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9	UNITED STATE	S DISTRICT COURT
10	EASTERN DISTR	ICT OF CALIFORNIA
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12	AMERICAN CABLE ASSOCIATION, CTIA	Case No.: 2:18-cv-02684 Case No.: 2:18-cv-02660
13	THE WIRELESS ASSOCATION, NCTA – THE INTERNET & TELEVISION	
14	ASSOCIATION, and USTELECOM –THE BROADBAND ASSOCIATION,	BRIEF OF ACCESS NOW, MOZILLA CORP, PUBLIC KNOWLEDGE, NEW AMERICA'S OPEN TECHNOLOGY
15	Plaintiffs,	INSTITUTE, AND FREE PRESS AS
16	V.	AMICUS CURIAE IN OPPOSITION TO PLAINTIFFS' RENEWED MOTIONS
17	WAYNED DECEDDA : 1: 00:1	FOR PRELIMINARY INJUNCTIONS
18	XAVIER BECERRA, in his official capacity as Attorney General of California,	Judge: Hon. John A. Mendez
19	Defendant.	vauge. Hom voim H. Menaez
20		
21	THE UNITED STATES OF AMERICA,	
22	Plaintiff,	
23	V.	
24	THE STATE OF CALIFORNIA; GAVIN C.	
25	NEWSOM, Governor of California, in his	
26	Official Capacity, and XAVIER BECERRA, Attorney General of California, in his Official	
27	Capacity,	
28	Defendants.	

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I. <u>INTEREST OF AMICI CURIAE</u>

Amici curiae are non-profit advocacy organizations and online companies that have for many years supported strong net neutrality protections to ensure consumers can access an internet free from undue influence from their internet service provider. Amici curiae thus have an established interest in the outcome and potential ramifications of this proceeding, and believe that their perspective will provide a fuller view of the stakes of this case. Listed in alphabetical order, these groups are the following:

Access Now is an international civil society organization registered as a 501(c)(3) non-profit in the United States of America, and focuses on defending and extending the digital rights of users at risk around the world. Access Now filed comments in both the 2015 and 2017 net neutrality proceedings at the Federal Communications Commission supporting strong rules, and relies on an open internet to reach its audience.

Free Press is a 501(c)(3) non-profit organization focused on equitable access to technology, diverse and independent ownership of media, and journalism that serves local communities. Free Press also filed comments in the 2015 and 2017 net neutrality proceedings (and earlier ones as well) at the Federal Communications Commission, supporting the strong rules adopted in 2015 and opposing their elimination in 2017.

Mozilla Corporation has been an advocate for the Internet for over a decade. Its mission is guided by the Mozilla Manifesto, a set of principles recognizing that, among other things, that the Internet must remain open and accessible. Today, hundreds of millions of people worldwide use Mozilla Firefox to discover and experience the web on computers, tablets, and mobile phones.

New America's Open Technology Institute ("OTI") is a 501(c)(3) non-profit organization in the United States. OTI is a program within New America, a foundation dedicated to the renewal of American politics and prosperity in the Digital Age. OTI strongly supports net neutrality and broadband deployment and strongly opposed the FCC's decision to eliminate net neutrality rules in 2017.

Public Knowledge ("PK") is a 501(c)(3) non-profit organization that advocates for

technology policy that serves the public interest. PK advocates before Congress, the courts, the Federal Communications Commission, and other governmental entities. Public Knowledge works to uphold and protect consumers' rights, including net neutrality.

II. ARGUMENT

A. The U.S. Chamber of Commerce misrepresents the level of broadband investment, falsely claiming that investment decreased due to the net neutrality rules.

Internet service providers ("ISPs") and their amici like the U.S. Chamber of Commerce ("Chamber") claim, falsely, that industry investment declined in 2015 and 2016, when the FCC's strong net neutrality rules were in place. They also claim, falsely, that investment rebounded in 2017 and 2018, when the Federal Communications Commission (FCC) eliminated those rules. Yet it is evident from these ISPs' own SEC disclosures, and from deployment reports filed on FCC Form 477, that just the reverse is true: when the rules were in place, there was instead an overall increase in aggregate broadband capital expenditures and deployment (in urban and rural areas alike) by the publicly traded ISPs that report these numbers. Since the rules' elimination, aggregate broadband investment has decreased. That is not to say that the rules caused increased investment, or that their elimination caused a decrease; yet the numbers belie the Chamber's claims about the direction of any change in investment when these rules were operative.

To begin with, a comparison of aggregate investment totals from year to year is not as informative as the Chamber pretends. Aggregate investment is a blunt metric that obscures variations between individual firms. Yet the picture is clear, no matter how the Chamber's brief attempts to cloud it with incomplete data derived solely from ISPs' lobbying arm. The Chamber claims, for example, that "[i]nvestment began to decline, however, in 2015, . . . [b]ut capital expenditures began to increase again with both the expectation and issuance of the 2018 Order." Chamber Br. at 5. Yet each of the citations here, to a few different FCC record comments allegedly supporting this proposition, lead back to a single source: USTelecom, a plaintiff in this case.

Honest assessment of aggregate broadband investment before and after the

elimination of the FCC's rules requires escaping the Chamber's hall of mirrors, where a single plaintiff's distorted claims about broadband investment are misleadingly made to look like several different commenters all supporting each other's analyses. And as looking below the surface at USTelecom's reports reveals, the lobbying association "collects capital expenditures data . . . in order to approximate an industry aggregate" but "does not adjust for inflation." See Patrick Brogan, *U.S. Broadband Investment Continued Upswing in 2018*, USTelecom (July 31, 2019), https://bit.ly/2G3ZOid at 3 (emphasis added).

Amicus Free Press has conducted its own analysis of broadband investment before and after the FCC's elimination of its net neutrality rules; but unlike USTelecom, Free Press used only publicly-reported data, adjusted for inflation, and showed the numbers that make up the aggregate rather than obscuring them behind a series of poorly explained "approximat[ions]." As data through 2019 demonstrates, aggregate investment by publicly-traded broadband providers increased sharply in the two-year period 2015-2016 with the FCC's rules in place, when compared to the prior two-year period. See, e.g., Free Press Broadband Deployment Comments, Dkt. No. 20-269 (Sept. 18, 2020), https://bit.ly/33ZVcSb at 50, Fig. 17 ("Free Press Comments"). On an inflation-adjusted basis, aggregate investment in 2017 by these firms did not even match their total in 2015, when the FCC's strong net neutrality rules went into effect. *Id.* And aggregate broadband investment has dropped every year since 2017, with the 2019 total more than \$2 billion below 2016's total. *Id.*

Looking at individual ISP investment decisions and expenditures during these time periods is even more informative than looking at the aggregate figure, however, because the aggregate can be skewed by changes at a single large firm. The investment decisions, cycles, and strategies employed by individual firms likewise show an industry experiencing significant growth in 2015 and 2016, with the FCC's strong net neutrality rules in place: the majority of publicly traded broadband providers reported investment increases after the 2015 Open Internet Order issued, see *Protecting and Promoting the Open Internet, Report and Order on Remand, Declaratory Ruling, and Order*, 30 FCC Rcd 5601 (Mar. 12, 2015) ("2015 Open Internet Order").

As the data in Free Press's latest report shows, there were declines reported by some individual providers in 2015 and 2016, such as AT&T; but these are clearly attributed to investment decisions made far in advance, in no way related to the FCC net neutrality rules' adoption or their elimination, and in accordance with the typically cyclical nature of capital investments in this industry. As AT&T itself told the FCC years before this particular proceeding, "there is no reason to expect capital expenditures to increase by the same amount year after year. Capital expenditures tend to be 'lumpy.'... Minor variations from year to year thus should not be surprising[.]" Comments of AT&T Inc., Dkt. 10-133 (July 30, 2010), https://bit.ly/2S3uG53 at 34.

Thus, the reason that AT&T spent less in 2015 than it did in 2014 had nothing to do with the FCC's net neutrality decisions: it had everything to do with the fact that AT&T finished a long-planned upgrade ahead of schedule in 2014. Comments of Randall Stephenson, Chairman & CEO, AT&T Inc., at UBS Global Media and Communications Conference (Dec. 8, 2015), https://bit.ly/2S7X2uH ("Stephenson Comments"). AT&T's rebound in 2016—with the net neutrality rules still in place—is attributable in large part to a merger condition imposed on its DIRECTV acquisition in 2015, in which AT&T promised to increase its fiber deployment in exchange for approval of that transaction. Yet AT&T's investment totals have decreased every year under Chairman Pai, and every year since the elimination of the rules, with no promise to continue deploying fiber now that the company has met that merger obligation. Free Press Comments at 34-35.

The upward trajectory for broadband when strong net neutrality rules were in place is plainly reflected in data measuring broadband speeds and deployment as well. ISPs' own reports on FCC Form 477 data show a steady increase in the number of people in the U.S. reportedly served by fixed residential broadband from 2014-2017, seemingly unaffected by the phantasmal investment declines or spikes that these ISPs and their amici conjure for this Court. There were no such declines at all, let alone any traceable to FCC regulation decisions. In the two years while strong net neutrality rules were in place, the average maximum available downstream speed for terrestrial home broadband in areas where broadband is deployed, according to FCC data, increased by 150 percent. These and other

performance metrics are far more informative than raw dollars of expenditures, since, as AT&T's Randall Stephenson bragged in 2015, deploying fiber and other upgrades "continues to get cheaper," allowing providers to spend less even as they offer significant increases in capacity and speeds. Stephenson Comments.

Furthermore, individual ISP capital expenditures have not skyrocketed since the FCC's elimination of these rules, even when that regulatory shift was coupled with massive corporate tax cuts. Both before and after the FCC's 2017 vote, improvements in wired broadband coverage, speeds, and choices continued on the same trajectory seen from the end of 2014, just before the FCC adopted the 2015 Open Internet Order. However, many of the largest broadband providers actually reported decreased expenditures in 2018, after elimination of the rules.

Verizon reported a 6.4% inflation-adjusted investment decline for 2017-2018. See Free Press Comments at 50, Fig. 17. AT&T spending declined too, as it also announced worker layoffs instead of the tax-cut fueled job growth it had promised. Jon Brodkin, *AT&T Slashed Billions from Network Spending, Cut Tens of Thousands of Jobs*, Ars Technica (Jan. 30, 2020), https://bit.ly/3i40fpY. Comcast reported that capital expenditures for 2018 and 2019 likewise decreased, after reporting more than 23% growth in such investments when strong net neutrality rules were in place for 2015-2016. Jon Brodkin, *Ajit Pai Promised Faster Broadband Expansion—Comcast Cut Spending Instead*, Ars Technica (Jan. 28, 2020), https://bit.ly/3cvuUeB. That is why any claim that ISPs simply need more money at their disposal, and that if they get it then they will automatically reinvest it, are so laughably and demonstrably untrue.

Even removing from the equation the accounting complications introduced by the AT&T/DIRECTV merger, and other changes affecting the accounting for Sprint's expenditures on leased handsets, the inflation-adjusted aggregate investment total for the remaining companies in this collection of publicly traded broadband providers increased by 8% in 2015-2016, but dropped by 0.2% in the first two years of the current FCC's tenure.

The overall declines, and declines in spending at individual companies, have continued in 2019 and 2020, exposing the utter fallacy of claims that net neutrality rules

depressed investment or that their elimination increased it. ISPs' investment decisions are driven by a multiplicity of factors, including the availability of new technologies, current interest rates, competitive pressures (if any), and the public demand for this increasingly essential communications service.

B. ISPs have a history of undermining net neutrality.

The Chamber argues "[c]ritics' predictions about the repeal of the [FCC's 2015 net neutrality rules] have failed to materialize," and claims that there is no evidence that ISPs have engaged in blocking, throttling, or paid prioritization, primarily because of competitive pressure. Chamber Br. at 7. None of these claims are accurate or persuasive.

1. <u>ISPs can and do violate net neutrality.</u>

As an initial matter, ISPs have the economic incentive and technical ability to undermine net neutrality. Everything users do online goes through their ISP, and ISPs can control that traffic and "exploit this role by acting in ways that may harm the open Internet, such as preferring their own or affiliated content, demanding fees from edge providers, or placing technical barriers to reaching end users." 2015 Open Internet Order, 30 FCC Rcd at 5630 (¶80). This phenomenon is typically called the "terminating access monopoly" over users. The D.C. Circuit Court of Appeals upheld the FCC's logic in *Verizon Communications Inc. v. FCC*, stating the FCC "convincingly detailed how broadband providers' position in the market gives them the economic power to restrict edge-provider traffic and charge for the services they furnish edge providers" in part because of weak competition, high switching costs, and asymmetric information (detailed in part II.C of this brief). *Verizon Communications Inc. v. FCC*, 740 F.3d 623, 646 (D.C. Cir. 2014) ("*Verizon*").

For that reason, every FCC since 2005, until now, has adopted some variation of net neutrality conduct rules.¹ In 2005, the FCC under Chairman Powell passed a Policy

¹ The Chamber's claims that "between 2000 and 2014, broadband was classified . . . as an 'information service'" Chamber Amicus at 5. That is not true. Digital Subscriber Line services were classified as Title II services until 2005, see Deployment of Wireline Services Offering Advanced Telecommunications Capacity, 13 FCC Rcd 24012 (1998) (classifying

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Statement based on four early net neutrality principles: consumers should be able to access the content of their choice, use applications of their choice, connect non-harmful devices to the network, and benefit from competition among network providers and online content and application providers. Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Policy Statement, 20 FCC Rcd 14986 (Sept. 23, 2005), https://bit.ly/2HyqWpY. After the D.C. Circuit held, in Comcast Corp. v. FCC, 600 F.3d 642 (2010) that the FCC lacked authority to enforce such requirements under Title I of the Communications Act, the FCC passed the 2010 Open Internet Order prohibiting blocking and unreasonable discrimination based in part on Section 706 and Title I authority. Preserving the Open Internet, Report and Order, 25 FCC Rcd 17905 (Dec. 23, 2010), https://bit.ly/3igaPdr. The D.C. Circuit struck down that order too, in Verizon, because the court said the FCC is not allowed to attach common carrier obligations like nondiscrimination to a service that is classified as a Title I information service. Verizon, 740 F.3d 623 (D.C. Cir. 2014). Thereafter, the FCC passed its 2015 Open Internet Order, which reclassified broadband providers as Title II telecommunications services, forbore from a significant portion of Title II regulations, and imposed strong net neutrality requirements including no blocking, no throttling, no paid prioritization, a general conduct rule, and interconnection oversight. The D.C. Circuit upheld these rules in full in *United States* Telecom Ass'n v. FCC, 855 F.3d 381 (D.C. Cir. 2017), and they were the law of the land until the current FCC abdicated its authority over broadband, went against history, and

DSL as a telecommunications service) and *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Report and Order and Notice of Proposed Rulemaking*, 20 FCC Rcd 14853 (Sept. 23, 2005) (classifying wireline services as information services), and wireless services were classified as Title II services until 2007, *Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks, Declaratory Ruling*, 22 FCC Rcd 5901 (Mar. 23, 2007). Moreover, many rural DSL providers continued to provide some broadband offerings as Title II services during that entire period. *See* Comments of the National Exchange Carrier Association, Dkt. No. 17-108 (July, 17, 2017), https://bit.ly/347jx8M at 5 ("These carriers typically serve rural, sparsely-populated areas and obtain significant benefits from the provision of broadband transmission services on a common carriage basis[.]").

eliminated all federal net neutrality conduct rules, retaining the bare minimum and insufficient transparency requirement. *Restoring Internet Freedom, Declaratory Ruling, Report and Order, and Order*, 33 FCC Rcd 311 (Jan. 4, 2018), https://bit.ly/3ibU4jG ("RIFO").

Thus, contrary to the Chamber's implications, net neutrality was not a new construct created in 2015, though only those strong rules fully withstood judicial review. Yet, despite the continuous presence of such rules, and after their elimination as well, ISPs have engaged in behavior that violates and undermines net neutrality.

In 2005, Madison River Communications, a DSL provider, blocked ports on its network that were used by competing VoIP services, which resulted in a consent decree and a fine. *Madison River Communications, LLC, Consent Decree*, 20 FCC Rcd 4295 (2005). Shortly thereafter, Comcast interfered with peer-to-peer file sharing over its network, resulting in another FCC investigation and enforcement order. *Formal Complaint of Free Press and Public Knowledge Against Comcast, Memorandum Opinion and Order*, 23 FCC Rcd 13028 (2008), https://bit.ly/3kVuCk7.

Wireless providers engaged in harmful conduct between 2010 and 2015 when limited net neutrality rules applied to them, even during a time in which the wireless market was more competitive than it is now. AT&T blocked, or attempted to block, voice services that competed with its voice service. Cecilia Kang, *AT&T Faces Complaint over iPhone Facetime Blocking*, Wash. Post (Sept. 18, 2012), http://wapo.st/S5kq7u. Verizon sought removal of tethering apps from the Android app store in 2011. Ryan Singel, *Verizon Ban on 4G Tethering Apps Violates Openness Rule, Complaint Alleges*, Wired (June 6, 2011), https://bit.ly/34bAi2v. Verizon similarly blocked Google Wallet, a competitor to the provider's own mobile payment system, on its phones. David Goldman, *Verizon Blocks Google Wallet*, CNN Money (Dec. 6, 2011), https://cnn.it/3kPHf06.

Behavior of wireless providers internationally also shows harmful behavior, again illustrating that ISPs have the incentive and the ability to engage in the type of conduct that SB 822 can address. In Canada in 2009, many wireless providers were throttling peer-to-peer traffic. Barbara van Schewick, *Network Neutrality and Quality of Service*, 67 Stanford

crisis. Colin Lechen

L.Rev. 1, 96-97 (2015), https://stanford.io/2SapBbe. In Europe, one study found that from the mid-2000s to 2011, "application-specific traffic management became pervasive" in the British broadband landscape. Alissa Cooper, *How Competition Drives Discrimination: an Analysis of Broadband Traffic Management in the UK*, TPRC (Aug. 2013), https://bit.ly/3cEHecw at 4.

These kinds of issues have reappeared following the FCC's elimination of net neutrality rules. For instance, an August 2019 report based on findings from the WeHe mobile application showed that all major US-based wireless ISPs engaged in some kind of traffic differentiation between particular applications, even prior to the effective date of the *RIFO*. The report found all of the then-four major wireless carriers (Verizon, T-Mobile, Sprint, and AT&T) throttled Netflix and YouTube over the cellular network. Verizon, T-Mobile, and Sprint further throttled Amazon Prime. The services were typically throttled to 1.5 Mbps, even though the network could handle up to 20 Mbps throughput. Such throttling shows the continued harm that ISPs wreak on their customers, in a way that prevents users from streaming high quality video to their devices. Fangfan Li, *et al.*, *A Large Scale Differential Analysis of Deployed Traffic Differentiation Practices*, Assoc. Computer Machinery (2019), https://bit.ly/3jffAFl at 137.

Additionally, after Comcast started once again to employ tactics that delay the network speeds of internet backbone operator Cogent, app developer Panic, a Cogent customer, reported that its Comcast users suffered slow connections when trying to access Panic's apps and upgrades. Jon Brodkin, *When Slow Downloads Hit an App Developer, only Comcast Customers Suffered*, Ars Technica (Mar. 9, 2018), https://bit.ly/3l0nbs6. When Netflix got caught in the same fight between Comcast and Cogent in 2014, Netflix just built its own network. *Id.* But not all businesses are Netflix—very few have the resources to simply build their own backend networks.

The elimination of net neutrality rules and any real oversight of ISP conduct at the federal level harms public safety as well. Verizon made headlines when it slowed the Santa Clara Fire Department's wireless service during the 2018 Mendocino Complex wildfire crisis. Colin Lecher, *Verizon Throttled California Fire Department During Wildfire Crisis*,

Verge (Aug. 21, 2018), https://bit.ly/2S97G4z. Whatever the implications of this shameful episode under the provisions of SB 822, officials in California have rightly noted that any impairment or degradation of outgoing emergency messages to members of the public would indeed be a net neutrality issue—and a public safety catastrophe.

2. <u>ISPs</u>, particularly mobile providers, further undermine net neutrality through harmful zero-rating practices.

Zero rating is another harmful practice ISPs engage in, which violates net neutrality laws under clearly delineated rules set forth in SB 822. Zero rating is the practice in which an ISP imposes a data cap or threshold for its users, then exempts certain preferred content (usually from a source affiliated with the ISP, or from an entity that pays the ISP for the exemption) from that data cap.

If an ISP zero-rates services in these harmful ways, it has an incentive to reduce its data cap or threshold, to nudge or force its users into using the affiliated content and avoiding the unaffiliated content. This is one reason why zero rating is banned in the Netherlands, and the Dutch Authority on Consumers and the Market has fined companies for violating the ban. The ban prevented another large Dutch ISP, KPN, from engaging in the same behavior as it was rolling out its video service that "allows its customers to watch anytime, anywhere TV on their smartphones or tablets." Research Note, Netherlands Zero-Rating, Rewheel (Feb. 6, 2015), https://bit.ly/3mZxle9 at 1. In recognition of the ban and the likelihood of its video service being underutilized by customers, KPN doubled the allowance under its data caps to 10 GB per month at no additional charge to the customer. *Id.*

Without such regulations in place, zero rating also harms consumers by raising prices. A study of ISPs in the EU during 2015 and 2016 found that "in markets where zero-rating offers had existed in both years, prices increased by 2%, whereas in markets with no zero-rating offers in both years, prices dropped by 8%. . . . Countries in which zero-rating offers disappeared from the market, displayed a 10% decrease in prices." Thomas Lohninger, *et al.*, *The Net Neutrality Situation in the EU*, Epicenter.works (Jan. 29, 2019), https://bit.ly/34bCbMD at 30.

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Anticompetitive zero rating also has negative effects on competition, as people tend to prefer using services that will not count against their cap. An app or service that is exempted from the data cap will be favored by the consumer, and any competing apps or services will suffer especially when the service is a video-based service. Such practices make it difficult for voices not affiliated with large ISPs to be heard. *See* Renderos Decl. ¶35.

ISPs have continually engaged in these kinds of harmful zero rating practices, and do so today after the elimination of the FCC's net neutrality rules and its disavowal of investigations into such practices. AT&T exempts its own DIRECTV services from its customers' data caps, and provides other favorable treatment for customers who subscribe to its DIRECTV services. Similarly, Verizon once zero-rated its own go90 service (which has since been shut down). Wireless Telecommunications Bureau, *Policy Review of Mobile Broadband Operators' Sponsored Data Offerings for Zero-rated Content and Services*, FCC (2017), https://bit.ly/3n0wFVZ at 9. The FCC then found that these zero rating programs had negative competitive impacts. *Id.* at 14, 16-17. Yet in the wake of the elimination of the rules and the current FCC's withdrawal, AT&T recently doubled down and began favoring another of its own video services, HBO Max, by zero rating it. Tyler Hersko, *AT&T Ignores Net Neutrality: HBO Max Won't Hit Data Caps but Competing Streamers Will*, IndieWire (June 4, 2020), https://bit.ly/33duJBF.

3. <u>Competition among ISPs is bleak at best.</u>

The Chamber argues that competition among ISPs prevents behavior that undermines net neutrality, Chamber Br. at 4-6, but that assertion flies in the face of reality. In truth, the ISP market in the United States is a deeply anticompetitive oligopoly, dominated by just a handful of companies. Recent FCC data, which actually overcounts broadband deployment and competition, *see* Jonathan Sallet, *Broadband for America's Future*, Benton Fdn. (Oct. 2019), https://bit.ly/3kWVikr at 27-28, shows weak competition for 100 Mbps download connection (the speeds at which about half of Americans subscribe, Kronenberg Decl. ¶9). FCC data for 2018 suggests that some 9.5% of the population have zero options at this speed, with 39% having one option, and 41% having two options. That data means

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approximately 292 million people in the U.S. had at most a duopoly at that speed, with 31 million of those having no options, and 127 million under a monopoly. *Fixed Coverage Updates as of YE2018*, FCC, https://bit.ly/33fLcW1 at 2. Even at the bare minimum "broadband" speed of 25 Mbps download, this FCC 2018 data suggested that at least 18 million Americans (5.6%) still lacked even one provider, and 87 million Americans (26.6%) are under a monopoly. *Id*.

Recent studies conducted in California show that competition in the state is likewise poor. In 2016, California regulators found that "[t]he residential high speed broadband market is highly concentrated throughout California," and "[d]espite advancement in technologies and services, the so-called 'digital divide' between geographic and economic sub-groups of the State's population has widened. Those Californians who lack reliable and affordable access to that network are unable to participate fully in the economy and society of the 21st century." Decision Analyzing the California Telecommunications Market and Directing Staff to Continue Data Gathering, Monitoring and Reporting on the Market, CPUC (Dec. 8, 2016), https://bit.ly/3jfDpwK at 3-4. Worse, that report found that "[i]n the Oakland and San Francisco markets, all . . . competitive carriers together provide less than 8% of total fixed broadband lines," meaning giant incumbent ISPs like AT&T and Comcast controlled the other 92% of the broadband market. Id. at 94. Further, in 2019, California regulators found that the investment focus of California telecom companies has been primarily in higher-income communities and urban areas, while they leave low-income communities behind with old, decaying infrastructure that is less resilient and more likely to have outages. Examination of the Local Telecommunications Networks and Related Policies and Practices of AT&T California and Frontier California, CPUC (April 2019), https://bit.ly/3kVAQjZ at 2-3.

Even if there were competition, several aspects of the ISP market make such competition less effective at disciplining behavior. First, consumers often lack information about the true cause of a low-quality internet connection. There could be many reasons for a poor user experience online, and ISP interference is merely one potential culprit. While disclosure is intended to fix this problem, some consumers may not understand such

disclosures especially when they are poorly drafted and purposefully buried by the ISP; and, once again, disclosure only helps if there is competition, such that a customer could switch to a provider that does not have the same limitation. Barbara van Schewick, *supra*, 67 Stanford L.Rev. at 86-88. Second, switching providers can often be difficult and costly for customers. The high switching costs incurred by customers who switch between providers make it less likely that those customers will actually make the switch. These costs include paying early termination fees, charges and time spent waiting for installation and new equipment, or charges and time spent returning old equipment. Significant effort goes into switching as well—customers need to compare new plans and coordinate installation, potentially missing work. *Id.* at 92-96.

It is vitally important that SB 822 goes into effect and is enforced. Without any regulation, ISPs will continue to cause harm to their customers, preventing them from accessing the online content providers of their choice, and harming the open internet writ large by artificially constricting internet usage to pad ISPs' own bottom lines. These kinds of harms would be further exacerbated by the fact that everyone now relies on the internet daily during the COVID-19 pandemic.

C. ISP networks have not been as "resilient" during the pandemic as industry claims.

The Chamber argues that "[b]roadband network performance during the global pandemic is a byproduct of the FCC's 'light touch' regulatory framework." Chamber Br. at 8. Network performance in the U.S. in response to COVID-19, however, has not held up as industry as claimed. Much industry analysis cited by the Chamber focuses on national average or median speeds, but a national focus ignores the effects on individuals and communities that already had poor internet connections, such as communities of color or rural communities.

Some reports suggest that additional usage during the COVID-19 crisis did indeed affect network speeds. This research rebutting ISPs' self-serving claims uses Measurement Lab data, which is similar to the Ookla data on which industry relies, but more accurately measures the user experience by testing potential slowdowns in different parts of the

connection including on and off of the ISPs' networks. This independent research showed more than a 10 percent increase between February and late March in the number of counties in which median network speeds did not meet the 25 Mbps download and 3 Mbps upload threshold that the FCC treats as "broadband" service. Additionally, 38 states experienced slower median speeds, with five experiencing a reduction in median speeds of more than 20 percent. Sascha Meinrath, *The Coronavirus Pandemic Is Breaking the Internet*, The Hill (May 2, 2020), https://bit.ly/30jljm3. And in 29.4 percent of counties, "most customers [were] not getting the government-required upload speed" to meet this FCC threshold. Amanda Hulpoch, *US's Digital Divide 'Is Going to Kill People' as COVID-19 Exposes Inequalities*, Guardian (Apr. 13, 2020), https://bit.ly/2HHKZm4. Other studies suggest that in California, for one week in mid-March 2020 compared to the prior ten weeks, cities like San Jose saw a 38 percent decrease in median internet speeds, Oxnard saw a 42 percent decrease, and Irvine saw a 20 percent decrease. Tyler Cooper, *Internet Speed Analysis*, BroadbandNow (Mar. 25, 2020), https://bit.ly/2Sgh8Tz.

Such "speed degradations appear to be especially acute in rural areas and areas that already have poor broadband service," Meinrath, *supra*, in part because "many rural Internet networks were barely functional before the pandemic." Doug Dawson, *Will COVID-19 Traffic Kill the Internet?*, POTs and PANs Blog (Mar. 31, 2020), https://bit.ly/3n4HohW. Rural areas are often served by older and less resilient DSL or low-quality fixed wireless service, which are more likely to suffer under the increased traffic. One broadband consultant worked with a rural county to test speeds right before the pandemic, and found that it had almost no speed tests above 5 Mbps download. "A 30% increase in usage won't cut speeds by just 30%, the extra usage is likely to crash the networks. A large portion of rural America already has dreadful broadband. There are terrible ramifications if a network that is only delivering 3 Mbps broadband today gets further stressed." *Id*.

The Chamber contrasts the supposedly-resilient U.S. network by comparing it to the EU, which the Chamber claims "faced more difficulty accommodating the fluctuation in traffic." Chamber Br. at 9. As an initial matter, network investment is dictated by far more than regulatory regimes (if indeed the regulatory choices made by the FCC over the past

decade had any impact at all), as discussed above. Even if it were true that the internet in the EU did not hold up, the Chamber's claim as to the cause for that performance would be unpersuasive. However, the Chamber completely ignores the context of the reports about this supposed "difficulty." First, as contemporaneous reporting shows, a decision to ask video providers to reduce their bandwidth needs was made, apparently unilaterally, by Thierry Breton, the European Commissioner for the Internal Market, in conversation with Reed Hastings, the CEO of Netflix. *See* Tweet by Thierry Breton, Twitter (Mar. 18, 2020), https://bit.ly/3n1bvXJ. If there were a real concern, the telecom agency (known as the Body of European Regulators for Electronic Communications, or BEREC) would have been involved. Second, and most importantly, this decision was a preventative measure, and was not based on evidence that EU networks were actually degrading. *Id.* (stating "infrastructures might be in strain") (emphasis added). If there were any such evidence of such degradation or performance declines in the EU later on, the Chamber's citation to Breton's preventative measures does not provide it.

III. CONCLUSION

For these reasons, amici curiae urge the wurt to deny the motion

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Dated: September 30, 2020

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CERTIFICATE OF COMPLIANCE

This brief complies with the 15-page limit set forth in the Court's July 30, 2020 scheduling order.

Dated: September 30, 2020

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CERTIFICATE OF SERVICE

I hereby certify that on September 30, 2020, I electronically filed the foregoing Brief of Access Now, Mozilla Corp, Public Knowledge, New America's Open Technology Institute, and Free Press as Amicus Curiae in Opposition to Plaintiffs' Renewed Motions for Preliminary Injunctions using the CM/ECF system, which will send notification of such filing to all parties of record.

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