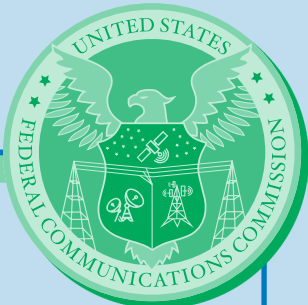


Terms of Service:
The Legalese of Digital Redlining

High-speed internet is an essential part of daily life, a reality made painfully noticeable by the current coronavirus pandemic. Yet millions of Americans still have inadequate access to this technology. This diagram shows how the funding and deployment of the Internet's physical infrastructure is largely dependent on the federal government's ever-changing definition of who qualifies as "unserved" and "underserved" by broadband internet access. Over the last two decades, there have been disagreements over the way broadband is mapped and classified. Competing partisan interests are invested in positioning broadband as a public utility or private amenity and as a "telecommunications service" or "information service."

Our digital and political systems are complexly intertwined, and the physical "stuff" of the internet—the placement of fiber-optic cables, servers, and routers—is ultimately governed by bureaucratic interests. When politicians emphasize geography and population density to describe network deficiencies, the government focuses on helping private companies expand their broadband infrastructure to unserved rural areas, places where people have little or no internet access. However, this also shifts focus away from historically excluded urban areas, disregarding the needs of underserved low-income residents who may have few affordable internet options at their disposal. While the Federal Communications Commission (FCC) aims to increase Americans' access to broadband, this diagram reveals conflicts between governing bodies over who is more deserving of this technology, further exacerbating the rural-urban divide that characterizes the nation's current political landscape.

1999
The FCC's first Broadband Progress Report defines "broadband" as having both an upload and download speed of at least 200 Kbps for users. Though the commissioners unanimously agree that broadband is being "deployed in a reasonable and timely manner," they recognize that not all Americans have equal access and that there is still plenty of work to be done.



CLINTON

1995

1996
The Telecommunications Act, an amendment to the 1934 Communications Act, passes into law and now includes internet access. According to the law, the FCC and state communications regulators must continually inquire whether "advanced telecommunications capability" is available to all Americans. This is defined as technology "that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications." The legislation also promotes free-market competition between ISPs.

1995
About sixteen million people in the world can access the internet. The web company Netscape files for an initial public offering, creating mass commercial interest in the internet.



The FCC regularly initiates an inquiry, called the Broadband Progress Report, into whether broadband internet is being deployed to all Americans in a "reasonable and timely manner." As this phrasing can be interpreted subjectively in a legal context, the FCC has leeway in its usage. This timeline shows FCC activities and legislation on broadband access; it also shows the FCC commissioners' votes for each year that progress reports have been conducted.

YES - 4 0 - NO

200 kbps in at least one direction

2000

BUSH

K. Abernathy

During the Bush administration, a majority of FCC members agreed that broadband was being deployed in a timely and reasonable manner, in part because of its deregulation of high-speed internet service providers (ISPs) as an "information service" instead of a "telecommunications service."

W. Kennard
H. Furchtgott-Roth
M. Powell
G. Tristani

2005
The FCC establishes four principles of open internet to ensure wide deployment, affordability, and accessibility "in a neutral manner." According to these principles, consumers should have the freedom to access internet content regardless of which device, application, or network provider they use, and all "lawful" data should be treated equally.

J. Adelstein
K. Martin
M. Copps
D. Taylor Tate
R. McDowell

2008
The Food, Conservation, and Energy Act passes into law, with the goal of expanding broadband service in rural areas, among other things.

2005



3 2

3 2

2018
Congress launches the ReConnect Program to provide \$600 million to expand broadband infrastructure and services to rural America.

25 Mbps upstream / 3 Mbps downstream

2015

2017
The FCC, led by Chairman Ajit Pai, receives criticism for suggesting that consumers are "served" if they have access to mobile broadband speeds of 10 Mbps for downloads and 1 Mbps for uploads. (The established FCC benchmark was about three times higher: 25 Mbps for downloads and 3 Mbps for uploads.) The FCC also votes to restrict access to the Lifeline program, making it harder for low-income Americans to buy subsidized telephone and broadband plans. In addition, the FCC votes in favor of repealing net neutrality.

2015
The FCC reclassifies broadband from an "information service" to a "telecommunications service," which subjects it to additional government regulations under the 1934 Communications Act and the 1996 Telecommunications Act. This allows the FCC to enforce net neutrality.

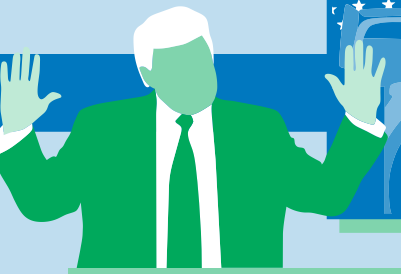
T. Wheeler

2020

TRUMP

BIDEN

G. Starks
J. Rosenworcel
A. Pai
M. O'Rielly
B. Carr



More recently, officials in the Trump administration have invested in rural infrastructure while divesting from telecommunications subsidy programs used by low-income urban residents.

2020
The FCC establishes the Rural Digital Opportunity Fund, \$20.4 billion dollars meant for rural broadband development over the next decade. Soon after, COVID-19 forces many Americans to virtually attend work and school from home. The FCC asks telecommunications companies to take the Keep Americans Connected Pledge to prevent customers from losing internet access. In 2018, before the pandemic, approximately fifteen million K-12 school students were living in a household without adequate internet service. The FCC also partners with the Department of Education to spend \$16 billion from the Coronavirus Aid, Relief, and Economic Security Act on remote learning, including home internet connectivity.

2010

OBAMA

4 Mbps upstream / 1 Mbps downstream

J. Genachowski
M. Baker
M. Clyburn

2010
The FCC releases its National Broadband Plan to prompt economic growth. In addition to recommendations for other internet access reforms, the plan includes setting minimum broadband speeds at 100 Mbps for downloads and 50 Mbps for uploads for a hundred million US homes by 2020. The FCC also introduces the Open Internet Order to regulate fixed broadband service. An expansion of the four principles set in 2005, the order discourages discrimination against content by ISPs. This equal treatment of web-based services and information forms the basis of net neutrality.

2011
The FCC releases the National Broadband Map, a \$300 million project that uses data self-reported by ISPs to show national broadband availability. However, the map is flawed because if ISPs claim to serve one customer in a census block, they incorrectly identify the block as "served" without confirming if other consumers have broadband access. In other words, the map overstates availability.

During the Obama administration, the FCC reversed its position, partially because its policies favored increased intervention by the government in the marketplace.

