I. Introduction - The State of Universal Service

II. Federal Policy
   A. Access: The Need for Broadband Infrastructure Funding & Good Jobs
   B. Affordability: Strengthening the Universal Service Fund & Lifeline
   C. Accountability: Merger Review That Protects Workers, Consumers
   D. Accountability: Reinstituting Net Neutrality Protections
   E. Oversight: Fully-staffed FCC & Completion of Broadband Mapping

III. State Policy
   A. Accountability: Asserting State Public Utility Commission Authority Over Broadband and VOIP to Ensure Network Resiliency, Public Safety, Consumer Protection & Data Collection
   B. Access & Accountability: Ensuring Broadband Deployment Grants Have Labor and Consumer Protections
   C. Affordability: State Universal Service Funds
   D. Accountability: New Entrants
   E. Accountability: Reversing the Harmful One-Touch-Make Ready Regime for Pole Attachments

IV. Local Policy
   A. Accountability: Ensuring Safe Streets with Oversight of 5G Wireless Infrastructure Deployment
   B. Access & Affordability: Digital Equity Offices & Initiatives - The Critical Role of Labor
   C. Access: Federal Funds for Localities to Ensure Access to Broadband
   D. Access: Dig Once Policies
Introduction

The State of Universal Service
Today, voice and data over broadband have become dominant forms of communication, but there is no legislated universal service requirement in place. Policy makers have assumed that competition would spur communications companies to deploy broadband widely and give customers not just one but competing choices. Competition has failed to deliver universal, affordable access, and today CWA is advocating for federal funding to close the Digital Divide by subsidizing deployment of broadband infrastructure to unserved and underserved areas, with strong accountability requirements attached to that funding, including labor standards. CWA is also advancing common sense legislation at the state level to regulate broadband under public utility commission authority so our communities aren’t left without recourse when broadband providers fail to deliver promised service. This booklet provides a summary of CWA’s positions on a range of broadband policy issues with the watchwords of universal access and affordability, corporate accountability, and broad public oversight. It’s a living document that will evolve as conditions change.

Federal Policy

Access: The Need for Broadband Infrastructure Funding & Good Jobs
Accessible, Affordable Internet for All Act (AAIAA) -- Majority Whip Jim Clyburn (D-SC) and Sen. Amy Klobuchar (D-MN) recently reintroduced the AAIAA (H.R. 1783/S. 745). The bill provides $79.5 billion to deploy broadband infrastructure to unserved and underserved communities, including $60 billion for a national competitive reverse auction to fund broadband deployment in unserved areas (areas with service below 25/25 Mbps) and areas with low-tier service (areas with service between 25/25 and 100/100 Mbps). The remaining $20 billion will be distributed among states by population for statewide competitive reverse auctions for broadband deployment to unserved areas and anchor institutions, like schools and libraries.

The bill addresses the importance of workers’ rights and the dangers of a race to the bottom on wages, safety, and quality by requiring recipients of this funding to remain neutral in workers’ union organizing efforts and to engage in first-contract bargaining and binding arbitration. Further, the bill prohibits subcontracting for the purposes of circumventing a collective bargaining agreement.

This federal investment would create an estimated 200,000 direct construction job years, likely meaning that it will put tens of thousands of people to work for several years. The spending would also create an estimated 286,000 indirect supply chain jobs and 328,000 induced jobs through a multiplier effect. And this does not even account for the job growth that would likely result from new businesses that could flourish if all communities have broadband. This total job creation of more than 800,000 job years will strengthen our communities for the long term, but only if these are good jobs that protect workers’ rights to organize and bargain collectively.

Resources:
Affordability: Strengthening the Universal Service Fund & Lifeline

Broaden the USF Funding Base
The funding mechanism that supports the Universal Service Fund (USF) -- which funds the FCC’s deployment, Lifeline, and E-Rate programs -- is unsustainable because it levies fees only on traditional voice service revenues, despite the shift to broadband as the primary communications service. The growth of the USF fee due to the shrinking number of telephone lines has negative impacts on consumers, business customers, and the telecom industry that serves them. All of the USF programs are at risk if the funding mechanism is not stabilized. The FCC can and should broaden the USF funding base to include broadband revenues. Other sources of funding to supplement and bridge the need for USF support, such as temporary appropriations measures and spectrum auction proceeds, can also be considered, but are no replacement for a sustainable USF.

Resources:
- [Universal Service Fund](https://www.fcc.gov) (FCC)

Strengthen Lifeline for Low-Income Households
As the only federal program that addresses the affordability of communications service, Lifeline is a crucial tool to closing the digital divide, and has been an essential resource for low-income people across the country during the ongoing COVID-19 pandemic. The FCC must strengthen the Lifeline program by ensuring that benefits are adequate to serve customers’ needs, the National Verifier is fully implemented, states are maximally participating, and by reducing barriers to participation.

The December 2020, COVID-19 Relief bill included a new $3.2 billion Emergency Broadband Benefit (EBB). Separate from the Lifeline program, the EBB will provide for $50 per month discounts for low-income families off the cost of internet service and a subsidy for low-cost devices such as computers and tablets. While the EBB is a temporary program through the end of the pandemic, it demonstrates both the persistence of affordability as a barrier to broadband and the inadequacy of a $9.25 monthly subsidy, which is what the Lifeline program provides.

Resources:
- [FCC: Lifeline Program for Low-Income Customers](https://www.fcc.gov)
- [FCC: Emergency Broadband Benefit](https://www.fcc.gov)
Accountability: Merger Review That Protects Workers, Consumers
U.S. merger review has ignored the interests of workers in recent decades, even finding in some cases that the suppression of wages were benefits of a merger because they contributed to so-called “efficiencies.” Benefits to one group (consumers) should never be used to justify harms to a second group (workers). Labor markets are distinct from consumer product markets and require separate analysis. In the T-Mobile/Sprint merger, the Economic Policy Institute forecast annual earnings reductions of $520 to $3,276 for wireless retail workers from increased labor market concentration due to the merger.

For all mergers, lawmakers should require the Department of Justice to review labor market impacts, particularly the anti-competitive exercise of growing monopsony power -- in which employers are able to control wages, setting rates lower than the competitive level if capital were vigorously competing for labor. To remedy unchecked monopsony power, merging parties should be subject to conditions that will ensure collective bargaining.

Employers’ use of anticompetitive restraints, like non-competes and mandatory arbitration, is also evidence of abusive dominance over workers that should be addressed during transactions and prohibited across the board.

Resources:
- CWA position on Antitrust & Worker Power
- Economic Policy Institute study of T-Mobile/Sprint merger impacts on workers

Accountability: Reinstituting Net Neutrality Protections
CWA strongly opposed former FCC Chair Ajit Pai’s mis-named “Restoring Internet Freedom” Order that eliminated essential safeguards that protect an open internet, including blocking, throttling and paid prioritization under Title II authority. CWA looks forward to working with new FCC leadership and public interest allies to reestablish the net neutrality protections included in the 2015 Open Internet Order.

Resources:
- The FCC’s 2015 Open Internet Order
- CWA statement opposing Chair Pai’s rollback of net neutrality protections

Oversight: Fully-staffed FCC & Completion of Broadband Mapping

Need for Fully Staffed FCC
The FCC is an essential independent regulatory agency to help achieve universal broadband access. As of May 2021, there is a vacant Democratic commissioner seat, resulting in 2-2 partisan gridlock that prevents the Commission from taking meaningful action. The FCC should be fully staffed as quickly as possible by a fifth commissioner with a deep commitment to
workers in the telecommunications industry and who understands broadband issues important to consumers and workers.

CWA has endorsed the current Acting Chair Jessica Rosenworcel for the position of permanent FCC Chair and Debbie Goldman, former CWA Director of Research and Telecommunications Policy Director for 25 years, for the vacant Democratic commissioner seat.

Resources:
- CWA endorsement letter for FCC Commissioner positions

Complete the Congressional Mandate for Mapping Quickly and Effectively

The FCC’s national broadband maps, which are critical to unserved areas seeking federal broadband subsidies, are notoriously inaccurate. This creates serious challenges to closing the digital divide. How can we know who still needs broadband access if we don’t know who has it?

Part of the problem is that the FCC’s measurement of broadband access overestimates coverage. By the FCC’s measurement, if one subscriber in an area has broadband service, the entire area is considered covered. For example, FCC data shows 100 percent broadband access in Ferry County, WA, while Microsoft estimated coverage at 2 percent.

The other part of the problem is the self-reporting of coverage data by providers. Last year, Democratic members of the House Energy & Commerce Committee criticised FCC’s reliance on carrier-reported coverage data after it was revealed that Barrier Communications Corporation submitted inaccurate coverage data. The company falsely claimed coverage for every census block in the states where it offered service to any census block.

In March 2020, Congress passed the Broadband DATA Act, which will:

- Require the FCC to collect granular service availability data from wired, fixed wireless, and satellite broadband providers.
- Set strong parameters for service availability data collected from mobile broadband providers to ensure accuracy.
- Permit the FCC to consider whether to collect verified coverage data from state, local, and tribal governments, as well as from other entities.
- Create a process for consumers; state, local, and tribal governments; and other groups to challenge FCC maps with their own data, and require the FCC to determine how to structure that process without making it overly burdensome on challengers.
- Establish a crowdsourcing process that will allow the public to participate in data collection.
- Strengthen enforcement against providers that knowingly or recklessly submit materially inaccurate broadband data.
- Require the FCC to use the newly-created maps when making new awards of broadband funding.
In February 2021, Acting Chair Rosenworcel announced a task-force to lead the effort to improve their broadband maps. However, the Commission has acknowledged that improving the national maps will be a months-long process, estimating 2022 at this point but the timeline is unclear. CWA supports states acting to improve mapping in parallel to the federal process.

Resources:
- US Senate Committee on Commerce, Science, and Technology: Bill to Improve Broadband Data Maps Signed Into Law
- FCC: Acting Chair Rosenworcel Establishes Broadband Data Task Force

State Policy

Accountability: Asserting State Public Utility Commission Authority Over Broadband and VOIP to Ensure Network Resiliency, Public Safety, Consumer Protection & Data Collection

CWA is advancing a commonsense state legislative proposal to establish public utility commission oversight of broadband in specific areas. This legislation is vitally important to achieving universal, affordable broadband access for all residents of our communities.

Public utility commissions (which have various names in different states) are elected or appointed bodies in charge of regulating essential services like telecommunications and electricity.

CWA's bill would give PUCs the power to take actions to achieve accountability from communications service providers:
- Network Resiliency - ensure the resiliency and reliability of broadband infrastructure and require internet service providers to submit information related to network reliability, including outage reporting.
- Public Safety - ensure the public safety and adequacy of networks by exercising oversight of internet service providers' emergency preparedness and plans for post-emergency network restoration, including establishing minimum power back-up requirements and requiring all internet service providers to maintain networks sufficiently to ensure reliable and safe communications services.
- Consumer Protection & Data Collection - establish mechanisms to collect consumer complaints and require internet service providers to report data on the deployment/availability, pricing and adoption of VoIP and broadband service.

Resources:
- CWA state legislation toolkit
- CWA press release launching our state legislative program, April 2021
Accountability & Access: Ensuring Broadband Deployment Grants Have Labor and Consumer Protections

Labor Standards for State-Funded Deployment
CWA supports state efforts to fund broadband deployment as long as the grant programs do not undercut existing labor standards won through decades of collective bargaining by telecom workers. CWA's model of labor standards for state and local broadband grants would give preference to high-road employers that meet the following criteria:

- Safety training and certification for all workers;
- Professional certifications and/or in-house training to ensure that deployment is done at a high standard;
- Local workforce that supports job pipelines for traditionally marginalized communities;
- No recent violations of labor law.

Best Practices to Achieve High Quality Build-out of Broadband

- Speed Thresholds - The definition of unserved areas eligible for grant funding should not go below the FCC’s 25/3 Mbps speed threshold. The requirement for new builds should be at least 100/20 Mbps wherever possible.
- Oversight and Accountability - States should include clawback provisions to ensure that grants awarded deliver the promised broadband service on planned timelines.
- Mechanism for Selection - Grant programs should be awarded based on “best value” principles, using a point system to weight various criteria, and avoid a race to the bottom “lowest cost” approach.

Resources

- Report: “Best Value in Publicly Funded Projects” from Florida International University

Affordability: State Universal Service Funds

A number of states have sought to strengthen state LifeLine programs, which are important supplements to the federal Lifeline programs. CWA supports these efforts and encourages states to broaden the base of their state universal service funds to include intrastate broadband revenues.

Accountability: New Entrants

Municipal Broadband and Cooperatives/Nonprofits - Municipal broadband and cooperative/nonprofits are often discussed as a solution to the digital divide that has resulted from private industry underinvestment. While there are many versions of municipal broadband, it usually refers to a broadband service where a public agency undertakes the investment and exercises the most control over the network. Generally, these networks are managed by public agencies or authorities, they own the infrastructure, and operate the networks to make the service available to consumers.
Legacy networks were built for the public and should be upgraded and continue to serve the public, with the same union workforce, but with greater accountability. CWA believes the best approach for most communities is to partner with a telecom provider to build and maintain fiber broadband by issuing a request for proposals that includes strong labor protections, and selecting the “best value” proposal.

However, in areas where union employers refuse to build broadband networks, where there is no option for a public-private partnership, policymakers may develop plans for municipal broadband initiatives. It is important for these policymakers to understand the many important considerations surrounding muni-broadband. At a minimum, muni-broadband proposals must include provisions for good jobs, labor standards, and workers’ rights; demonstrate financial and operational viability; and include enforceable commitments to provide affordable high-speed broadband access to unserved or underserved communities.

Resources:
- CWA position statement on municipal involvement in broadband deployment
- Benton Foundation report on public-private partnerships, CWA’s preferred approach to municipal involvement

**WISPs** - Wireless internet service providers (WISPs) provide fixed wireless access to households and businesses, often in rural areas. This technology is inferior to fiber-to-the-premises and should not be subsidized by taxpayers unless it is the only practical option for a particular geographic terrain and is proven to reliably deliver the promised speeds. In particular, the FCC should review the applications of WISPs like Starry and NextLink that won hundreds of millions of dollars to deploy gigabit service in the recent Rural Digital Opportunity Fund auction. The FCC should evaluate whether these WISPs overpromised the speeds they can deliver at the deployment costs to which they committed.

Resources:
- NTCA white paper on the technological limitations of fixed wireless

**LEO Satellite** - Currently, there are three major companies vying to provide broadband via “Low Earth Orbit” (LEO) satellites: Starlink (owned by SpaceX), Project Kuiper (owned by Amazon), and OneWeb (owned by Softbank). Though there are currently companies that provide internet services by satellite, they orbit 22,000 miles above Earth making the connection slower and less reliable. LEO satellites orbit about 400 miles above Earth, allowing for faster speeds and lower latency. Starlink is the farthest along in its deployment of the satellite network, which is intended to eventually consist of tens of thousands of satellites. The technology is still under development, though beta tests have shown Starlink to provide around 100 Mbps speeds with low latency.

There are several problems with LEO networks:
• They may not be economically viable - A Morgan Stanley analysis estimates that it would cost $240 billion for Starlink to complete its network. It would need three million customers paying $99 per month to make the service viable within ten years.
• The satellites may obscure the night sky - the low orbit of the satellites would be visible in the night sky.
• The satellites may fail to deorbit and increase the amount of space junk in orbit. This would put operating satellites at risk of collision with defunct LEO satellites.

Presently, it remains an open question whether LEO networks could be competitive with traditional broadband carriers and whether they will face regulatory obstacles. Fiber-to-the-home still provides a much faster connection and is cheaper to deploy. In areas without fiber, LEO networks may be competitive with DSL even if the subscriptions are more expensive.

**Accountability: Reversing the Harmful One-Touch-Make Ready Regime for Pole Attachments**

One Touch, Make Ready threatens worker and public safety, destroys good jobs, and in some locations violates CWA collective bargaining agreements. One Touch, Make Ready (OTMR) is a pole attachment policy that mandates companies (and their approved contractors) that want to put new equipment on utility poles can move existing equipment to create the necessary space. This is called “make-ready” work. Make-ready pole attachment work is complex and, if done incorrectly, can lead to dangerous conditions for workers and the public. Unskilled work could leave heavy terminals and wires hanging without the proper support. Ungrounded wires could pose electrocution risks. Incorrect placement or overloading equipment on damaged or decaying poles could lead to poles falling in the public right-of-way.

Skilled, properly trained, career company employees are in the best position to do make-ready work safely and properly. They know the equipment, the condition of the poles, the rules regulating attachment placement, and have been properly trained. Moreover, career workers are on the frontlines of the telecommunications industry – responding to consumer needs, building and maintaining networks, ensuring safety and quality service. Allowing contractors to do make-ready work undermines good, career jobs in communities across the US.

In addition to worker and public safety harms, in some locations OTMR violates CWA collective bargaining agreements. For example, the CBA between CWA District 3 and AT&T Southeast includes Article 14, a provision that has been in the agreement for decades. In Article 14, BellSouth agrees “to use only Company employees on work involving the construction, maintenance, removal and/or repair of the following types of plant: All aerial outside plant...underground cable and splicing of buried cable ... equipment which constitutes any part of a communication circuit.”

While OTMR was adopted by the Trump Administration’s FCC in 2018, the FCC’s Order allows states to reverse preempt the federal OTMR regime if there are state pole attachment regulations in place. To reverse preempt, a state has to pass legislation and certify to the FCC
that “in so regulating such rates, terms, and conditions, the state has the authority to consider and does consider the interests of the subscribers of the services offered via such attachments, as well as the interests of the consumers of the utility services.” As of May 2021, 22 states and DC have reverse preempted the FCC’s OTMR regime.

Resources:
- FCC: States That Have Certified That They Regulate Pole Attachments
- Summary of FCC OTMR Order (8-23-18)
- OTMR talking points
- OTMR ex parte - 5-18-18 - WCB-CPD (with photos)

Local Policy

Accountability: Ensuring Safe Streets with Oversight of 5G Wireless Infrastructure Deployment

Large telecommunications companies are increasingly installing “small cell” antennas on our city streets. Unlike traditional macro cell towers, small cell antennas provide a much smaller coverage radius. This means that unlike macro towers, small cell antennas need to be built near where we live and work, and that a far greater number of them are being deployed, all connected by fiber. This deployment is a huge infrastructure build-out, and it needs to incorporate accountability to workers and the public.

Subcontractor Transparency

When work is happening in public rights-of-way, unsafe conditions affect both workers and the public. The industry often suggests that small cell installation is as simple as attaching a box to a pole, but the reality is that it’s complex work that can involve excavation for underground fiber deployment, use of heavy equipment, and navigating other utilities. When things go wrong in the right-of-way, there are serious consequences. For example, in April 2019, a subcontractor for Crown Castle in North Carolina hit a gas line and caused an explosion that killed two people and injured another twenty-five.¹ In February 2019, a Verizon subcontractor in San Francisco hit a gas line and caused an explosion and a three-alarm blaze that destroyed multiple properties.²

A big problem for safety is that the telecommunications industry, like many sectors, is heavily subcontracted. Often there are multiple layers of subcontracting between a provider and the actual workers in the right-of-way. Meanwhile, many cities are only aware of the company that

---

signed the permit, and do not know the identity of the actual company working in the right-of-way. This can create accountability problems. For example, in the San Francisco explosion, the subcontractor didn’t have a required license. And in the North Carolina explosion, the contractor doing the work wasn’t listed on the permit. Often these are low-road non-union companies, working on thin profit margins and safety is not a priority.

CWA is advocating for local governments to craft their permitting policies and master license agreements to promote accountability and transparency for these subcontractors, including requiring information on the identity of the company actually working in the right-of-way and workplace safety information.

Local Authority Over Small Cell Permitting
As cities work to manage extensive small cell deployment on public property like light and traffic poles, they face an attack on their authority to effectively manage our streets. In 2018, after aggressive industry lobbying, the Trump FCC published an order that drastically limited the power of local governments to regulate small cells. The order prevents cities from charging the industry fair rates to access public property, and imposes strict timelines for cities to process applications. These burdens translate into costs for taxpayers. For example, a recent report finds that of cities surveyed, small cell preemption has increased staffing expenses in four out of five mid-size localities, and 63% of large localities. Effectively, the public is being forced to subsidize private companies installing equipment on public property.

The industry has also moved state bills that preempt local authority in at least 29 states. In many states, the industry has pushed misleading messaging about 5G, implying that 5G small cells will somehow bridge the digital divide or suggesting that cities are “behind” in the “race” to 5G. In some cases, “5G hype” has led cities to agree to “public-private partnerships” that amount to sweetheart deals, giving away access to public assets for pennies on the dollar. The reality is that “streamlined” small cell permitting does nothing to address digital inequity, and is a giveaway to corporate interests on the backs of communities, workers, and local governments.

CWA has advocated for robust local power to manage small cell deployment and ensure that work done in the rights-of-way is safe for workers and the public. We have opposed the FCC’s small cell orders and preemption bills in many states.

Resources
- CWA’s campaign for accountability in next generation networks: Fair5G.org
- Factsheet: Subcontracting in Small Cell Deployment: Who’s Doing the Work in Our Streets?
- Reports from CWA on Verizon’s unfair 5G deals in Sacramento and San Diego

3 National Association of Telecommunications Officers and Advisors, March 2021, “Stretched Thin and Feeling the Squeeze: The Harmful Effects of Small Cell Preemption on Local Governments.”
4 Local Solutions Support Center, “What is Preemption?”; National Council of State Legislatures, Small Cell Preemption Legislative Tracker; and additional legislative research on file with CWA Research Department.
- Report from NATOA and CWA: “Stretched Thin and Feeling the Squeeze: The Harmful Effects of Small Cell Preemption on Local Governments”

Access & Affordability: Digital Equity Offices & Initiatives - The Critical Role of Labor
Many cities are pursuing digital equity efforts through specialized offices or initiatives. When CWA gets involved, we can hold corporations accountable and support CWA members. Oftentimes, industry voices push for stop-gap measures, like wifi hotspots or device lending, that don’t do anything to address digital redlining. CWA believes that households deserve access to high quality broadband connections no matter their income or neighborhood. For example, in San Diego, CWA Local 9509 is working in coalition with school districts, non-profit allies, and legislators to promote labor standards in digital equity spending and robust fiber buildout.

Resources
- CWA Report, AT&T's Digital Redlining: Leaving Communities Behind for Profit
- San Diego Regional Digital Equity Coalition, Statement of Principles

Access: Federal Funds for Localities to Ensure Access to Broadband
There are substantial funds available for broadband in 2020-2021 relief packages. CWA local leaders can bring awareness about these resources to elected leaders and allies. Under the American Rescue Plan, states, territories, cities and tribal governments can use their collective $350 billion in federal funds to cover costs until Dec. 2024 “to make necessary investments in water, sewer, or broadband infrastructure,” among several permissible uses. The Treasury Department’s Interim Final Guidance for this funding encourages localities to adopt labor standards for these projects.

CWA has begun to develop a menu of options for how cities and counties can effectively use federal funds for broadband expansion (both rural and urban), including:
- Partnerships with ISPs via procurement/RFP to deploy broadband to underserved neighborhoods, piggybacking on public infrastructure, with labor standards attached;
- Support for "digital navigator" programs to sign people up for the Emergency Broadband Benefit and other digital inclusion resources;
- Setting up Digital Equity Offices and Councils with labor representation at the City/County level to identify gaps and develop grant opportunities.

Resources:
- Treasury Department Interim Final Rule for American Rescue Plan State & Local Fiscal Recovery Funds
- National Digital Inclusion Alliance guide to creating a Digital Navigator program

Access: Dig Once Policies
Dig Once policies require the installation of broadband conduit as part of a federally or state-funded construction project. The common-sense policy ensures public rights-of-way aren’t repeatedly torn up for broadband deployment by requiring communication between broadband
providers and transportation departments and that infrastructure upgrades, like a new bridge or tunnel, include space for providers to lay fiber in the future.

Resources:

- BroadbandNow Dig Once brief