# THE TIME HAS COME FOR BROADBAND INTERNET TO BE REGULATED AS A UTILITY: HOW THE COVID PANDEMIC CRYSTALIZED THIS REALITY

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## I. OVERVIEW AND ASSERTION / THE INTERNET SHOULD BE REGULATED AS A UTILITY

On March 11, 1989, the World Wide Web became publicly available.[1] In the relatively short time since then, the internet has

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[1] Farnoush Amiri, *The World Wide Web Is 30 Years Old-and Its Inventor Has a Warning for Us*, NBC NEWS (Mar. 12, 2019), https://www.nbcnews.com/tech/tech-news/world-wide-web-30-its-inventor-has-warning-us-n982156.

become an essential part of nearly every business segment[2] and has become ubiquitous in people's personal and social lives. Generally, the internet has been a positive cultural benefit by opening access and information to individuals in volumes not previously realized. Yet internet access is not assured by today's patchwork regulation, and the federal government has failed to regulate such access under a single standard.[3] This failure by the federal government continues to empower private internet service providers to select who among us has unfettered access to this wealth of information and opportunity.[4]

An August 2021 study by BroadbandNow estimates that at least 42 million Americans do not have internet access sufficient for remote work requirements.[5] Other studies by the National Digital Inclusion Alliance and Greenlining have found that up to 23% of Americans cannot access remote work opportunities due to insufficient internet access.[6,7] Allowing private internet providers to pick who has access based on their profit goals has broad segments of the population, resulting in those groups being systemically marginalized.[8]

Remote-work and equal access to jobs has heightened internet access from a convenience to a requirement on par with electricity and telephone. Historically, as electricity and telephone once crossed barriers from novelty to convenience to essential, the government stepped in to classify these services as utilities to regulate and mandate

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[2] *See* K. Sabeel Rahman, *The New Utilities: Private Power, Social Infrastructure, and the Revival of the Public Utility Concept*, 39 CARDOZA LAW REVIEW 1621 (2018).
[3] *See, How States Are Expanding Broadband Access*, PEW (Feb. 27, 2020), https://www.pewtrusts.org/en/research-and-analysis/reports/2020/02/how-states-are-expanding-broadband-access.)
[4] Angela Siefer, *State-Level Broadband Policy,* PELL CENTER FOR INT'S RELATIONS & PUB. POLICY (2015).
[5] John Busby, Julia Tanberk & Tyler Cooper, *BroadbandNow Estimates Availability for all 50 States; Confirms that More than 42 Million Americans Do Not Have Access to Broadband*, BROADBANDNOW (May 5, 2021), https://broadbandnow.com/research/fcc-broadband-overreporting-by-state.
[6] *See* Angela Siefer & Bill Callahan, *Why Smart Cities Need Digital Inclusion,* NATIONAL DIGITAL INCLUSION ALLIANCE (2019), https://www.digitalinclusion.org/wp-content/uploads/2019/09/Smart-Inclusive-Cities.pdf; *See* Vinhcent Le & Gissela Moya, *On the Wrong Side of the Digital Divide*, THE GREENLINING INSTITUTE (June 2, 2020), https://greenlining.org/publications/online-resources/2020/on-the-wrong-side-of-the-digital-divide/#introduction.
[7] *See* Vinhcent Le & Gissela Moya, *On the Wrong Side of the Digital Divide,* THE GREENLINING INSTITUTE (June 2, 2020), https://greenlining.org/publications/online-resources/2020/on-the-wrong-side-of-the-digital-divide/#introduction.
[8] *ReConnect Loan and Grant Program*, U.S. DEPARTMENT OF AGRICULTURE (2021), https://www.usda.gov/reconnect.

equal access. The time has come for broadband internet to be treated as a utility to equalize access and standardize pricing.

This paper will explore how the internet has become a necessity for the benefits it provides and how this has been brought into focus by the COVID pandemic. It will then explore how segments of society are marginalized and cannot benefit from internet access by taking an in depth look at the function, history, and legality of public utilities. Finally, it will explore how this access issue can be resolved by regulating the internet as a public utility, providing some potential next steps toward realizing a utility internet model.

## II. THE MODERN INTERNET REQUIRES BROADBAND

Internet connectivity is a spectrum but in practicality it has two broad categories with older landline technologies at the slow end and the modern broadband at the higher. The older phone line system including its highest speed service, DSL, provides sufficient bandwidth for basic internet services such as email and low-resolution video but it is broadly recognized as insufficient for modern internet usage. Broadband on the other hand is defined as having an internet connection that enables twenty-five megabits per second download speed and three megabits per second upload speed.[9] Broadband, most commonly delivered over cable, fiber optic and satellite, is considered table stakes to participate in high resolution uses such as internet videoconferencing, remote access, large file transfers, and high-definition video streaming.

Importantly, these four capabilities – internet video conferencing, remote access, large file transfers, and high-definition streaming – are the critical requirements for enabling remote employment opportunities. Sufficient internet bandwidth allows many workers to work remotely without the need to be within commuter range of their workplace. Thus, broadband internet access expands the available job market outward from beyond commuter range to virtually anywhere. Granted, remote employment is not available for hands-on jobs such as labor-intensive roles, service jobs, or manufacturing. However, remote jobs expanded exponentially because of COVID

[9] Jon O'Connell & Bill Wellock, *Report Challenges Internet Providers' Advertised Speeds*, CITIZENS' VOICE, https://www.citizensvoice.com/news/report-challenges-internet-providers-advertised-speeds/article_a827be94-d771-59fe-afde-df798a7785ce.html (Apr. 17, 2020).)

opened opportunities for workers to explore new roles that offer remote work. Access to broadband internet improves employment options of all types for residents within the coverage area. Studies have shown that simply providing unfettered access to the internet improves an area's socioeconomics simply by making it easier to locate and apply for jobs.[10] With a responsive internet connection, workers can access job listings and conduct job research to discover opportunities that match their skills.[11] Lacking internet access has the opposite effect: "Recent Pew research indicates that job seekers without broadband at home have a harder time contacting potential employers, filling out online job applications, creating a professional resume, and highlighting employment skills on social media."[12]

Simply using and browsing the internet is challenging with poor internet connectivity. Modern internet sites are data intensive and assume broadband access speeds. Without broadband, many online sites time out before fully loading and advanced online features such as videoconferencing suffer such high latency that they are practically non-functional. Imagine if during a job search, every individual job listing took up to a minute to load and online applications repeatedly timed out due to network latency. To demonstrate the impact, this website simulates the lag for typical online activities at different connection speeds. For reference, DSL is the fastest phone line service providing 6Mb/sec average performance, while "slow" broadband options are approximately 100Mb/sec.

## III. THE DIGITAL DIVIDE

The split between those with easy access to broadband internet and those without is a well-established phenomenon commonly referred to as the digital divide. The 2020 Covid-pandemic forced employees to adopt remote work policies which brought the divide into sharp contrast. Even using public libraries or a Starbucks as a workaround for internet was cut off when all public spaces were shutdown. Slow internet transformed from an annoyance into a

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[10] *See The Digital Divide and Economic Benefits of Broadband Access*, COUNCIL OF ECON. ADVISERS (2016).
[11] *Id*. at 7.
[12] *Id*. (citing Aaron Smith, *Lack of Broadband Can be a Key Obstacle, Especially for Job Seekers*, PEW RESEARCH CENTER, Dec. 28, 2015, https://www.pewresearch.org/fact-tank/2015/12/28/lack-of-broadband-can-be-a-key-obstacle-especially-for-job-seekers/).

crippling obstacle, unfairly isolating a large swath of American workers from equal access to jobs.

COVID forced the largest ever remote-work experiment in history and dramatically changed the opinions and workplace expectations of employers both large and small. During the earliest COVID restrictions, many employers scrambled to enable remote work but were pleasantly surprised to find that much of business continued and the economy even grew despite the upheaval. As the first easing of restrictions arrived, many employers were entertaining permanent remote or hybrid-remote solutions but had not fully internalized those options. Just as employees were trickling back into physical work sites another round of restrictions reversed the flow. The second transition back to remote was much smoother, but employers were forced to consider permanent remote solutions to better prepare for unpredictable future disruptions.

The easy assumption is that the digital divide falls neatly between urban and rural areas, but studies show that 75% of those with insufficient internet access are within urban areas.[13] Urban areas are most likely to have jobs that can convert to remote work which amplifies the impact. Skilled workers who were commuting to the office found themselves unable to work because they lacked sufficient remote capabilities. The remote work standard is no longer a luxury but rather a necessity and has created a new class of haves and have nots like the days before electricity and telephone were regulated. Utilities provide equal access to a publicly beneficial commodity and the time for creating an internet utility has arrived.

## IV. WHAT IS A UTILITY

A public utility is "a business enterprise, as a public-service corporation, performing an essential public service and regulated by the federal, state, or local government."[14] The most common utility form is a corporation or other association that carries on an enterprise for the accommodation of the public, the members of which are entitled as a matter of right to use the enterprise's facilities. Most utilities operate as monopolies but are subject to governmental regulation.[15]

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[13] Siefer, *supra* note 6, at 2-3.
[14] *Public Utility*, DICTIONARY.COM, https://www.dictionary.com/browse/public-utility (last visited Dec. 14, 2022).
[15] *Utility*, BLACK'S LAW DICTIONARY (11th ed. 2019).

The most common utilities are electricity, gas, telephone and water services.

These services can be publicly or privately owned but their universal necessity has justified regulation to provide fair and equal access. The internet, and specifically broadband internet, is increasingly just as essential. As described "by Susan Aaronson, director of the Digital Trade and Data Governance Hub at George Washington University, affordable high-speed internet access is a service that government should provide," is an essential public good and is essential to equality of opportunity, access to credit, access to other public goods, access to education.[16]

Utilities are rate-regulated by state's Public Utilities Commissions (PUC). A PUC approves and regulates a utility's rates and service quality and in exchange the utility gains a right to a monopoly on the service they provide.[17] This tradeoff gains the utility a captive market and predictable revenue while the ratepayers gain access to the service at a defined rate that is shielded from market fluctuations.[18]

Today, most states have only limited oversight of broadband internet suppliers and that is primarily around regulation of service quality. Legislation in 34 states prohibits local PUCs from oversight of internet services, which includes broadband, although some small telephone companies, primarily in rural areas, continue to be regulated for both voice and broadband services.[19]

A central common aspect of all public utilities is that they are natural monopolies. Natural monopolies are characterized by natural barriers of entry – high costs of entry into a market and/or markets that yield powerful economies of scale. As such, natural monopolies do not necessarily arise due to market collusion or bad corporate behavior.[20]

The "high cost of entry" concept is exemplified by electrical utilities. It is easy to recognize the required infrastructure of wires

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[16] David Lazarus, *Column: The Pandemic Makes Clear it's Time to Treat the Internet as a Utility*, LOS ANGELES TIMES, Oct. 23, 2020, https://www.latimes.com/business/story/2020-10-23/coronavirus-internet-is-a-utility.

[17] *How should broadband be regulated?,* PEW (Aug 25, 2021), https://www.pewtrusts.org/en/research-and-analysis/articles/2021/08/25/how-should-broadband-be-regulated, (transcribing an interview of Sherry Lichtenberg, deputy director of the National Regulatory Research Institute).

[18] James LaMarca, *A Regional Solution to Broadband Availability in Pennsylvania,* 82 U. PITTSBURGH L. REV. 649, 662 (2021).

[19] *How should broadband be regulated?, supra* note 16.

[20] LaMarca, *supra* note 18, at 657.

which deliver electricity from generation plants to individual homes and businesses. Before an electrical utility can even begin to sell its services, it must completely install the required infrastructure. This high upfront cost and commitment creates a natural barrier to entering the market. Additionally, the rights-of-way for power lines cannot typically be duplicated. The first system in place controls the distribution as replicating it would be an unnecessary and redundant expenditure of resources. Thus, the utility creates and controls a scarce resource.[21]

Very similarly, physical broadband internet suffers a high cost of entry for physical cabling from distribution centers to individual homes and businesses. The rights-of-way here are less restrictive than electricity as many areas commonly have both cable and fiber infrastructure available in parallel. This is not truly redundancy but rather competing distribution technologies. Further, emerging broadband cell and satellite services are competing directly with physical cabling infrastructures and even promoting expansion into areas not served by physical cabling. Regardless of the distribution type, installing these infrastructures still requires prohibitively high costs of entry whether it be digging cable trenches, installing cell towers, or launching satellites. Thus, broadband internet's high cost of entry fits this first element of a natural monopoly.

The second aspect of a natural monopoly is a profit model dependent on economies of scale. To move beyond the high initial outlay into eventual profit, public utilities target a market tipping point where the cost of production is minimized by economies of scale. Economies of scale occur when a high number of users benefit from a small production environment such that the average cost equals marginal cost.[22] Economies of scale promote early entrants into a market but naturally deter competition since the serviceable customer base is limited and largely consumed by the first entrant.

Using electricity again as an example, the cost of the service would be unbearable if each household required a dedicated generation facility. Instead, a company builds a single generation facility and uses that single source to power thousands of homes thus spreading the generation cost across many customers. The larger the customer base per generator, the lower the average cost to produce which drives up the economies of scale profit. Here again, broadband internet enjoys a

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[21] *Id.* at 659.
[22] *Id.*

similar model since internet distribution is centrally provided with the cost spread over a very large number of end users. Thus, broadband internet business models meet the second factor of a natural monopoly as well.

The natural monopoly's combination of high costs of entry and the economies of scale market organically results in one large firm servicing a given area. The monopolistic nature combined with a high dependence on the product raises a need for oversight to deter abusive pricing and ensure equal access. This is where public utility regulation comes into play.

Public utilities are services of high importance to daily life for a large majority of citizens. Typically, these services are essential to public safety, health, or economic activity. For example, it is easy to grasp that electricity provides more than mere convenience. Safety in public areas such as parks and streets, public health at hospitals, government services such as police and fire departments and individual households all require electricity to operate.

Something so critical requires service that can be delivered with nearly perfect inelastic demand.[23] "Inelastic demand occurs when a change in the price of a good does not result in a meaningful change in the quantity of that good demanded by the market."[24] For example, if the cost of electricity generation increases, the demand for electricity does not decrease. Electricity customers instead continue to buy electricity at the price provided due to their unchanged need. "There is no way to avoid needing it or to find an effective substitute. Thus, the presence of inelastic demand in addition to the previously discussed characteristics could indicate that a private industry is ripe for consideration as a public utility."[25]

Here again, internet dependency has crossed the point from convenience to critical. Eric Schmidt, the former CEO of Google told CBS's "Face the Nation": "All of a sudden, the internet is no longer optional. *You can't participate in this economy without access to the internet.*"[26] Many basic social services require email communication and many recurring payment systems strongly discourage or even penalize payment by check or cash. Equal access to low-cost goods online requires internet access, and the complexity of many sites

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[23] *Id.*
[24] *Id.*
[25] *Id.*
[26] Tom Wheeler, *5 steps to get the internet to all Americans*, BROOKINGS INSTITUTION, May 27, 2020, https://www.brookings.edu/research/5-steps-to-get-the-internet-to-all-americans/.

requires higher speed connection. Internet is a necessity for equal access to remote work, jobs sites and online jobs research. Intermixing online activities into daily living has created an inelastic demand similar to public utility services.

Together, broadband internet's natural monopoly characteristics, broad dependence and criticality, and inelastic demand show that it would benefit from utility classification.

### *A. Benefits of Utilities*

So then what benefit does a utility classification and its government regulation serve? First, it protects from the natural downside of monopolies such as price gouging and manipulative service tiering. Oversight prevents these natural monopolies from abusing their captive customer base with unreasonable cost increases or intentional service degradation. Consumers can be assured electricity will be provided at a dependable service level and pricing will be predictable.[27] The captive nature of the market for electricity consumers, for example, would force consumers to pay whatever was demanded and transmission producers would be able to degrade service to poorer customers in favor of wealthier customers whenever availability is challenged.

This scenario played out in February 2021 in Texas, one of the most deregulated public utility jurisdictions in the United States. The lack of regulation meant the inelastic benefit of a utility was not in place and electricity providers were free to pass service issue costs onto their customers.

Underregulated Texas electricity providers broadly failed to implement proper winterization and were caught off-guard when a major winter storm swept across the state. As a result, cascading power outages crippled wide swaths of the state just as the cold created a sudden demand for electricity. The resulting blackouts lasted for a week and left 4.5 million Texans without power, heat and water as many public water systems depend on electricity to operate.[28]

Leveraging their monopoly to put profit over service, the power companies then gouged those customers lucky enough to retain service up to seventy times the normal monthly amount. "Without the power to regulate prices based on costs in the wholesale market, the

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[27] LaMarca, *supra* note 18.
[28] *Id.* at 660-61.

commission could do little to prevent the electricity monopoly from price gouging vulnerable citizens in desperate need of electricity. By refusing to properly regulate electric public utilities, Texas experienced widespread system failure and astronomical price increases due to the monopolistic behavior of utilities."[29]

Utility regulation protects from scenarios such as the one in Texas. Regulation protects citizens and businesses who rely upon the utility being available consistently and reliably. It ensures that unanticipated service costs are addressed equitably and allows the government a means to monitor them.

In return for this regulation, the government grants the firm a pseudo-monopoly which brings a highly predictable customer base and profitability. In return the firm agrees to government oversight of the prices the firm can charge its customers; strict oversight into which assets the firm can purchase and sell; restrictions on the firm's ability to pick and choose its customers; and designation of a specific service territory.[30] The utility model is a framework that developed slowly over an extended period and can be used to incorporate new services as they reached an appropriate level of public dependency such as broadband internet has today.

### *2. The History of Utilities Reveals the Internet Is on the Same Trajectory*

Today, US utilities operate under municipal management with federal oversight and regulation, broadband internet would easily fit into this same structure. To understand how, we will examine how and why municipal electrical utilities came into being to showcase the similarities to broadband internet services.

The municipal utility model, developed from the late 1880's through multiple variations, dictates regional distribution to local customers on a not-for-profit basis. The primary concern is the service at the end point rather than business benefits from the transmission point. The result is that that rates are cost-based, and service is dependable. Since they are municipally owned, the customers are the owners and through elected or appointed governing boards or councils they are also the decision makers for their utilities. Economies of scale typically result in a single public power utility serving a single state or

[29] *Id.* at 660.
[30] *Id.* at 661.

region.[31] "Like schools, parks, libraries, police, and fire protection, public power utilities are part of local government. They are governed locally and operated to provide an essential public service at a reasonable price."[32]

The first public power utility was born on the evening of March 31, 1880, in the farm community of Wabash, Indiana. Shortly after 8 pm that evening, mechanics hitched a threshing machine engine to the west wall of the Wabash County Courthouse and sent motive power to a generator in the basement. Within minutes, lights atop the courthouse bathed downtown Wabash in brilliant light.

One eyewitness account described the scene in Wabash that night as follows:

> People stood overwhelmed with awe, as if in the presence of the supernatural. The strange, weird, light, exceeded in power only by the sun, rendered the square as light as midday. Men fell on their knees, groans were uttered at the sight and many were dumb with amazement. We contemplated the new wonder in science as lightning brought down from the heavens.[33]

From that humble beginning, electricity grew rapidly to become a necessity. That growth model has been repeated for other common utilities such as telephone and water, and broadband internet is on the same trajectory. Utility regulation was largely unsettled until Franklin D. Roosevelt's New Deal policies of the 1930s. Roosevelt's pro-competition policies spotlighted investor-owned electric utilities (utility holding companies) for abusing ratepayers and "slowing national economic development through monopoly pricing practices, facilitated by ineffective state-level regulation."[34] The New Deal legislation funded major federal power projects and supported municipal competition with existing utility holding companies.[35] Today we see very similar slow economic development, monopoly type pricing and ineffective state-level regulation in the broadband internet market.

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[31] Delia Patterson, *Public power: A rich history, a bright future*, American Public Power Association (2018).
[32] *Id*.
[33] *Id*.
[34] Dena Reavis, *The History of Economic Thought Surrounding the Public Utility Holding Company Act of 1935*, 17 E. ILL. U. HISTORIA J. 142 (2008).
[35] *Id*.

"From 1882 to 1932, electricity production and consumption grew considerably."[36] The electricity industry in the United States grew from a novel luxury for wealthy customers to an industry with $12.7 billion in capital assets and equipment by 1932, servicing 25 million customers.[37] This market was almost exclusively served by the for-profit utility holding companies. This segmenting of the market based purely on profit is very similar to the segmentation seen with broadband internet.

In the 1920 and 1930s, states pushed for the establishment of state-run regulatory commissions to reign in the utility holding companies. Acting as virtual monopolies the utility holding companies were engaging in predatory pricing for often unreliable service. State-run commissions it was thought could regulate and legitimize these monopolies to eliminate predatory pricing and guaranteed a reasonable quality of service. In exchange, utility companies would gain sanctioned protection from competition and a guaranteed geographic market. By the early 1930s, thirty-seven states had state commission-based regulation of their electric utilities.[38]

Initially used to power common areas and wealthy homes, electricity usage quickly expanded into more homes and businesses through monopoly franchised services. As the number of municipally controlled utilities expanded independently across the nation, regulatory chaos ensued. C.O. Ruggles, of Harvard University, noted in 1929 that there was "no rhyme or reason" to how each utility was regulated. They were almost all, however, uniformly understaffed, underpaid, and inexperienced. Likewise, there was little uniformity to exactly what public services each commission controlled and for which of the often-overlapping jurisdictions. Ruggles defined the scope of the issue and need for a more universal regulation scheme.[39]

> (1) The industries of this country are rapidly becoming dependent upon central electric stations. . . . With electric power a factor in American manufacturing, equitable regulation of the power industry is of far more importance than it was when it was confined merely to the field of lighting. . . . (2) The economies and the improvements in the character of the service which

[36] *Id.*
[37] *Id.*
[38] *Id.* at 146
[39] *Id.*

> have been realized through large-scale generation, long- distance transmission, and centralized financing and management, have been substantial and we should adopt a form of regulation which will foster and encourage further accomplishments along these lines but which will also reward parent companies[.] . . . (3) The development of the electrical industry . . . has brought about . . . many problems . . . beyond the jurisdiction of the states.
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> If the foregoing analysis is sound, it would appear that the following conclusions are justified: (1) State commissions should be materially strengthened, and their jurisdiction extended so that in all states they will have the power to regulate utilities[.] . . . (2) Federal regulation is necessary to cope with the problems which are clearly beyond the control of the states. [40]

By 1932, the eight largest utility holding companies controlled 73% of the investor-owned electric industry.[41] Roosevelt promised that "where a community…is not satisfied with the service rendered or the rates charged by the private utility, it has the undeniable basic right . . . to set up . . . its own governmentally owned and operated service."[42] His promise was initiated through the Public Works Administration (PWA) which was established in 1933. The PWA made low-interest loans to local governments to create jobs and "encouraged cities dissatisfied with the rates charged by monopoly investor-owned electric firms to apply for PWA funding to construct competing facilities."[43] Municipal governments competing with the utility holding companies in some cases caused those companies to lower their rates voluntarily. In areas, mostly rural, where electrical service had not yet been established PWA funding was used to build their own plants to generate electricity rather than wait for investor-owned utilities to expand into their areas. Dissatisfaction with public utility holding companies, municipal service competition and the 1935 Public Utility

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[40] Ruggles, C. O., *Regulation of Electric Light and Power Utilities,* vol. 19, no. 1 The American Economic Review, American Economic Association (1929)
[41] Wikipedia, *North American Co. v. SEC* (2021)
[42] Reavis, *supra* note 34.
[43] *Id*. at 149

Holding Company Act (PUHCA) spelled the end for large dominant utility holding companies.

Title I of the Public Utility Holding Company Act (PUHCA), placed the capital structure of interstate public utility holding companies under the supervision of the Securities and Exchange Commission and required these companies to confine their operations to utility service in a single state or in contiguous states. Title I also placed wholesale interstate electric rates under Federal Power Commission (FPC) approval.[44]

A similar structure could regulate broadband internet under the supervision of the Federal Communication Commission (FCC) who could determine how to divide the total serviceable market amongst providers. The FCC would also have authority for oversight of wholesale interstate broadband rates.

### *C. Legality of Federal Utility Regulation*

PUHCA sought to break up the eight large utility holding companies who collectively served more than 3,000,000 customers in a service territory of 165,000 square miles.[45] The North American Company was the largest and consisted of 80 companies operating in 17 states and the District of Columbia.[46] PUHCA, through the Securities and Exchange Committee (SEC), limited each holding company to a single geographic system and forced divestiture of their other public utilities and unrelated companies.[47] They sought this system because the consolidation of such a broad market under so few companies gave those companies tremendous personal and political power. Furthermore, the Great Depression was a fresh lesson that the dependance upon, and failure, of such large organizations can have a devastating effect on the populous.

Fearing an impending destruction of their holdings, North American challenged the constitutionality of PUHCA and requested an injunction against its enforcement. North American's case was combined with another of similar claims when it ultimately arrived at

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[44] *Public Utility Holding Company Act of 1935*, Committee Print 108-B of the Committee on Financial Services of the U.S. House of Representatives, U.S. Securities and Exchange Commission (2004).
[45] N. Am. Co. v. Sec. & Exch. Comm'n, 133 F.2d 148, 150 (2d Cir. 1943), aff'd, 327 U.S. 686 (1946).
[46] *Id.*
[47] *Id.*

the Supreme Court. The Supreme Court in *Landis v. North American Co.*,[48] held that the case was premature because they had not yet registered with the SEC to allow it to conduct its proceedings. In 1937, North American registered as a holding company with the SEC and the SEC issued an order requiring divestiture of North American's securities in companies other than the Union Electric Company, their largest electric utility. North American appealed in 1943 but the Court of Appeals for the Second Circuit upheld the order[49] after which North American appealed to the U.S. Supreme Court which granted certiorari.[50] North American's primary arguments were that ownership of securities was not interstate commerce within the meaning of the Commerce Clause and that the divestiture ordered by the SEC was a taking in violation of the Fifth Amendment.[51]

The Supreme Court ruled that North American was engaging in interstate commerce through the substantial stock ownerships of their distributed subsidiaries.[52] Thus, Congress could regulate their activities under the Commerce Clause which allows them to protect the freedom of interstate commerce using any lawful means not prohibited by the Constitution.[53] Northern Securities established that Congress could affect the ownership of securities to protect the freedom of commerce which it did in fashioning the divestiture remedy in PUHCA. This is a critical finding that is useful even today in attempts to regulate utilities and is revisited later in this paper as an aspect of broadband internet as a utility.

The biggest blow, though, came in the Supreme Court's ruling that the divestiture order was not a taking in violation of the Fifth Amendment. The Court held that the benefit to Northern Securities shareholders did not outweigh the potential harm to the public and determined that the economic advantages to a holding company with vast unregulated electric systems were not commensurate with the resulting disadvantages to consumers.[54]

Ultimately, the result was that large holding companies spanning regions and states were too unwieldly to meet the unique needs of individual municipalities. Distribution was broken into regional services that could be tailored and regulated to meet municipal

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[48] Landis v. N. Am. Co., 299 U.S. 248 (1936).
[49] N. Am. Co., F.2d at 148.
[50] N. Am. Co. v. Sec. & Exch. Comm'n, 327 U.S. 686 (1946).
[51] *Id*.
[52] N. Sec. Co. v. United States, 193 U.S. 197 (1904).
[53] U.S. CONST. art. *I, § 8, cl. 3*
[54] *Id*.

requirements. Today's model of locally owned and controlled electricity service under federal regulation operates largely as it did over 100 years ago. Many municipal utilities established in the 19th and 20th centuries still operate which demonstrates the sustainable benefit of public utility services.[55]

## V. INTERNET COMPARISON TO ELECTRIC UTILITIES

Electrical utilities experienced the growing pains necessary to set the path for almost all other utilities such as natural gas and telephone services. Each grew from novelty for the entitled few into necessity for daily living and business. Each also were operated by large conglomerates that had virtual strangleholds on the service quality and demanded fees accordingly. Those conglomerates provided the initial high startup costs in order to obtain economies of scale to grow into for-profit monopolies. And lastly, all eventually succumbed to the municipally managed utility model of federally approved non-profit monopolies. Regulation then mandated their expansion into underserved areas to provide universal service, sometimes backed by federal funding.

Similarly, the internet has grown from a novelty into a necessity intertwined with many aspects of daily life. Modern corporations, the majority of small businesses, and the rapidly expanding internet economy, would not be able to conduct business at the scale they enjoy without near instantaneous transactions and logistics control. The percentage of businesses using the Internet outpaces the percentage of residential users. The small business broadband adoption rate has increased to 90%.[56] The internet economy's "contribution to the U.S. GDP grew 22 percent per year since 2016, in a national economy that grows between two to three percent per year. In 2020 alone, it contributed $2.45 trillion to the United States' $21.18 trillion GDP. Since 2008, the internet's contribution to GDP has grown eightfold, from $300 billion to $2.45 trillion."[57] The internet is clearly no longer a convenience. This is easily

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[55] Patterson, *supra* note 31.

[56] *The Impact of Broadband Speed and Price on Small Business*, Small Business Administration (2010).

[57] *The Economic Impact of the Market-Making Internet – Advertising, Content, Commerce, and Innovation: Contribution to U.S. Employment and GDP*, Interactive Advertising Bureau (2021).

observable by the instantaneous impact when banks, stock and commodity exchanges, and large enterprises suffer even short-term disruptions.

Out of this need, numerous internet service providers have arisen, but in a market controlled by a small number of providers with vast areas of service such as Comcast, Charter and Verizon.[58] The size and control of these few companies looks very much like that of the utility holding companies prior to their breakup under PUHCA.

A 2019 study revealed that Comcast and Charter maintain a near-monopoly over 47 million American consumers.[59] Millions of Americans have no real choice of who provides internet in their location. This is particularly true with broadband, a typical customer has one choice of broadband and a second option from their phone company for DSL.[60] Broadband providers are behaving very similarly to the utility holding companies of the early 1900s, complete with predatory and inscrutable pricing and indeterminate service levels.[61] These similarities to the history of electric utilities and the impact level internet has should similarly trigger regulation.

As hard as the COVID pandemic has been for many people, imagine how much more difficult it would have been without internet access. Electronic access to information became vital because isolation became a matter of life and death. Conveniences such as ordering food and accessing medical care through the internet were suddenly the norm and even critical for those at higher risk from the virus. Initially viewed as a short-term issue, the pandemic drew on and focused the reality that internet connectivity is no longer an optional part of life. This pandemic can no longer be viewed as an isolated incident, and continued reliance on the whims of a small number of for-profit internet providers is unsustainable.

Internet service providers try to ride a fine line between hawking their services as vital while simultaneously reminding us that it is just cat videos and Facebook posts. They are incentivized to downplay the criticality to deflect conversations around regulation. But the UN's Universal Declaration of Human Rights Article 27 states that "Everyone has the right freely to participate in the cultural life of the

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[58] H. Trostle and Christopher Mitchell, Updates from Ny Ony Razafindrabe, Michelle Andrews, and Katie Kienbaum, *Profiles of Monopoly*, Institute for Local Self-Reliance (2020)
[59] *Id*.
[60] *Id*.
[61] Kristina M. Lagasse, *Shaping the Future of the Internet: Regulating the World's Most Powerful Information Resource in U.S. Telecom Association v. FCC*, 63 LOYOLA L. REV. 321 (2017).

community, to enjoy the arts and to share in scientific advancement and its benefits."[62] Much of modern culture takes place online and without equal access for everyone, then these rights are not equally available.[63] Equality demands that the internet be regulated as a utility so all have an opportunity to participate if they choose.

## VI. INTERNET SERVICE PROVIDERS FIGHT REGULATION

Net neutrality is an umbrella term for several policy debates concerning "freedom of expression, competition of service and user choice, impact on innovation, nondiscriminatory traffic management practices, pricing, and overall business models."[64] Whether broadband internet, as differentiated from traditional landline internet, is a simple information service, as opposed to a telecommunications service, is at the core of the net neutrality struggle, a struggle ongoing for almost two decades. Media coverage tends to focus on the content regulation and bandwidth discrimination aspects of net neutrality but more relevant here is the section of the policy that classified broadband internet as a telecommunications service. Telecommunications services fall under the domain of the Federal Communications Commission (FCC) who would be the regulating body for internet utilities. "The Federal Communications Commission regulates interstate and international communications by radio, television, wire, satellite, and cable in all 50 states, the District of Columbia and U.S. territories. An independent U.S. government agency overseen by Congress, the Commission is the federal agency responsible for implementing and enforcing America's communications law and regulations."[65] To avoid regulation, internet service providers fight desperately to maintain their status as information services.

The FCC's common carrier authority empowers them to foster competition, ensure non-discriminatory access, and cap rates to ensure fair access for all customers. The goals of FCC regulation and the pushback from internet companies is strikingly like the early days of federal utility regulation and the resulting push back by electricity conglomerates.

Without regulation, those without internet access are significantly disadvantaged, as were those without access to electricity

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[62] *Universal Declaration of Human Rights*, United Nations (1948).
[63] *Id.*, Article 27.
[64] *Policy Brief: Network Neutrality*, Internet Society (2015).
[65] *About the FCC*, Federal Communications Commission (2021).

in the early 1900s. Both electricity providers and now internet services, grew to benefit from economies of scale as they expanded coverage in dense population centers. But unlike the electricity generators, it is more difficult to cleanly break internet service providers into geographic regions because their services are not as rigidly tied to centralized generation facilities. This complication is a wrinkle that will need to be ironed out to obtain the localization central to the municipal utility model.

Furthermore, like early electricity deployment, where rural and underserved communities didn't justify commercial capital investment in infrastructure, internet service providers are not incentivized to provide these communities with internet access. High initial infrastructure costs into areas with lower density or prevalent economic hardships cannot ensure a return on the investment. While the providers remain for-profit companies, this is not likely to change. It will require a pseudo-monopoly guaranteed customer base free from competition as well as federal investment to provide the incentive for expansion.

Reclassifying broadband as a "telecommunications service" under Title II grants the FCC authority to regulate broadband as a public utility and recognizes the federal government has a responsibility to ensure fair, reasonable, and affordable access for all citizens. The struggle to get the FCC to adopt and provide regulation has been long, tumultuous and is ongoing today.

## VII. HOW THE INTERNET IS NOT REGULATED AS A UTILITY

"A complex web of federal law and corresponding administrative agency rulemaking attempted to govern the telecommunications industry. Regulation over electronic communications originated more than eighty years ago with the Communications Act of 1934, which delineated the FCC the authority to regulate the communications industry."[66, 67]

The Communications Act of 1934 has been often revised and is still in use today as 47 U.S.C.A. § 154.[68,69,70] The Communication Act of 1934's most consequential aspect granted the FCC the authority

[66] Lagasse, *supra* note 61.
[67] *See Communications Act of 1934*, 47 U.S.C.A. § 154 (West).
[68] *Communication Act of 1934 Legislative Comments*, FCC (1934).
[69] *Communication Act 1996 Revision*, FCC (1996).
[70] *See Communications Act of 1934*, 47 U.S.C.A. § 154 (West).

to regulate the communications industry. Regulation was broken into two sections, Title I and Title II.[71] Only services under Title II are rigorously regulated, including electrical utilities.

"Today's telecommunication regulatory structure largely derives from the FCC's 1980 Computer II Order (Computer II), which distinguished certain communications services as 'basic' or 'enhanced' services."[72] "Basic services, like telephone, were defined as services that transmitted communications but did not interact with customer-supplied information, while enhanced services, like voicemail, were services that processed customer-supplied information."[73] Similar to electrical utility regulation, Title II prohibits "unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services."[74] Importantly, only basic services were classified in the Computer II Order as Title II services, all others, which would include broadband, enjoyed the lighter regulations of Title I.

Updating to accommodate technology and communication industry changes, the Communications Act of 1996 brought the original Communications Act into the 20th century. The 1996 act designated two new service categories--"Telecommunications services" and "Information services."[75] Under the 1996 act, "Basic services" were replaced with "Telecommunications services" and defined as "offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used."[76] Similarly "Enhanced services" were replaced with "Information services" and defined as "offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications."[77] Still only those services which fell under the "Telecommunications services" (previously "Basic services") classification were subject to Title II regulation.[78]

Initially the FCC classified cable internet providers as Information services rather than Telecommunications services since they viewed the cable providers as a passthrough service to the internet. At the time, cable internet was rapidly growing as the primary source

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[71] *Communication Act of 1934 Legislative Comments*, FCC (1934).
[72] Re Second Computer Inquiry, 77 F.C.C.2d 384 (1980).
[73] Lagasse, *supra* note 61.
[74] *Telecommunications Common Carrier Regulation*, 47 U.S.C.A. § 202 (West).
[75] *Telecommunications Act of 1996*, FCC (1996).
[76] *Id.*
[77] *Id.*
[78] *Id.*

for higher speeds and the FCC's classification was challenged in court by several parties in *National Cable & Telecommunications Ass'n v. Brand X Internet Services*.[79] Brand X was attempting to have the cable infrastructure classified as a utility which would mandate other services be allowed to use the lines similar to phone companies allowing their lines to be used for purposes other than voice phone calls. As a small company, this would allow Brand X to provide their own competing internet service by leveraging the upfront infrastructure investments that had been made by cable companies.[80] Ultimately, the Supreme Court applied the deferential standards from *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.* to determine whether the court had the authority to override an agency's construction of their own statute when the statute was within the agency's jurisdiction.[81] Chevron established that "[w]hen a challenge to an agency construction of a statutory provision, fairly conceptualized, really centers on the wisdom of the agency's policy, rather than whether it is a reasonable choice within a gap left open by Congress, the challenge must fail."[82] They further found that the court did not have responsibility for assessing the wisdom of policy choices stating "our Constitution vests such responsibilities in the political branches."[83] Thus, finding no fault with the FCC's classification, the court deferred to the FCC's classification of internet services as Class I and thus free of heavy regulation. Following this decision, the FCC placed all other broadband services into the same category allowing them to enjoy 10 years of light touch regulation before another serious challenge arose. The FCC did however adopt four Open Internet principals for broadband provided over wired connections:

> To encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet, consumers are entitled to[:]
> • access the lawful Internet content of their choice.
> • ... run applications and use services of their choice, subject to the needs of law enforcement.
> • ... connect their choice of legal devices that do not harm the network.

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[79] Nat'l Cable & Telecommunications Ass'n v. Brand X Internet Servs., 545 U.S. 967 (2005).
[80] *Id.*
[81] Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc., 467 U.S. 837 (1984).
[82] *Id.*
[83] Tennessee Valley Auth. v. Hill, 437 U.S. 153 (1978).

> • ... competition among network providers, application and service providers, and content providers.[84]

As was envisioned in the early framing of utility regulation, companies with monopoly-like power will inevitably misuse it. That seemed to be the case when two non-profit advocacy groups accused Comcast of interfering with their subscriber's internet usage, in violation of the FCC Open Internet Principals. In response, the FCC issued an order censuring Comcast and declaring jurisdiction over service provider network management practices based on the ancillary jurisdiction given to it by the Communications Act.[85] The FCC relied primarily on the Communications Act of 1934 section 4i, which authorizes the Commission to "perform any and all acts, make such rules and regulations, and issue such orders . . . as may be necessary in the execution of its functions."[86]

Comcast appealed the FCC's ruling and importantly the FCC's authority. The issue was heard in the 2010 case *Comcast v. FCC* where the D.C. Circuit held that the FCC had failed to justify its exercise of ancillary authority to regulate an ISP's network management practices.[87] The court used a two-part test from *American Library Association v. FCC* to evaluate if the FCC order was within its ancillary powers.[88] That test states that first "the regulation must be covered by the Commission's general grant of jurisdiction under Title I of the Communications Act" which encompasses "all interstate and foreign communication by wire or radio."[89] Second, the FCC regulations must be "reasonably ancillary to the effective performance of the Commission's various responsibilities."[90] Importantly, Comcast conceded that the FCC satisfied the first test meaning it has the authority to regulate. However, the court ruled the FCC overstepped by going too far into Comcast business operations.[91] Having established the authority aspect, the FCC still needed determine a workable model.

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[84] *Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities*, FCC FCC, 70 FR 60222-01 (2005).
[85] In the Matters of Formal Complaint of Free Press & Pub. Knowledge Against Comcast Corp., FCC, 23 F.C.C. Rcd. 13028 (2008).
[86] Comcast Corp. v. F.C.C., 600 F.3d 642, 644 (D.C. Cir. 2010).
[87] *Id.* at 642.
[88] Am. Libr. Ass'n. v. F.C.C., 406 F.3d 689 (D.C. Cir. 2005).
[89] See United States v. Southwestern Cable Co., 392 U.S. 157 (1968) (quoting 47 U.S.C.A. § 152(a)).
[90] Comcast Corp. v. F.C.C., 600 F.3d 642 (D.C. Cir. 2010).
[91] *Id.*

The FCC refined their approach and in 2010, released its FCC Open Internet Order. This order again created two new classes of internet access, wired/fixed and wireless.[92] It also laid out three new rules: (1) transparency for both fixed and mobile broadband providers; (2) a no-blocking provision for both fixed and mobile broadband providers; and (3) an anti-discrimination rule for fixed providers, under which they could not unreasonably discriminate against lawful network traffic. It was Verizon this time who challenged the order in *Verizon v. FCC*.[93] The court again struck down some of the FCC rules, allowing the transparency principle to stand but vacating the anti-blocking and the anti-discrimination principles. It was the FCC's own classification of internet service providers under Title I that was their downfall. The Court relied on *D. Ginsberg & Sons, Inc. v. Popkin,* which stated that "general language of a statutory provision, although broad enough to include it, will not be held to apply to a matter specifically dealt with in another part of the same enactment."[94] In *Verizon* the court determined that the FCC was trying to regulate cable internet as both an information and a telecommunications service which runs counter to the segmenting in the Communications Act.

However, the court's ruling helped clarify and provide the path forward. The court determined that the FCC did have usable statutory authority under The Telecommunication Act of 1996 § 706 :

> [T]he Commission ... shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans ... by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment.[95]

§ 706(b) requires that the FCC conduct a regular inquiry regarding whether advanced telecommunications capability is available and being deployed to all Americans. If it is not, § 706(b)

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[92] *ED. COMM'CN COMM'N, IN RE PRESERVING THE OPEN INTERNET, SEC. III*, FCC 10-201FCC 10-201 (2010).
[93] Verizon Commc'ns, Inc. v. FCC, 740 F.3d 623, 628 (D.C. Cir. 2014).
[94] *Id.* at 649–50 (citing D. Ginsberg & Sons, Inc. v. Popkin, 285 U.S. 204, 208 (1932)).
[95] *Telecommunications Act of 1996*, FCC (1996).

requires the FCC to "take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market."[96]

The FCC's defeat lay in its own conflicting definitions. The FCC under § 706 could not act "in a manner that contravene[d] any specific prohibition contained in the Communications Act."[97] The court held that "the [FCC] would violate the Communications Act were it to regulate broadband providers as common carriers," given the FCC's "still-binding decision to classify broadband providers" as information services and not telecommunication services.[98] Since the two classifications remain mutually exclusive, the court concluded that the FCC could not on one hand classify a service as an information service and on the other hand impose common carrier obligations designed for a telecommunication service.[99]

The classification conflicts were resolved in 2015 when the FCC finally reclassified Internet as a Title II telecommunications service subject to common carrier regulation with its 2015 Open Internet Order.[100] An impetus for this change was the continuing exclusionary behaviors of broadband providers, this time in providing "fast-lane" priority access to higher paying customers, one of the behaviors that utility regulation was developed to prohibit. The FCC wanted to address this behavior directly with its Title II common carrier provisions of non-discrimination and no-blocking.

Yet again the FCC was challenged in court, this time by the United States Telecommunications Association who petitioned the D.C. Circuit to review the Order on the grounds that it was "arbitrary, capricious, and an abuse of discretion . . . ; violates federal law, including, but not limited to, the Constitution, the Communications Act of 1934 ... and FCC regulations promulgated thereunder; conflicts with the notice-and-comment rulemaking requirements of 5 U.S.C. § 553; and is otherwise contrary to law."[101]

Despite the challenge to this reclassification, the Appellate Court this time ruled that the FCC correctly classified broadband as a telecommunications service.[102] In one notable section the court took

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[96] *Id*.
[97] Verizon v. F.C.C., 740 F.3d 623, 649 (D.C. Cir. 2014).
[98] *Id*. at 650.
[99] *Id*. at 628.
[100] Protective Pet. for Review, 2, March 23, 2015.
[101] U.S. Telecom Ass'n v. Fed. Commc'ns Comm'n, 825 F.3d 674, 698 (D.C. Cir. 2016).
[102] *Id*.

pains to explain that with the modern broadband internet, the access service was distinctly separated from the content on the internet.

That consumers focus on transmission to the exclusion of add-on applications is hardly controversial. Even the most limited examination of contemporary broadband usage reveals that consumers rely on the service primarily to access third-party content. The "typical consumer" purchases broadband to use "third-party apps such as Facebook, Netflix, YouTube, Twitter, or MLB.tv, or ... to access any of thousands of websites." . . . consumers today "pay telecommunications providers for access to the Internet, and *access* is exactly what they get. For *content*, they turn to [the] creative efforts ... of others."

Indeed, given the tremendous impact third-party internet content has had on our society, it would be hard to deny its dominance in the broadband experience. Over the past two decades, this content has transformed nearly every aspect of our lives, from profound actions like choosing a leader, building a career, and falling in love, to more quotidian ones like hailing a cab and watching a movie. [103]

This separation of access and content placed broadband internet into the same category as telephone lines which are mandated to provide access for uses beyond simple phone calls. Telephone service is a regulated utility and here the court is lumping broadband into that same category.

The FCC had determined that broadband service satisfies the statutory definition of a telecommunications service: "the offering of telecommunications for a fee directly to the public." The court determined that in accordance with *National Cable & Telecommunications Ass'n v. Brand X Internet Services* ,[104] "the Commission's conclusions about consumer perception find extensive support in the record and together justify the Commission's decision to reclassify broadband as a telecommunications service."[105] The D.C. Circuit ultimately upheld the 2015 Order in a landmark victory for the FCC, one of the most significant policy changes to the broadband industry in history.[106] Under this policy, the FCC would have authority to potentially create municipal utilities structured similarly to electricity by breaking the major broadband internet providers into

[103] *Id.* At 711
[104] Nat'l Cable & Telecommunications Ass'n v. Brand X Internet Servs., 545 U.S. 967 (2005).
[105] United States Telecom Ass'n. v. FCC, 825 F.3d 674, 698 (D.C. Cir. 2016).
[106] *Id.*

pseudo-monopolies to expand coverage and structure accessible pricing.

Yet, with the solidified authority to regulate broadband internet as a utility after so many years, before they could even begin to address how it might be structured, the FCC in 2017 yielded to political pressure and inexplicably reversed course. They decided to classify broadband once again as an information service, a fundamental part of its repeal of the 2015 net neutrality rules, thus yielding most of their power to regulate internet access as a utility.

## XIII. POSSIBLE REGULATORY NEXT STEPS

And now, living under the FCC's blunder, COVID has starkly demonstrated that broadband is as important to daily life as electricity, gas, or telephone. Yet, we are left without the quality and accessibility assurances of those utilities. Broadband is critical. Our collective need is continuously expanding as students participate in remote schooling, previously inconceivable numbers of workers perform remotely, and patients routinely access telemedicine services.

The necessary regulation to identify and correct service issues, ensure reliable access, and operate fairly for all is again sidelined by the FCC. The beneficial lessons of utility history show clearly how to incentivize the creation of municipal utilities, the market stability of quasi-monopolies with guaranteed customer access and how to use federal infrastructure assistance for access and expansion. Yet, to the benefit of large-scale broadband providers, these lessons are ignored for political reasons, which only encourages providers to continue business as usual. They continue to behave just like the utility holding companies of the early 1900s while the need increasingly outpaces their investment.

Both political sea changes and redirecting of the FCC will be required to reign in broadband internet providers. The FCC knows this is necessary, as demonstrated by their years-long effort to obtain regulation. The impetus the next time around may be a fresh congressional examination to classify broadband providers as common carriers. A common carrier is a commercial entity providing service to the public for a fee.[107] A common carrier must "use the utmost care and

[107] *Common Carrier*, BLACK'S LAW DICTIONARY (10th ed. 2014).

diligence," with "a reasonable degree of skill".[108] This standard of care reflects "that the privilege of serving the public as a common carrier necessarily entails great responsibility, requiring common carriers to exercise a high duty of care towards their customers."[109]

As a regulated entity, public utilities may be liable for offenses typically only reserved to the state.[110] Under 42 U.S.C. § 1983, a person may only file suit alleging constitutional violations against state actors.[111] However, when serving a state-like role that entails serving the public, a common carrier can be held liable as a state actor.[112] A finding that an entity is essentially a state actor derives from coercive power exerted by the state and the state's control over the entity's action, both of which are direct results of utility regulation seen in historic regulation applications.[113]

Although not currently designated as utilities, congress could find that broadband providers are, in effect, common carriers because their service is broadly needed yet they continue to regulate and restrict internet services based on profit motives. Additionally by wielding their power to control internet transmission, broadband providers become more and more like a state actor and thus open to statutory regulation. Designating broadband service providers as common carriers would effectively place them in the same position as telephone companies and other telecommunications providers who are regulated as utilities today.[114]

Whether the impetus originates from congress or some other source, the other core factors supporting utility classification remain. Broadband service providers operate as natural monopolies. They have large upfront infrastructure costs that serve as a competitive barrier to entry and their sheer size affords them low operation margins through economies of scale. Congressional attention, monopoly style operation, the 2016 U.S. Telecom decision, and ongoing public outcry could drive the FCC to reassert itself as a regulatory body over this industry.

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[108] Squaw Valley Ski Corp. v. Sup. Ct. of Placer Cnty., 2 Cal.App.4th 1499, 1507 (Cal. Ct. App. 1992).
[109] *Id*.
[110] Am. Mfrs. Mut. Ins. Co. v. Sullivan, 526 U.S. 40, 55 (1999).
[111] Civil Action for Deprivation of Rights, 42 U.S.C. § 1983 (2012).
[112] Am. Mfrs., 526 U.S. at 52.
[113] Real Est. Bar Ass'n for Mass., Inc. v. Nat'l Real Est. Info. Servs., 608 F.3d 110, 123 (1st Cir. 2010).
[114] Federal Communications Commission, *Protecting and Promoting the Open Internet*, FEDERAL REGISTER (June 12, 2015), https://www.federalregister.gov/documents/2015/04/13/2015-07841/protecting-and-promoting-the-open-internet#h-1.

In fact, public outcry is in fact growing. In its 2020 Global Social Mobility Index, the World Economic Forum included technology access as one of 10 pillars contributing, with equal weight, to a nation's social mobility score, alongside factors such as health and access to education.[115] Eighty-seven percent of people reported that the internet has been important to them during the outbreak, and fifty-three percent of people reported that broadband is essential for critical purposes and everyday tasks.[116]

Congress, wittingly or not, seemed to recognize that Americans view their internet access as a utility and are unhappy with the service and cost with the Coronavirus Aid, Relief, and Economic Security (CARES) Act. In it, Congress placed internet payments alongside electricity, gas and telephone, by lumping each of them under an umbrella term of 'covered utility payment'.[117] Perhaps, if they are assessing these services as equivalent needs, then Congress may be more likely to classify them equally for regulatory purposes.

## IX. BENEFITS OF INTERNET AS A UTILITY

Rural and lower-income urban areas suffer disproportionately from lack of broadband internet because the for-profit model of broadband service providers disincentivizes expansion into these areas, they lack any assured return on the investment. Circularly, this lack of access serves as a barrier to making these potential customers more profitable customer base for those same providers. With equal access opportunities to broadband internet, these communities could benefit from e-learning to improve job skills, branch out into new remote work opportunities, and access e-health providers. Even the less quantifiable benefits like easy access to online entertainment and lower cost shopping provide benefits to both, quality of life and cost of living that are otherwise unavailable in broadband deprived areas. Moreover, there are mental health and social benefits are only to people, who through internet access, then may also be exposed to cultures and ideas from outside their immediate geography.

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[115] *The Global Social Mobility Report 2020*, WORLD ECONOMIC FORUM at 16 (Jan. 2020), https://www3.weforum.org/docs/Global_Social_Mobility_Report.pdf.
[116] Meredith Whipple, *We Already Knew Broadband Should be a Public Utility*, PUBLIC KNOWLEDGE (March 15, 2021), https://publicknowledge.org/we-already-knew-broadband-should-be-a-public-utility-the-pandemic-made-it-obvious/.
[117] Coronavirus Aid, Relief, and Economic Security Act, PL 116-136, 116th Cong. § 1106(a)(5) (2020).

For example, the mental health benefits of broader access can be extrapolated from the opposite effect demonstrated by COVID restrictions. "Covid-19 triggered a staggering uptick in mental illness rates: This year, more than 40% of adults in the United States reported experiencing symptoms of depression or anxiety, compared with 11% in 2019."[118] "The model for mental health treatment has long required in-person appointments, but the pandemic changed that paradigm, prompting psychiatrists to pivot to telehealth treatment—and in a big way: The number of telehealth visits for mental health increased 6,500% during the health crisis."[119] This rapid expansion of online mental health services is virtually nonexistence without access, which once again disadvantaging the already underserved populations.

Reviving a Title II designation for broadband internet would enable the FCC to change the incentive model for infrastructure investment and open access to federal funding and research that can assist in other ways. This research may indicate that the upfront barrier to expansion is not as high as with other utilities, in part because advancing 5G cell and satellite technologies eliminate the need for physical cable installations to every home and business. If, for example, satellite is proven to be sufficiently stable and cost effective, the subsidy required for service may be as low as a satellite dish and receiver as compared to miles of fiber optic cable installation below every street. Likewise, leveraging and upgrading existing cell tower infrastructure may be another reasonably low-cost option as compared to physical cabling. Regardless of the approach taken, without federal insistence to seek out solutions, we are enabling broadband service providers to argue against expansion with outdated talking points.

Granting a public utility its pseudo-monopoly provides them with assurances that competition cannot threaten their services. It lowers the bar to expansion into underserved areas with assured customer access in the expanded areas. These exact concerns were present and addressed for electric and other utilities, so it is unrealistic to continue to act as if they are insurmountable for broadband internet service. The models are proven and applicable.

Beyond the technical connectivity issues, customers in underserved areas have affordability barriers. A Pew Research survey found that 28% of those who have a high-speed connection at home say

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[118] Jodi Helmer, *These 3 Changes can Help Us Overcome the Mental Health Pandemic*, FORBES (Oct. 4, 2021), https://www.forbes.com/sites/otsuka/2021/10/04/these-3-changes-can-help-us-overcome-the-mental-health-pandemic/?sh=4cc8c39c396f.
[119] *Id*.

they worry a lot or some about paying for this service and 30% of smartphone owners say they worry at least some about paying their cellphone bill. This is disproportionally felt by Hispanic or Black broadband or smartphone users and those with lower incomes are especially likely to say they worry about these types of bills.[120] However, Title II would address these price concerns in the same manner as the price concerns were addressed for electrical utilities and it would no longer be a justifiable objection for broadband providers. In reality, the cost barriers today are the result of their for-profit model as was the case in the early days of electricity. A utility model provides expansion and upgrades in all geographic areas with costs defrayed by government subsidies and an increased captive customer base. Further, social aid programs provide subsidies that can allow utilities to lower the individual cost while maintaining profit. Subsidies reduce the affordability barrier to individual households, theoretically opening opportunities discussed earlier to change an area's socioeconomics. In this way both the company and the consumer are bettered by the arrangement.

Lastly, utility regulation raises the aggregate service quality and availability across all consumers and provides a consumer protection mechanism should the utility fail to meet their obligations. As with electrical utilities, all households should be able to rely on the same broadband ease of access and service quality regardless of their street address or household income.

## X. CONCLUSION

Utilities are fundamental to our society. Renters and homebuyers do not need to research the electricity, water, and gas quality before deciding where to live because these are known quantities. The time has come for internet access to be the same. Far too much of everyday living relies on quality internet access to justifying continuing to treat it as an optional luxury.

Following the status quo of for-profit broadband will only serve to maintain the price gouging, inconsistent service availability and marginalization of underserved communities. The FCC must re-assert

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[120] Emily Vogels, et al., *53% of Americans Say the Internet has been Essential*, PEW RESEARCH CENTER (Apr. 30, 2020), https://www.pewresearch.org/internet/2020/04/30/53-of-americans-say-the-internet-has-been-essential-during-the-covid-19-outbreak/.

their authority to develop a working municipal public utility model for broadband internet.