility and affordability of broadband service.
- Broadband providers should be able to partner with pole owners to leverage infrastructure funding for pole replacements and make-ready in order to expedite broadband deployments.

6. Pole Capacity Should Be Expanded When Necessary and Costs Should be Shared Fairly

- Poles that are too short, crowded or not strong enough to support new broadband facilities should be replaced or reinforced so that broadband can be deployed where it is needed.
- Costs for expanded capacity should be shared equitably.
- The cost of replacing older poles should not be borne entirely by new or existing attachers. Imposing the entire pole replacement costs on new or existing attachers unfairly subsidizes the pole owner’s plant (as the pole owner would have otherwise been responsible for replacement) and unreasonably drives up the cost of new broadband and communications deployment. Pole owners share in the benefits of pole replacements, particularly by avoiding certain future replacement and maintenance costs, and should contribute to pole replacements accordingly.
- Make ready work for new attachers should not include costs for correcting pre-existing violations of licensors, licensees, or joint users.

7. Engineering and Safety Requirements Should Be Reasonable and Transparent.

- Pole owners’ safety and engineering standards should be reasonable given local conditions—and should be based upon genuine safety and engineering considerations. Safety and engineering codes should not be used by pole owners as a pretext to force attachers to pay for improvements, or to make it more difficult for attachers to offer competing services.
- Safe temporary attachments and extension arms should be permitted to allow broadband to be extended to unserved areas pending completion of make-ready work on poles.
- Pole owners and providers should coordinate and use third party resources if necessary to expedite the engineering and permitting process.

8. Overlashing Should Be Permitted Upon Notice, Without Separate Application Requirements.

- Overlashing—*i.e.*, adding a new attachment to an existing one—helps speed broadband deployment by enabling broadband facilities to be deployed simply and safely, as long as overlashing follows generally accepted safety and engineering standards.

9. Regulators Should Make Prompt Dispute Resolution Available for Pole Access Disputes.

- Sensible pole access and attachment rules will only help speed broadband deployment if they are followed and enforced. Disputes must be resolved by regulators quickly.
- Policy-makers should include all stakeholders in the process of developing and implementing pole attachment policies.

10. Pole Owners Should Keep Sufficient, Timely Records to Calculate Recurring Rates, and Make the Records Available.

- Sensible rules governing just and reasonable rental charges for poles are only meaningful if pole owners maintain and share the data necessary to calculate those rates fairly and accurately.
- The process of rate calculation should be fair and transparent.

For questions about these Pole Attachment Principles, please contact John Windhausen, Executive Director, SHLB Coalition, at jwindhausen@shlb.org.