

**BEFORE THE  
FEDERAL TRADE COMMISSION  
WASHINGTON, DC**

Competition and Consumer Protection in the 21 <sup>st</sup> Century	)	
	)	Project Number P181201
Topic 2: Competition and Consumer Protection Issues in Communication, Information, and Media Technology Networks	)	

**COMMENTS OF THE AMERICAN CABLE ASSOCIATION  
ON THE PUBLIC NOTICE**



The American Cable Association (ACA) hereby comments on Topic 2, Competition and Consumer Protection Issues in Communication, Information, and Media Technology Networks, in the public notice issued by the Federal Trade Commission (FTC) on Competition and Consumer Protection in the 21<sup>st</sup> Century.<sup>1</sup> ACA represents approximately 700 smaller Internet Service Providers (ISPs) passing some 18 million households and serving almost 7 million.<sup>2</sup> ACA's objective in these comments is to inform the FTC, as it assesses competition and consumer protection issues in the Internet eco-system, about the evolution of the Internet and

---

<sup>1</sup> Federal Trade Commission, "Competition and Consumer Protection in the 21<sup>st</sup> Century, Project 181201" (June 20, 2018). See 83 Fed. Reg. 38307 (Aug. 6, 2018).

<sup>2</sup> For additional information about ACA, see [www.americancable.org](http://www.americancable.org). See also "Connecting Hometown America, How the Smaller Operators of ACA are Having a Big Impact" (2014), which elaborates on the characteristics and activities of smaller video and broadband providers who are ACA members, available at [http://www.americancable.press/files/140328%20ACA\\_Whitepaper\\_PDF%20\(FINAL\).pdf](http://www.americancable.press/files/140328%20ACA_Whitepaper_PDF%20(FINAL).pdf) (Connecting Hometown America).

broadband markets, the unique and important role smaller ISPs play in the market, as well as about their views on appropriate government regulation.<sup>3</sup> In brief, smaller ISPs often provide vital connectivity to the Internet for their customers, especially in rural areas. At other times, they compete with other ISPs and provide customers with choice in accessing broadband service. But, regardless of the market in which they operate, smaller ISPs invariably lack any incentive or ability to leverage either their customers or upstream edge providers.<sup>4</sup> In fact, they are more at risk of being leveraged by upstream providers. As demonstrated by their recent Transparency Rule disclosures, smaller ISPs also have, and will continue, to abide by open Internet principles, and in their comments in the *Restoring Internet Freedom* proceeding, they indicated their support for reasonable disclosure (transparency) requirements.<sup>5</sup> Further, smaller ISPs have, and will continue, to protect customer privacy and data security and to comply with the FTC’s “unfair or deceptive acts or practices” standard.<sup>6</sup>

## Introduction

The FTC’s 2007 staff report “Broadband Connectivity, Competitive Policy”<sup>7</sup> focused on just one part of the Internet ecosystem – broadband Internet connectivity – and one major issue – net neutrality regulation. The staff found that “[t]here is evidence that the broadband Internet access industry is moving in the direction of more, not less, competition,” and advised “proceeding with caution before enacting broad, *ex ante* restrictions in an unsettled, dynamic

---

<sup>3</sup> Smaller ISPs often offer video service and voice service, often in a bundle with broadband service. Unlike other ISPs, smaller ISPs are not affiliated with video programming firms.

<sup>4</sup> Smaller ISPs also are subject to antitrust laws overseen at the federal level by the FTC and Department of Justice.

<sup>5</sup> Comments of the American Cable Association, *Restoring Internet Freedom*, Notice of Proposed Rulemaking, WC Docket No. 17-108, at v (July 17, 2017) (*ACA RIF Comments*).

<sup>6</sup> 15 U.S.C. § 45.

<sup>7</sup> “Broadband Connectivity Competition Report,” FTC Staff Report (June 2007) (FTC Broadband Report).

environment.”<sup>8</sup> ACA believes the staff’s admonition was sound, and there is even greater reason to stick to this course today. As the Federal Communications Commission (FCC) found in the *Restoring Internet Freedom Order*, “[A]nalysis of broadband deployment data, coupled with an understanding of ISPs’ underlying cost structure, indicates fixed broadband Internet access providers frequently face competitive pressures that mitigate their ability to exert market power . . . . [C]ompetition that exists in the broadband market, combined with the protections of consumer protection and antitrust laws against anticompetitive behaviors, will constrain the actions of an ISP that attempts to undermine the openness of the Internet in ways that harm consumers.”<sup>9</sup>

For smaller ISPs, the broadband Internet access markets they serve have become much more competitive since 2007, as numerous fixed providers have either entered or upgraded their network capabilities. Mobile providers too have enhanced the performance of their networks, such that they increasingly are being viewed by consumers in markets served by smaller ISPs as a substitute for fixed service. Further, these trends show every indication of continuing. Every year, smaller ISPs, as well as mobile providers operating in their markets, are investing billions annually to provide higher performance and innovative services while service prices (per megabit) are declining.

Not only is the local broadband market competitive, but smaller ISPs have not demonstrated any incentive or ability to leverage content, service, and application (upstream or edge) providers – nor have edge providers complained about smaller ISPs unreasonably leveraging them. This is not surprising because smaller ISPs are a mere fraction of the size of

---

<sup>8</sup> *Id.* at 9-10.

<sup>9</sup> *Restoring Internet Freedom*, WC Docket No. 17-108, Declaratory Ruling, Report and Order, and Order, 33 FCC Rcd 311, 382, para. 123. (2017) (*Restoring Internet Freedom Order*). See also *id.* at 382-93, paras 124-139 (“[C]ompetition [in fixed Internet access] . . . appears to be widespread.”).

the most popular platform firms or content distribution networks that aggregate traffic from smaller edge providers. In fact, smaller ISPs often cannot even get these firms to enter into arrangements with them to improve service for their customers. As such, if leverage exists, it lies with upstream providers (just as it does in the video programming market).

It also is equally, if not more, important to understand that the entire Internet ecosystem is vast; that ISPs play one, albeit key, role in that ecosystem; and that the ecosystem has evolved tremendously in the past decade and continues to evolve. As a result, new markets have developed and others have collapsed or become inconsequential, market boundaries have shifted, and market relationships are more complex. In such an environment, the FTC plays a vital role, but any action must be steeped in empirical evidence to identify markets and to find real market failure. Just as the FTC staff advised in 2007, policy makers should “carefully consider the potentially adverse and unintended effects” of their actions before intervening.<sup>10</sup>

ACA urges the FTC in its hearings to explore the entire Internet expanse and the smaller ISPs relatively limited presence in that universe. Our comments herein, however, will be more focused on the local broadband connectivity market – downstream service to consumers and upstream interconnection with content, service, and applications providers – and most especially on that market in terms of the role played by smaller ISPs.

### **The Role of Smaller ISPs in Providing Broadband Connectivity to End Users and Edge Providers**

ISPs play an essential role in the expansive and ever-evolving Internet ecosystem. ISPs enable consumers and business users to access the broader Internet by connecting them to a national fiber network of regional transit and national backbone providers; Content Distribution Networks (CDNs) that then connect with content, services, and applications providers; and often

---

<sup>10</sup> FTC Broadband Report at 11.

directly with larger content, services, and applications providers.<sup>11</sup> ISPs range in size from the largest, which provide coverage for millions of homes, to smaller providers, which may serve as few as a hundred residents.

Most of ACA's smaller ISP members (including cable operators, incumbent rural telephone providers, and municipal operators) provide service in smaller communities and rural areas, and have on average 8,000 subscribers – with a majority having fewer than 1,000 subscribers. In most instances, consumers in smaller communities have a choice of two wireline providers (an incumbent telephone providers and a cable operator) for broadband service, as well as mobile providers, and often a fixed wireless and satellite provider. Sjoberg's Inc. is representative of a smaller cable operator. From a declaration submitted in the *Restoring Internet Freedom* proceeding, it explained that it operates in rural Northwest Minnesota (density of 20 homes per mile) and serves 6,800 broadband subscribers.<sup>12</sup> It competes with fixed broadband providers, including a rural telephone company and fixed wireless company. Three mobile broadband providers also serve its territory. It first offered broadband access service in 1997, and today it operates a modern DOCSIS 3.0 network, with plans to upgrade it.<sup>13</sup> Sjoberg charges \$50 per month for a 30/3 Mbps broadband service (with a 450 GB/month limit) and \$90 per month for a 55/6 Mbps service (with a 650 GB/month limit), which are below the FCC's Urban Rate benchmark.<sup>14</sup> However, because Sjoberg is 330 miles from Minneapolis, which is

---

<sup>11</sup> Content, services, and applications providers can connect to ISPs in a variety of ways. The largest providers may have their own transport networks and directly connect to ISPs. Other providers use CDNs, which aggregate traffic from many providers to facilitate interconnection (often direct) and the exchange of traffic with ISPs. And, many providers exchange traffic over the public Internet through local ISPs and transit providers.

<sup>12</sup> See *ACA RIF Comments* at Exhibit D.

<sup>13</sup> *Id.*

<sup>14</sup> These rates, terms, and conditions are for broadband bundled with cable service. The FCC's most recent Urban Rate Survey indicated the "benchmark" price for a 25/3 Mbps service with 250 GB of data/month is \$94.01 and is \$106.52 for a 50/5 Mbps service with unlimited data. See

the nearest point at which it exchanges Internet traffic, it pays \$13 per each Mbps of transport capacity. It has not yet been able to enter into a “caching” agreement with Netflix to lower the cost of transport.<sup>15</sup>

A handful of ACA ISPs operate as overbuilders in urban areas. Overbuilders compete against much larger incumbent cable operators and telephone providers – and even another overbuilder – to provide wireline broadband service. These overbuilders also generally compete with the four national mobile providers. These overbuilders range in size, with smaller providers serving a few thousand subscribers to the largest having upwards of 1 million subscribers spread over numerous local markets. Because they are the “third” wireline provider in a business where economies of scale count, overbuilders face substantial challenges to be viable and must compete aggressively, including by not only providing services on par or better than their competitors, but with superior customer service and innovative product offerings.

To provide broadband Internet access service (BIAS) that meets burgeoning consumer demands, ISPs invest substantial amounts of capital annually to maintain and upgrade to higher performance networks, as well as, in many instances, to expand into new areas. The level of these investments are based upon many factors, including competitive conditions, access to capital, and the regulatory climate, all of which must enable the provider to earn the necessary financial return. While smaller ISPs are cognizant of these factors, they also invest because it makes good business sense in the communities in which they live and work. The record is clear that these investments, which for the smaller ISP sector amount to over \$1 billion annually,<sup>16</sup>

---

*Wireline Competition Bureau Announces Results of 2018 Urban Rate Survey for Fixed Voice and Broadband Service, et al.*, WC Docket No. 10-90, Public Notice, 32 FCC Rcd 9339 (2017).

<sup>15</sup> See *ACA RIF Comments* at Exhibit D.

<sup>16</sup> The amount of annual investment by smaller ISPs is derived from their public statements and from reports on public companies’ financial filings. See, e.g., “Mediacom Communications Reports Combined Results for Fourth Quarter and Full Year 2017,” BusinessWire (Feb. 22, 2018), available at <https://www.businesswire.com/news/home/20180222005733/en/Mediacom->

continue to be made, and that consumers are continuously being upgraded to more robust broadband service while prices (per megabit) continue to decline.

### ***Smaller ISP Upstream (Interconnection and Traffic Exchange) Relationships and Practices***

The Internet is a network of networks, each independently managed yet interconnected. End users connect to a local ISP, and then the ISP connects to the broader Internet in a number of ways, including through an Internet Exchange Point (IEP). An ISP may reach an IEP directly from its own network or by exchanging traffic with a third-party transit provider who carries the traffic to and from an IEP. An ISP also can exchange traffic with a content provider or a CDN, including at an IEP where the content provider or CDN has collocated facilities or, if there is sufficient traffic, by connecting directly at the ISP's local facilities. For instance, a content provider, like Netflix or Amazon, which has an enormous amount of traffic, has an incentive to install a cache (server) to store video content at a local ISP's facilities so that its customers can readily access the most in-demand content.

Whether an ISP pays for exchanging traffic depends on the amount and direction of traffic and the extent to which the transit provider's facilities are used. Larger ISPs, which send

---

[Communications-Reports-Combined-Results-Fourth-Quarter](#); "Cable capex still peaking with major network investments," FierceVideo (Mar. 7, 2018) available at <https://www.fiercevideo.com/cable/cable-capex-still-peaking-major-network-investments>; see also: "Connecting Hometown America," at 4, n.4; *ACA Connections*, "ACA Members Impacting America" available at [www.americancable.org](http://www.americancable.org), which every two weeks reviews recent investments and service announcements by ACA members; Written Statement of Matthew M. Polka, President and CEO, American Cable Association, Before the House Energy and Commerce Committee, Subcommittee on Communications and Technology, "Closing the Digital Divide: Broadband Infrastructure Solutions," at 1, January 30, 2018 available at <https://docs.house.gov/meetings/IF/IF16/20180130/106810/HHRG-115-IF16-Wstate-PolkaM-20180130-U5052.pdf>; PR Newswire, WOW! 1 Gig Internet Speeds Now Available to More Than 95 Percent of Customers, Mar. 6, 2018, <https://www.prnewswire.com/news-releases/wow-1-gig-internet-speeds-now-available-to-more-than-95-percent-of-customers-300608795.html>; Cable One, GigaOne: The Next Generation of Speed, <https://www.cableone.net/gigaone>; Taylor Soper, GeekWire, "WAVE Broadband Launches Residential Gigabit Internet Service in Washington, Oregon, California, Nov. 16, 2017, <https://www.geekwire.com/2017/wave-broadband-launches-residential-gigabit-internet-service-washington-oregon-california/>.

large amounts of traffic upstream and receive similar, or even greater, amounts downstream and have their own facilities, generally have settlement-free peering arrangements, although in some instances they may even charge for interconnection. Even some mid-size ISPs have some regional transport links and enough customers to avoid, or at least reduce, transit payments. By contrast, ISPs with smaller customer bases – and a disproportionate amount of downstream traffic and fewer network facilities – use a transit provider and almost always pay to exchange traffic.<sup>17</sup> ACA performed a survey of its members several years ago and found that smaller ISPs’ interconnection and traffic exchange arrangements are generally characterized by:

***Reduced Network Scale***

Network scale refers to the size and expanse of an ISP’s network. Larger ISPs (e.g., Comcast, Verizon, and AT&T) have very large amounts of traffic and access to substantial amounts of capital that it is economical for them to own and operate backbone networks. By contrast, smaller ISPs, which have neither of these attributes, have to purchase access from third-party transit providers to reach an IEP and may have to pay for peering.

***Smaller Subscriber Bases***

An ISP’s subscriber base is the number of subscribers (“eyeballs”) it has. Larger subscriber bases generate more traffic and allow providers to distribute their costs over more customers, which in turn makes it more economical to build their own facilities. In addition, larger ISPs control more “eyeballs,” which is attractive to upstream suppliers,

---

<sup>17</sup> Transit providers have a variety of restrictions before entering into settlement-free peering agreements, which smaller ISPs cannot meet. Many transit providers require that the ISP have networks in multiple time zones within the US, something no smaller ISP could possess. Additionally, transit providers require equal distribution of the upload/download traffic across the networks, something that a smaller ISP would not generate, and they typically require a smaller ISP to upgrade its infrastructure, which imposes a real financial burden on the smaller ISP.



such as content distributors and transit providers, and enables these parties to engage in direct negotiation for more efficient ways to exchange traffic, such as by having the upstream provider connect directly and collocate facilities, including a caching server, at an ISP's point of aggregation (e.g., a central office or headend). For instance, from Netflix's perspective, Comcast with more than 22 million subscribers is a much more desirable partner than an ISP with only 1,000 subscribers.

### ***More Remote Operating Locations***

Where an ISP operates affects the number and type of suppliers it can access. ISPs operating in urban areas have more transit options and can readily access multiple content distribution networks. ISPs in rural markets have more limited options. In addition, in markets with more options, prices for transit are lower. Smaller ISPs typically operate in these markets with fewer choices which results in higher transport<sup>18</sup> and transit fees, raising overall costs to serve each subscriber relative to an ISP operating in an urban environment. ACA members are typically small ISPs in predominately rural areas.

### ***Less Dense Operating Areas***

Higher population density results in greater amounts of traffic in a concentrated area, which can enhance the business case to support investment in and deployment of higher bandwidth facilities. In other words, building fiber facilities to interconnect with IEPs is expensive and those costs can be recovered in a fiscally responsible manner if there are many more customers in close proximity. Smaller providers operating in more

---

<sup>18</sup> Transport fees are fixed fees that ISPs pay to third-party network providers for connection to the broader Internet

rural areas thus face real challenges in justifying the construction of fiber facilities required to carry large amounts of Internet traffic (*i.e.*, video content).

### ***Limited Access to Capital***

ISPs need access to capital at reasonable rates, terms, and conditions to invest in network upgrades and expansion – as well as to build facilities to directly connect at IEPs. Larger ISPs are able to finance these investments out of operating cash flow generated by their revenues. In addition, large, mostly public, ISPs have access to corporate debt markets. By contrast, smaller ISPs have a difficult time accessing capital because they have lower revenues given their smaller subscriber bases, and therefore lower operating cash flows. In addition, smaller ISPs have limited access to bank loans. For instance, many of the infrastructure investments of smaller ISPs are often below lending thresholds set by banks, which be \$10 million or greater. Without the ability to meet this lending threshold, smaller ISPs are forced to limit their investments to what can be financed out of cash flows. In sum, these constraints on capital limit smaller ISPs from building their own backbone or transport networks, which would lower the ISPs' operating costs.

ACA's survey reflected the consequences of these many factors:

- 72% of respondents to the survey stated that they pay for transit, and 86% do not engage in settlement-free peering.
- 70% of respondents reported having no direct relationship with a content provider.
- 85% of respondents stated they had no interconnection agreements with CDNs in place.

Given these characteristics of smaller ISPs, they are “price takers” in negotiations with transit providers. Smaller ISPs are in no position to dictate the terms of any of these

agreements, as the transit providers view the ISP as merely a customer, not an equal. Smaller ISPs thus have no real chance of attaining what larger ISPs have – settlement-free peering.

As discussed above, ISPs also can exchange traffic directly with content providers and CDNs, but, just as with transit providers, smaller ISPs have little or no leverage in this relationship. The over-the-top, on-demand content provider Netflix requires an ISP to have greater peak daily Netflix traffic than smaller ISPs normally generate. Netflix also requires a dedicated connection between the ISP and Netflix as well as dedicated data center space, requirements smaller ISPs cannot justify financially. CDNs, like Akamai, require ISPs to make additional networking ports available, which raises the costs to the smaller ISP. As a result of having little bargaining power, smaller ISPs must access content providers and CDNs at IEPs. This means they cannot save transit and transport costs and cannot give their customers a better experience in accessing content.

In sum, smaller ISPs are more likely to be leveraged by upstream suppliers than apply leverage. This is not dissimilar from what occurs when smaller ISPs that offer video deal with video programming providers. Smaller ISPs do not have their own facilities to connect to IEPs, lack the “eyeballs” to attract content providers, and most certainly are unable to impose tolls on upstream providers. The result is that small ISPs exercise no market power over upstream suppliers and have no incentive or ability to restrict access to their subscriber bases.

### ***Smaller ISP Provision of Broadband Internet Access Service to Customers***

As discussed above, smaller overbuilder ISPs, because they operate as the third wireline provider, have every incentive to provide consumers with innovative higher-performance broadband service at reasonable prices. First, they are relatively new entrants, competing most often with large incumbent cable and telephone providers, and need to attract customers by providing better service at better rates. Second, the economics of the business – with very large up-front network construction costs – dictates that they need to rapidly achieve

scale by signing up subscribers to provide a payback within a reasonable timeframe.<sup>19</sup> Third, given the high cost of customer acquisition, overbuilders have the incentive to continue to provide good service at reasonable rates to current subscribers. This fact is borne out by the high consumer rankings that overbuilder ISPs receive. For instance, RCN, which operates in the Northeast and Chicago, and Grande Communications, which operates in Texas, frequently top consumer rankings of the best ISPs.<sup>20</sup> In addition, PC Mag has praised companies like Hotwire<sup>21</sup> and Allo<sup>22</sup> for delivering some of the highest broadband speeds in the nation.<sup>23</sup>

As for smaller ISPs in rural areas, they too have incentives to provide broadband service at reasonable rates and adequate performance levels. First, smaller ISPs generally face another wireline provider and increasingly compete with fixed and mobile wireless broadband providers and, in more remote areas, even with satellite providers.<sup>24</sup> Second, most rural ISPs are based in their communities, and it simply makes good business sense to treat their “neighbors” well.<sup>25</sup> Third, even apart from these market incentives, FCC mandates constrain the behavior of smaller ISPs in several ways depending upon the area in which they operate. In

---

<sup>19</sup> For a more complete explanation of the economics of fixed ISPs, see *Restoring Internet Freedom Order* at 383-84, para. 126 (“First, even two competing wireline ISPs place competitive constraints on each other. ISPs’ substantial sunk costs imply that competition between even two ISPs is likely to be relatively strong . . . [A] wireline ISP has strong incentives, even when facing a single competitor, to capture customers or induce greater use of its network, so long as its current prices materially exceed the marginal cost of such changes.”).

<sup>20</sup> See, e.g., “Readers’ Choice Awards 2017: Internet Service Providers,” PCMag (May 25, 2017), available at <https://www.pcmag.com/article/353825/readers-choice-awards-2017-internet-service-providers>.

<sup>21</sup> Founded in 2000, Hotwire Communications is a fiber-optic communications services provider that operates in states including Pennsylvania, New York, New Jersey, Ohio, Florida, and Georgia. See Hotwire Communications, About, <http://hotwirecommunications.com/about/>.

<sup>22</sup> Based in Nebraska, ALLO “provides communications services to over seven cities with more than 335,000 people.” See ALLO, <https://www.allocommunications.com/about/>.

<sup>23</sup> See Eric Griffith, PC Mag, “The Fastest ISPs of 2018”, June 23, 2018, <https://www.pcmag.com/article/361765/the-fastest-isps-of-2018>.

<sup>24</sup> See *Restoring Internet Freedom Order* at 382, para. 123.

<sup>25</sup> See, e.g., *ACA RIF Comments* at ii.

areas served by larger incumbent telephone providers (so-called price cap carriers), a smaller ISP that does not want to have the FCC declare its service territory “unserved” – thus enabling the incumbent or some other provider to receive support from the FCC’s Connect America Fund program – must provide broadband service at prices below the Urban Rate benchmark and at a performance level above the FCC’s minimum.<sup>26</sup> In areas where smaller incumbent telephone providers (so-called rate-of-return carriers) receive FCC support, a competing ISP needs to be cognizant that the incumbent must comply with the broadband price and performance level set by the FCC. And, even where a smaller ISP is the sole provider in an area, it most often receives FCC support and therefore has its prices constrained and minimum performance levels set by FCC mandates.<sup>27</sup>

Finally, data filed in the FCC’s *Restoring Internet Freedom* proceeding lends support to ACA’s assertions that ISPs, including those operating in rural areas, are pricing reasonably while increasing the performance of their networks.<sup>28</sup>

- Overall, from 2011-2017, the Bureau of Labor Statistics Internet consumer price index (CPI) grew by 1.4% while CPI for all items grew by 8.7%.
- From 2011-2017, based on SNL Kagan and other third-party data, prices for broadband Internet access service declined in every speed tier, from a 14% reduction for the below 10 Mbps tier to a 57% reduction for tiers above 100 Mbps.

---

<sup>26</sup> See e.g., *Connect America Fund, et al.*, WC Docket No. 10-90, *et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17693, 17695, 17705-06, paras. 81, 86, 109 (2011), *aff’d sub nom.*, *In re FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014); *Connect America Fund, et al.*, WC Docket No. 10-90, *et al.*, Report and Order, 29 FCC Rcd 15644, 15649, 15671, paras. 15, 73 (2014); *Connect America Fund*, WC Docket No. 10-90, Order, DA 18-710, para. 3 (July 6, 2018).

<sup>27</sup> A smaller ISP that is the sole wireline provider in an area usually competes with mobile and satellite providers. In addition, the FCC will soon provide additional support for 4G service in areas unserved by incumbent mobile providers. See Federal Communications Commission, Mobility Fund Phase II, available at <https://www.fcc.gov/mobility-fund-phase-ii-mf-ii>.

<sup>28</sup> See Comments of the Fiber Broadband Association, *Restoring Internet Freedom*, Notice of Proposed Rulemaking, WC Docket No. 17-108 (July 17, 2018).

- From 2011-2017, based on a sampling of publicly available data from AT&T, Charter, Comcast, Cox, and Suddenlink, prices for broadband Internet access service in rural areas experienced similar declines to urban markets.
- As for broadband supply, in 2011, 75% of sampled offerings were below 25 Mbps, while in 2017, approximately 80% were above 25 Mbps.

### **Smaller ISPs and Government Regulation of Broadband Internet Access Service**

ACA's smaller ISP members have been and remain fully committed to ensuring consumers have access to a free and open Internet while preserving their ability, as well as that of edge providers, to innovate and invest. ACA members have been following the four policy principles set forth in the FCC's 2005 *Internet Policy Statement*,<sup>29</sup> as well as the FCC's 2010 codification of the transparency principle,<sup>30</sup> and will continue to do so. Most recently, they issued their disclosures to comply with the transparency rule updated in the recent *Restoring Internet Freedom Order*.<sup>31</sup> They do not, and have committed not to, block, throttle, or censor Internet traffic.<sup>32</sup> They are transparent with their customers about the commercial terms, network practices, and network performance associated with their residential broadband Internet access service. They do so not only because the policy principles strike an appropriate balance between service provider and consumer needs, but because they make good business sense and are broadly accepted across the Internet ecosystem. Moreover, as discussed above,

---

<sup>29</sup> *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, et al.*, GN Docket No. 00-185, CC Docket No. 02-33, *et al.*, Policy Statement, 20 FCC Rcd 14986, 14988, para. 4 (2005) (*Internet Policy Statement*) (stating that consumers are entitled to (1) access lawful Internet content of their choice; (2) run applications and use services of their choice; (3) connect their choice of legal devices that do not harm the network; and (4) competition among network providers, applications and service providers, and content providers).

<sup>30</sup> *Preserving the Open Internet*, GN Docket No. 09-191, WC Docket No. 07-52, Report and Order, 25 FCC Rcd 17905 (2010).

<sup>31</sup> *Restoring Internet Freedom Order* at 439, para. 218.

<sup>32</sup> Examples of the smaller provider commitments can be found at the FCC's website, "ISP Transparency Disclosures Portal," available at <https://www.fcc.gov/isp-disclosures>, and by reviewing Transparency Disclosures on the providers' individual websites. See also *Restoring Internet Freedom Order* at 378-79, para. 117.

smaller ISPs lack the leverage to harm Internet edge providers and lack the incentive to harm their own customers. They also see no benefit to engaging in such practices. As such, smaller ISPs do not act as “gatekeepers” to their customers’ freedom to access what they choose on the Internet or to the ability of Internet edge providers to freely reach those broadband customers. In addition, there is no evidence that the market will fail to deter ISPs from unreasonably denying service to or discriminating against customers or edge providers.

On the other side of the ledger, the FCC’s 2015 *Open Internet Order*’s<sup>33</sup> regulation of smaller ISPs based on the unproven assumption that ISPs would block, throttle, engage in paid prioritization arrangements or cause other harms, came at a significant cost. For over a decade prior to the 2015 *Open Internet Order*, instead of reclassifying broadband Internet access service as a telecommunications service subject to common carrier regulation, the FCC had created a highly successful “light-touch” regulatory environment for ISPs by classifying them as providers of “information service” under Title I of the Communications Act. Smaller ISPs thrived in this environment. They invested significantly in maintaining robust high-performance networks. Their investments brought competition to incumbent broadband providers in urban areas and enhanced services in rural regions. Unfortunately, all of their efforts to advance broadband deployment and adoption through investment and innovation were put at risk by the FCC’s abrupt decision in 2015 to dramatically change course.

Following Title II reclassification in the 2015 *Open Internet Order*, ACA members spent significant resources and incurred unexpected legal and consulting costs in trying to understand the impact of the decision and what it meant for their existing and planned services, and in

---

<sup>33</sup> *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd 5601 (2015) (*Open Internet Order*).

taking steps to minimize the risk of enforcement actions and consumer complaints.<sup>34</sup> As a result of their regulatory compliance reviews, for example, smaller ISPs directed counsel to revise consumer-facing notices and policies and marketing programs.<sup>35</sup> The threat of *ex post* rate regulation hung particularly heavy over their heads, requiring smaller ISPs, who are especially risk-averse, to run all current and planned offerings against the “just” and “reasonable” and unreasonably discriminatory standards of Sections 201 and 202 of the Communications Act,<sup>36</sup> increasing their legal costs and causing them to set aside increased litigation reserves. As a result, members had to divert their scarce resources to backward-looking regulatory compliance and away from forward-looking investments and service innovations. In addition to increased regulatory compliance costs, members experienced increased costs for financing their businesses and network upgrades and expansions, and increases in their pole attachment rates, all directly attributable to Title II reclassification.

Title II reclassification decreased ACA members’ ability and incentive to develop and deploy innovative new features and services, and has negatively impacted their existing business models.<sup>37</sup> It harmed their ability to invest in their services and networks. Smaller ISPs who were using usage-based billing practices changed or abandoned their use, while others held off or delayed moving to usage-based billing and data cap allowances. Yet others held off or delayed launching “individualized” arrangements with edge providers that would improve their end user customers’ Internet experience and lowered their costs. All of these actions were taken as a result of regulatory uncertainty under Title II and the Internet General Conduct

---

<sup>34</sup> For documentation of these problems and ACA member reaction, see *ACA RIF Comments* at Exhibits A-E (Declarations from ACA Members).

<sup>35</sup> See *id.*

<sup>36</sup> 47 U.S.C. §§ 201-202.

<sup>37</sup> See *ACA RIF Comments* at Exhibits A-E.



standard. Although data caps and overage charges help educate and send useful pricing signals to customers who utilize a disproportionate amount of bandwidth each month, and help generate revenues that can be plowed back into network improvements, smaller ISPs either dropped or delayed their use. They did so even when data caps and overage charges helped them defray the costs of bandwidth transport to remote systems, and despite knowing their use had not been prohibited by the FCC, because of the potential for FCC enforcement. Smaller ISPs, fearful of the prospect of rate regulation, also found themselves reluctant to roll out other new features and services, including dedicated access services to improve voice offerings and use of caching arrangements that would have benefitted the ISPs by lowering their transport costs.

ACA members cut back and/or delayed network upgrade and expansion plans, new equipment purchases, acquiring other broadband properties, and hiring new staff as a result of the Title II decision.<sup>38</sup> The key driver cited in these decisions<sup>38</sup> was the potential threat of after-the-fact rate regulation that would impair their ability to recoup their investment and repay loans. Some curtailed investments to expand into rural, unserved areas, forgoing economic opportunities and leaving those residents without the benefit of access to broadband Internet service. Others decreased their hiring and the purchase of additional systems as a result of the uncertainty created by the Title II reclassification.

The FCC's *Restoring Internet Freedom Order* remedied these problems. By revoking Title II status and returning to an information service classification – and by taking common carrier rate regulation completely off the table – the decision enabled smaller ISPs to move forward with plans for major system upgrades and rebuilds as well as deployment of new features and services. Smaller ISPs are now able to return their focus and resources to

---

<sup>38</sup> See *id.*

expanding broadband Internet service and networks, addressing broadband adoption and helping to close the digital divide.

ACA continues to support the FCC's Transparency Rule. Disclosure requirements are among the least intrusive, but very productive, regulatory measures. Consumers expect and deserve to receive accurate information about broadband Internet access service at the point of sale and on an on-going basis as subscribers to the service. So too, Internet edge providers benefit from understanding how broadband ISPs are managing their networks so that they can take network management practices into account when developing their content, applications, services, and devices. Finally, ACA submits that all providers in the Internet eco-system should disclose to consumers critical aspects of their service terms and conditions. Not only would this benefit consumers, but it would create a level playing field among providers that either compete or provide inputs to other providers.

### **Smaller ISPs and Government Regulation of Privacy and Data Security**

In 2016, when the FCC sought to adopt privacy and data security regulations for ISPs pursuant to its newfound authority derived from the *Open Internet Order*, ACA joined with other ISPs and their trade associations to propose a privacy and data security regulatory framework that would be based on the “unfair or deceptive acts or practices” standard of Section 5 of the FTC Act, under which the FTC treats all providers in the Internet eco-system similarly.<sup>39</sup> Until the *Open Internet Order*, BIAS providers operated under the FTC's framework and complied without incident. ISPs explained their proposal would not only establish the appropriate, technology-neutral standard, but also would avoid customer confusion that would be inevitable under any entity-based regulation<sup>40</sup> and would lead to greater innovation and competition. ACA

---

<sup>39</sup> See Letter from Matthew M. Polka, President & CEO, American Cable Association, *et al.*, to Tom Wheeler, Chairman, Federal Communications Commission (Mar. 1, 2016).

<sup>40</sup> The FTC too has agreed that a privacy framework should be technology neutral. See, e.g., “Protecting Consumer Privacy in an Era of Rapid Change,” FTC Report (Mar. 2012); “Joint

continues to support such an approach and is heartened that jurisdiction over ISP privacy and data security activities has returned to the FTC.

ACA believes that a sound privacy and data security framework should be consistent with the following four principles: (1) transparency; (2) respect for context and consumer choice; (3) data security; and (4) data breach notification.

- **Transparency.** ISPs and all other providers, including edge providers, in the Internet eco-system (Internet Providers) should provide notice, which is neither deceptive nor unfair, describing the customer data that they collect, how they will use that data, and whether and for what purposes they may share that data with third parties.
- **Respect for Context and Consumer Choice.** Internet Providers may use or disclose customer data as is consistent with the context in which the customer provides, or the provider obtains, the information, provided that the provider's actions are not unfair or deceptive. For example, Internet Providers should give consumers easy-to-understand choices for non-contextual uses and disclosures of their data, where the failure to provide choice would be deceptive or unfair. Internet Providers also should consider the sensitivity of the data and the context in which they were collected when determining the appropriate choice mechanism. On the other hand, the use or disclosure of customer data for the following commonly accepted data practices would not warrant a "choice mechanism" (customer consent), either because customer consent can be inferred or because public policy considerations make choice unnecessary: product and service fulfillment, fraud prevention, compliance with law, responses to government requests, network management, first-party marketing, and affiliate sharing where the affiliate relationship is reasonably clear to consumers.
- **Data Security.** Internet Providers should establish, implement, and maintain a customer data security program that is neither unfair nor deceptive and includes reasonable physical, technical, and administrative security safeguards to protect customer data from unauthorized access, use, and disclosure. Internet Providers' data security programs should provide reasonable protections in light of the nature and scope of the activities of the company, the sensitivity of the data, and the size and complexity of the relevant data operations of the company.
- **Data Breach Notifications.** Internet Providers should notify customers whose data has been breached when failure to notify would be unfair or deceptive. Given that breach investigations frequently are ongoing at the time providers offer notice to customers, a notice that turns out to be incomplete or inaccurate is not deceptive, as long as the provider corrects any material inaccuracies within a reasonable period of time of

---

Statement of Acting FTC Chairman Maureen K. Ohlhausen and FCC Chairman Ajit Pai on Protecting Americans' Online Privacy," Federal Trade Commission, Press Release (Mar. 1, 2017), available at <https://www.ftc.gov/news-events/press-releases/2017/03/joint-statement-acting-ftc-chairman-maureen-k-ohlhausen-fcc>.

discovering them. Internet Providers should have flexibility to determine how and when to provide such notice.

ACA believes this framework will provide ISPs with the ability to update their practices in ways that meet the evolving privacy and data security needs of their customers and ensure they can provide their customers new products and customized services. By contrast, rules dictating specific methods quickly become out of date and out of step with constantly changing technology, hampering innovation and harming consumers.

ACA's framework also would enhance the ability of smaller ISPs to comply without incurring undue cost or burdens. First, the framework is consistent with the requirements of the cable privacy statute (Section 551 of the Communications Act) and the customer proprietary network information statute (Section 222 of the Communications Act), which many ISPs are required to comply with if they also offer cable or telephone service.<sup>41</sup> Second, ACA's framework aligns with consumer expectations by respecting the context of customer-carrier interactions, while providing ISPs with flexibility to offer new and innovative services to their customers, increasing consumer choice and competition. Third, the proposed data security rule maintains a robust general security standard, requiring physical, technical, and administrative security safeguards, while including the size of the company as a factor in determining whether particular safeguards are reasonable. As such, in the event that small providers grow into medium or large providers, the rules naturally will require more sophisticated processes commensurate with their larger operations. Finally, the proposed data breach notification rule provides flexible deadlines that will not overburden small providers, and a safety valve for good faith disclosures so that small providers can avoid counterproductive strict liability enforcement actions associated with inflexible and overly prescriptive regimes.

---

<sup>41</sup> See 47 U.S.C. §§ 222, 551.

In sum, an “unfair and deceptive” approach for all Internet Providers would meet customers’ privacy needs and ensure they have access to innovative products and services. ACA believes this is sound approach that would be consistent with FTC historical oversight. Finally, because the Internet is inherently national in scope with consumers accessing content, services, and applications regardless of their locations or providers’ locations, we should strive to enact a single, national privacy and data security framework – just as the FCC has done in its *Restoring Internet Freedom Order*. Making providers that operate across state lines subject to individual state, or even local, mandates will add enormous amounts of friction, especially for smaller ISPs, with no demonstrable benefit.

### **Impact of High and Increasing Video Programming Fees on Broadband Deployment**

As discussed above, ACA members have been aggressively deploying high-performance broadband networks, especially in rural areas. These networks enable not only the provision of broadband service, but other services, most notably multichannel video services. The vast majority of ACA members offer double-play bundles of broadband and video services. As one CEO explained, “[i]f you’re going to pull customers to your broadband and other services, you’ve got to lead with [multichannel] video.”<sup>42</sup>

Despite the growth of online video in recent years, traditional multichannel video service remains a key product for most households – and an integral part of the double-play package for providers. While broadband offers higher margins than multichannel video,<sup>43</sup> few service providers see a viable business model in offering only broadband today. The economics of

---

<sup>42</sup> Brian Fung, “Here’s the Single Biggest Thing Holding Google Fiber Back,” *The Washington Post*, (Oct. 6, 2014), available at [www.washingtonpost.com/blogs/the-switch/wp/2014/10/06/video-is-holding-google-fiber-back/](http://www.washingtonpost.com/blogs/the-switch/wp/2014/10/06/video-is-holding-google-fiber-back/).

<sup>43</sup> SNL Kagan estimates that for some of the largest MVPDs, broadband is a 60% gross margin product versus 18% for video. Tony Lenoir, “Q2 Steady, but Red Flags in Future Outlook for Video Margins,” *SNL Kagan* (Aug. 8, 2014), available at [www.snk.com/interactivex/article.aspx?id=28833656&KPLT=6](http://www.snk.com/interactivex/article.aspx?id=28833656&KPLT=6).

multichannel video service are therefore fundamental to service providers' decisions to invest in new broadband deployments.

In recent years, the economics of multichannel video service have become increasingly challenging. Programming fees, charged on a per-subscriber basis by multichannel video networks and broadcast TV stations, have generally risen much more rapidly than prices for multichannel video. From 2006-2014, total programming fees for the U.S. multichannel video industry more than doubled.<sup>44</sup> On an annual basis, per subscriber programming fees have increased an average of 9.4% a year between 2010 and 2015.<sup>45</sup>

For smaller service providers, the growth in programming fees has been even greater. Carriage fees for a typical member of the National Cable Television Cooperative, a not-for-profit that acts as a buying group for smaller-scale multichannel video providers to negotiate lower rates from nationally-distributed video programming vendors, increased by 10.6% a year between 2010 and 2015<sup>46</sup>—and this excludes two categories of programming that have risen faster than the market, regional sports networks (like New England Sports Network) and local broadcast stations (affiliates of ABC, NBC, CBS and FOX). Some American Cable Association members have seen annual programming fee growth of 15% or greater.<sup>47</sup>

Moving forward, ACA expects this trend of steep programming fee increases to continue. One of the biggest drivers of rising programming fees is broadcast television retransmission consent fees. These fees, charged by local broadcast stations to multichannel video

---

<sup>44</sup> Robin Flynn, "The Larger Picture of Multichannel Video Revenues, Costs," *SNL Kagan* (Apr. 28, 2014), available at <https://www.snl.com/InteractiveX/article.aspx?Id=27923399> (*Flynn Article*).

<sup>45</sup> *Id.*

<sup>46</sup> This does not include retransmission consent fees or regional sports network fees (aggregated information given by the National Cable Television Cooperative in February 2015).

<sup>47</sup> These increases include retransmission consent fees and regional sports network fees and are based on interviews conducted with ACA members in January 2015.

programming distributors (MVPDs) for retransmitting the broadcast signals, have been rising rapidly as broadcast ratings have fallen and advertising revenues have flat-lined. Industry analyst Michael Nathanson opined that broadcasters will not approach a limit on how much they can receive in retransmission consent fees for many years.<sup>48</sup> Leslie Moonves, CEO of CBS Corp., has set a target of \$2 billion in annual revenue from retransmission consent fees by 2020, up from \$500 million in 2013—which implies an average annual increase of 21%.<sup>49</sup> Regional sports network fees are also expected to rise rapidly as well.

As programming fees have continued to rise, multichannel video revenues have lagged. According to analysis by SNL Kagan, U.S. multichannel video per subscriber programming costs grew at an annual rate of 9.4% between 2010 and 2015 while multichannel video average revenue per subscriber only grew at an annual growth rate of 4.1% during the same period.<sup>50</sup>

Looking forward, small video service providers will be increasingly constrained in their ability to pass programming fee cost increases along to customers. Price hikes put these providers at risk of losing subscribers to direct competition and online video services. The most price-sensitive multichannel video subscribers will disconnect their service in pursuit of lower-price options. Traditional video subscribership is expected to decline by approximately 3-4% in 2018.<sup>51</sup> This decline in multichannel video penetration over the past few years suggests the danger for smaller service providers of continually trying to pass along programming fee increases onto customers. If these providers are not able to pass on the programming fee

---

<sup>48</sup> Harry A. Jessell, “Nathanson: No Limit In Sight for Retrans \$,” TVNewsCheck (Mar. 9, 2015), available at <http://www.tvnewscheck.com/article/83547/nathanson-no-limit-in-sight-for-retrans->.

<sup>49</sup> Keach Hagey, “CBS Plays Hardball as Affiliate Fees Pile Up,” *The Wall Street Journal* (Aug. 20, 2014), available at <http://www.wsj.com/articles/cbs-plays-hardball-as-affiliate-fees-pile-up-1408578087>.

<sup>50</sup> *Flynn Article*.

<sup>51</sup> “Telecom and Pay TV, Previewing 2Q Cable Earnings,” UBS (June 25, 2018).

increases to customers, their margins will continue to be squeezed, reducing free cash flow. This is especially the case for smaller providers, who typically pass along 60% of their video revenues to programmers for programming fees. They therefore must increase their video revenue by 60% of the rate of increase of their programming costs, or their video margins will decline.

If we assume that the current market trends for programming costs and multichannel video revenues continue, video margins for smaller-scale MVPDs will become negative by 2020.<sup>52</sup> In addition, while we expect total market broadband penetration to continue to grow, it will be at a slower pace since the market is becoming increasingly saturated. Thus, while multichannel video will remain a key product for smaller service providers, the decline in the importance of multichannel video products and the slow increase of the higher-margin broadband product would not be enough to offset the impact of higher programming costs. Between 2015 and 2025, EBITDA (earnings before interest, taxes, depreciation and amortization) margin decreases by nearly half, which in turn affects the pace of broadband deployment. ACA's modeling resulted in the following critical conclusions –

The business case for broadband deployment would be expected to decline and eventually become unprofitable in the coming decade. Deployment in rural areas will be most vulnerable due to the high cost of building out new broadband. Overbuilders face similarly challenging economics.

---

<sup>52</sup> This is based on the assumption that 60% of multichannel video average revenue per user is spent on programming fees, that programming fees grow at a rate of 10% per year, and that average multichannel video revenue per user grows 3.5% per year. For a complete description of ACA's modeling, see "High and Increasing Video Programming Fees Threaten Broadband Deployment," American Cable Association, Research Paper (2015).



It may seem sensible for these providers to drop their multichannel video product and focus on providing higher-margin broadband service. But very few providers are willing to take the plunge and move to a broadband-only business model due to the threat of losing subscribers to broadband competitors that offer multichannel video services. Thus, since consumer preferences and behavior changes are still evolving, providers are unlikely to drop their multichannel video services and move toward a broadband-only business model. And, consequently, without regulatory reform to rein in programmers' fees (or new streams of revenues from other services), MVPDs may need to cut back on broadband deployment.

## **Conclusion**

The Internet and broadband markets have evolved significantly since the FTC issued its Broadband Report in 2007. An endless array of providers have entered the Internet eco-system since then, and these markets have the hallmarks of being competitive, or at least being subject to substantial competitive constraints, even in more rural areas. Moreover, from the ISP perspective, there is demonstrable proof that consumers are far better off, with more reliable, higher performance broadband service at declining rates – and these trends show no signs of abating.

ACA's smaller ISPs operate within the complex Internet ecosystem. In rural areas, they provide critical connectivity, as well as consumer choice. In more urban areas, they offer an additional competitive constraint on incumbents. Invariably, they lack any incentive or ability to leverage their customers or upstream edge providers and are at greater risk of being leveraged by upstream providers. Having reasonable regulatory oversight is essential if they are to flourish and provide consumers in their service areas with a superior broadband experience.

ACA appreciates having the opportunity to file these comments and looks forward to working with the FTC as it conducts its hearings on competition and consumer protection issues and examines the evolution, status, and future direction of the Internet ecosystem.

Respectfully submitted,

By: 

Matthew M. Polka  
President and Chief Executive Officer  
American Cable Association  
Seven Parkway Center  
Suite 755  
Pittsburgh, PA 15220  
(412) 922-8300

Thomas Cohen  
J. Bradford Currier  
Kelley Drye & Warren LLP  
3050 K Street, NW  
Washington, DC 20007  
(202) 342-8518  
Counsel to American Cable Association

Ross J. Lieberman  
Senior Vice President of Government Affairs  
American Cable Association  
2415 39th Place, NW  
Washington, DC 20007  
(202) 494-5661

August 20, 2018