

Broadband Facts

It Took Government Regulation to Make Telephone Service Universal

Universal Service for Telephone

- Universal service was a cornerstone of the first major communications law, the Communications Act of 1934. Universal service policies, funded by a tax on telephone bills, were an extraordinary success, bringing affordable telephone service to over 98% of the population, even to those in remote rural areas.
- Without these policies, telephone companies would have had little incentive to bring telephone service to hard-to-reach or unprofitable places.

No Universal Service for Broadband

- Today, voice and data over broadband have become dominant forms of communication, but there is no legislated universal service requirement in place. There have been some requirements connected to telecom deals; for example, in order to get FCC approval to buy DIRECTV, AT&T was required to expand its fiber build-out to 12 million households. As soon as AT&T met the requirement in mid-2019, it halted its national build-out for more than a year. Fiber-to-the-home is available for less than a third (28%) of AT&T's residential customers as of June 2019.
- For the most part, regulators have assumed that competition would spur telecom companies to deploy broadband widely and give customers not just one but competing choices. While the 1996 Telecommunications Act provided for unbundling of telecom network elements and wholesale competition, broadband has not been subject to these requirements.

Broadband Basics

- Broadband internet service can be provided over DSL, fiber, cable or other technologies. Broadband provided over fiber-optic cable is understood to be the highest speed, highest quality option.
- FCC's definition of broadband speed: 25 Megabits per second (Mbps) download and 3 Mbps upload (25/3). *CWA supports an upgrade of this definition to 100 Mbps download and 20 Mbps upload (100/20).*
- Over 86% of U.S. households have home broadband, but only 64% of households are subscribed to service providing at least 25/3 speeds, and only 47% of households are subscribed to service providing at least 100 Mbps download speed.
- The FCC last updated its definition of broadband in 2015. Digital applications have become much more data-intensive since then. (Just think of how much you watch videos or use Zoom over the internet compared to 2015.) Users need faster broadband speeds to take advantage of these technological advances.
 - Download speeds needed for different activities:
 - Video learning: 5-25 Mbps
 - Streaming a high-definition video: 5-8 Mbps
 - Online gaming: 3-4 Mbps
 - Now imagine a single household trying to do all this on a single 25/3 Mbps broadband connection.
- Regulation: Under the Trump Administration, the FCC classified broadband as an “information service” rather than a “telecommunications service,” exempting it from regulation. Even though the FCC gave up authority, a federal court determined that states and their public utility commissions (PUCs) *can* regulate broadband. In fact, there has been a long tradition of state and local regulation of intrastate service and the physical network (conduit, poles, service quality, etc.) – which has evolved from Plain Old Telephone Service (POTS) to the broadband of today.

Build Broadband Better Talking Points

The COVID 19 pandemic exposed the gaps in broadband services. When the pandemic ends, those gaps won't go away. Americans need high speed, affordable broadband to work, learn, shop and succeed in the world today. However, millions of us do not have reliable, affordable broadband access. CWA members are ready to start building and supporting new high speed connections, but it's going to take time and the need is urgent. Congress is working to pass a bi-partisan infrastructure plan with funding and wording around broadband. Building broadband better means three things: universal access and affordability, corporate accountability, and broad public oversight.

- Competition has failed to deliver universal affordable broadband access.
- Federal funding is necessary to subsidize deployment of broadband infrastructure to unserved and underserved areas and states need to be on board to make sure it is spent wisely and benefits their communities.
- There must be strong accountability requirements attached to that funding, including labor standards.
- State-level regulation of broadband service is necessary so our communities aren't left without recourses when broadband providers fail to deliver promised service.
- Without regulation, the goal of universal broadband service is just a nice dream.

Build Broadband Better General Talking Points p.2

Congress has ear marked around \$65 billion to build broadband infrastructure to unserved and underserved communities.

- This investment would create hundreds of thousands of jobs, including direct construction jobs, supply chain jobs and job growth from business growth in communities that have not previously had adequate broadband service.
- We need to make sure that the funds support good jobs in our communities. Companies cannot be allowed to engage in a race to the bottom on wages, safety, and quality in order to boost stock prices and executive pay.
- The bill puts a check on corporate greed by requiring recipients of this funding to remain neutral in workers' union organizing efforts. It also prohibits companies with union workers from subcontracting the work in order to avoid paying the fair wages and benefits union workers have negotiated.

Build Broadband Better General Talking Points p.3

Some state and local governments are also funding broadband buildout. It's important to make sure public dollars are invested in reliable, high quality networks. They must not fall into the trap of awarding grants to the lowest bidder - after all, you get what you pay for. States should give preference to companies that employ skilled, well-trained workers from local communities.

For decades, corporate lobbyists have chipped away at the authority of state public utility commissions to regulate telecommunications services. Telecom industry executives said deregulation was necessary for competition and that competition would magically fix everything. It hasn't, and state public utility commissions must ensure this essential service is there for our communities today and into the future.

- State legislators must take action to enable public utility commissions to make sure that companies are providing reliable and safe broadband services and that customers' complaints are taken seriously.

Why FTTP (Fiber to the Premise) is Better Than Wireless

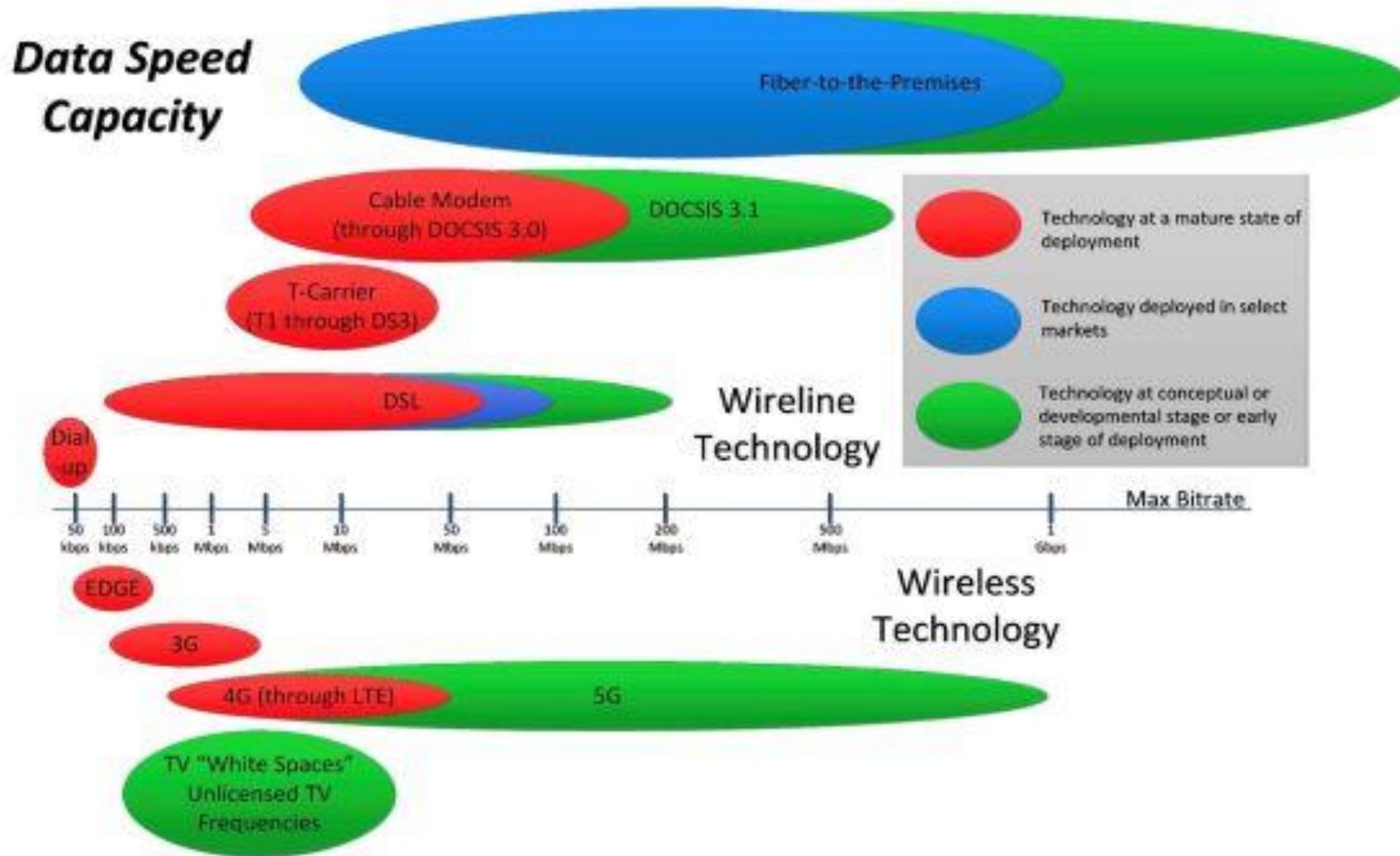
Wireless Technologies

- Wireless technologies have shortcomings compared to wireline services.
- Mobile broadband provides only about one-tenth of the speed available from wireline service
- The largest mobile operations have 150 MHz of shared spectrum at most, and the capacity is shared among the few hundred customers connected to the cell site
- Quality of wireless networks do not allow for performance or speed guarantees
- 5G is a marketing tool with promises of faster speeds somewhere on the horizon

Wireline Fiber Optics

- In contrast, a strand of standard single-mode fiber optic cable has a theoretical physical capacity in excess of 10,000 GHz (10 million MHz), far greater than the entire usable wireless spectrum combined
- Wireline services are sufficiently consistent in speed, allowing service providers to offer guaranteed minimum and maximum speeds, outage time and minimum technical performance parameters for speed and accuracy
- There is no “throttling” with wireline service like there is with wireless. Even in a so-called, “unlimited” plan, users experience significant degradation of speeds due to throttling.

Figure 1: Wireline and Wireless Capacity





**WE NEED
YOUR HELP**

Presidents:

1. Allow for presentations about expanding broadband in union meetings
2. Ask membership for stories:
 - How has the lack of broadband access affected you and your family?
 - Couldn't work from home during Covid-19?
 - Children couldn't do remote learning?
 - Couldn't interact with relatives on social media or zoom?
3. Ask technicians for photos of shoddy contractor field work (Will be uploaded to Google Drive)
4. Get technician stories about the dangers of working on facilities behind unskilled contractors