

**Before the**  
**FEDERAL COMMUNICATIONS COMMISSION**  
**Washington, D.C. 20554**

In the Matter of )  
)  
Protecting the Privacy of Customers ) WC Docket No. 16-106  
of Broadband and Other )  
Telecommunications Services )

**REPLY COMMENTS OF THE**  
**INTERNATIONAL CENTER FOR LAW & ECONOMICS AND**  
**SCHOLARS OF LAW & ECONOMICS**  
**JULY 6, 2016**

These Comments are submitted by the International Center for Law & Economics on behalf of itself, as well as the following scholars of law & economics (affiliations provided for identification only):

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## Introduction

The NPRM and many of the comments supporting it reflect an ill-considered approach to privacy regulation for ISPs. Getting regulation right is always difficult, but it is all the more so when confronting evolving technology, inconsistent and heterogeneous consumer demand, and intertwined economic effects that operate along multiple dimensions.

[S]ecuring a solution that increases social welfare[] isn't straightforward as a practical matter. From the consumer's side, the solution needs to account for the benefits that consumers receive from content and services and the benefits of targeting ads, as well as the costs they incur from giving up data they would prefer to keep private. Then from the ad platform's side, the solution needs to account for the investments the platform is making in providing content and the risk that consumers will attempt to free ride on those investments without providing any compensation—in the form of attention or data—in return. Finally, the solution must account for the costs incurred by both consumers and

the ad platform including the costs of acquiring information necessary for making efficient decisions.<sup>1</sup>

The NPRM fails adequately to address these issues, to make out an adequate case for the proposed regulation, or to justify treating ISPs differently than other companies that collect and use data.

Perhaps most important, the NPRM also fails to acknowledge or adequately assess the actual market in which the use of consumer data arises: the advertising market. Whether intentionally or not, this NPRM is not primarily about regulating consumer privacy; it is about keeping ISPs out of the advertising business. But in this market, ISPs are upstarts challenging the dominant position of firms like Google and Facebook.

Placing onerous restrictions upon ISPs alone results in either under-regulation of edge providers or over-regulation of ISPs within the advertising market, without any clear justification as to why consumer privacy takes on different qualities for each type of advertising platform. But the proper method of regulating privacy is, in fact, the course that both the FTC and the FCC have historically taken, and which has yielded a stable, evenly administered regime: case-by-case examination of actual privacy harms and a minimalist approach to *ex ante*, proscriptive regulations.

## **Neither the NPRM itself nor the comments supporting it justify differential treatment for ISPs**

Even limited to just the broadband access market — that is, leaving aside the advertising market for the moment — the logic of the NPRM fails on its own terms.

First, the NPRM and several of the comments supporting it reflect an unsubstantiated belief that ISPs present a unique (and uniquely substantial) threat to privacy, necessitating particular (and particularly onerous) regulation by the FCC. Public Knowledge and its co-authors, for example, claim that

BIAS providers are gatekeepers to the Internet. This position is unique to BIAS providers, and carries substantial implications for consumers, as the Commission has previously recognized. While traffic splinters among providers at the edge, all data — sensitive, non-sensitive, and everything in between — must pass through the hands of an ISP....

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<sup>1</sup> David S. Evans, *Mobile Advertising: Economics, Evolution and Policy* (June 1, 2016) at 45, *available at* <http://ssrn.com/abstract=2786123>.

The different ways that broadband providers can exploit the information that consumers must expose as part of receiving service — as well as the certainty that the most sensitive information will flow over the network — justify Congress’ decision to design unique privacy protections for common carriers. As Senator Leahy recently noted in a letter to the Commission, “[t]he patchwork of state privacy laws and Federal Trade Commission enforcement are not adequate protections” for consumers.<sup>2</sup>

These breathless claims are inaccurate, however, and they are insufficient to justify the regulatory treatment the Commission proposes in the NPRM. As Howard Beales and Jeff Eisenach (among many others) have observed, “it is far from obvious which firms or types of firms currently have the most comprehensive view of consumers’ online activities.”<sup>3</sup> Further,

consumers’ access to the Internet is fragmented across multiple channels, meaning that no online service provider is in a position to collect a comprehensive record for any significant proportion of consumers, and there is no qualitative difference between the comprehensiveness of data available, for instance, to ISPs and what can be and is collected by other types of firms, such as firms that provide as search engines, browsers, operating systems and social media platforms, as well as data brokers and large advertising networks. Equally important, technologies and market conditions are constantly evolving. Thus, any attempt to categorize particular providers as uniquely engaged in “comprehensive data collection” about consumers’ online activities would quickly prove outdated.<sup>4</sup>

Advocates of the proposed rules also proffer the misguided argument that there is less — and insufficient — competition in the broadband industry, which restricts consumers’ choices and permits ISPs to abuse consumer data with impunity.<sup>5</sup> As we discuss further below, there is little indication that broadband access is lacking adequate competition, and strong indications that both current access and future development will ensure sufficient competi-

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<sup>2</sup> Comments of Public Knowledge, The Benton Foundation, Consumer Federation of American, and National Consumers League, In the Matter of Protecting the Privacy of Consumers of Broadband and Other Telecommunications Services, WC Docket No. 16-106, at 3-4 (May 27, 2016), *available at* <https://ecfsapi.fcc.gov/file/60002080037.pdf> [hereinafter “PK Comments”].

<sup>3</sup> Howard Beales and Jeffrey A. Eisenach, *Putting Consumers First: A Functionality-Based Approach to Online Privacy* 2 (Navigant Economics Paper, Jan. 2013), *available at* <http://ssrn.com/abstract=2211540>.

<sup>4</sup> *Id.*

<sup>5</sup> *See, e.g.*, OPEN TECHNOLOGY INSTITUTE, THE FCC’S ROLE IN PROTECTING ONLINE PRIVACY: AN EXPLAINER 2, 3 (Jan. 2016) (characterizing ISP’s as “gatekeepers” that “face little competition”), *available at* [https://static.newamerica.org/attachments/12325-the-fccs-role-in-protecting-online-privacy/CPNI\\_web.d4fbdb12e83f4adc89f37ebffa3e6075.pdf](https://static.newamerica.org/attachments/12325-the-fccs-role-in-protecting-online-privacy/CPNI_web.d4fbdb12e83f4adc89f37ebffa3e6075.pdf) [hereinafter “OTI Paper”].

tion to protect privacy-sensitive consumers — assuming there are in fact enough of them to justify the cost of ISPs adopting different access models at all. As of 2014, over 74% of homes had access to at least two wired ISPs able to deliver 10 Mbps download speed, and over 88% had access to at least two providers delivering 3 Mbps service.<sup>6</sup> Meanwhile, over 93% of consumers have access to at least three mobile broadband providers.<sup>7</sup>

Further, assuming, for the sake of argument, that ISPs are “gatekeepers,” so too are many edge providers, judged by the same standard. Indeed, according to some — including supporters of the current NPRM — many edge providers’ positions as data aggregators are both more substantial and less apparent to consumers (and therefore less likely to be checked by competition).<sup>8</sup> Facebook and Google, for instance, are able to invisibly track users across the majority of the web, and to do so in ways that are both more comprehensive than ISPs and that afford users less opportunity to “opt-out” through the use of alternatives.

Further, within the advertising market, ISPs do not have access to any greater amount of useful consumer data — and possibly quite a bit less — than any other actor. Yet, the Commission asserts that ISPs “have the ability to capture a breadth of data that an individual streaming video provider, search engine or even e-commerce site simply does not”<sup>9</sup> — an assertion made without citing to any sort of economic (or other) analysis to justify its conclusion. Thanks to healthy competition in the broader advertising market, however, a wide range of companies do in fact have access to copious amounts of useful data.

Facebook, for example, offers its “Facebook Exchange” as a way of allowing third parties to access its more than 1 billion users for retargeting and remarketing.<sup>10</sup> This program allows Facebook to combine the wealth of personal information — both explicitly shared and mined from within Facebook — with the online behavior of users outside of Facebook in order to serve up highly targeted advertising for third-party companies. Facebook also offers a “Custom Audiences” program that allows individuals within the Facebook platform to

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<sup>6</sup> In re Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable & Timely Fashion, & Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, 30 F.C.C. Rcd. 1375 ¶ 83 (2015) [hereinafter “2015 Broadband Report”].

<sup>7</sup> In re Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993: Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Seventeenth Report, 29 F.C.C. Rcd. 15311 ¶ 51, Chart III.A.2 (2014).

<sup>8</sup> See, e.g., TIM WU, THE MASTER SWITCH: THE RISE AND FALL OF INFORMATION EMPIRES (2010).

<sup>9</sup> Notice of Proposed Rulemaking, In the Matter of Protecting the Privacy of Customers of Broadband and Other Telecommunications Services, WC Docket 16-106, at ¶ 1 (Mar. 31, 2016), available at [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-16-39A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-39A1.pdf) [hereinafter “NPRM”].

<sup>10</sup> *Facebook Exchange*, FACEBOOK BUSINESS (last accessed Jul. 5, 2016), available at <https://www.facebook.com/business/a/online-sales/facebook-exchange>.

narrowly target segments of their audience in order to serve up posts and other advertising.<sup>11</sup> And with the introduction of Facebook’s own in-app browser, the company is able to correlate ever more data about individual users.<sup>12</sup>

Compared to ISPs, the scope of data available to edge providers is truly pervasive, allowing them to gather data on users across devices and contexts. Facebook’s Atlas Ad Server, a prime example, allows the company to develop profiles of consumers across devices, even including offline purchases.<sup>13</sup> Despite the bluster of some commenters, ISPs do not have access to anywhere near the scope of advertising-relevant data that these dominant ad networks have.

There might be a relevant difference between edge services and broadband providers, but if there is, it lies in switching costs and market power in the advertising market, not some inherent distinction between the “edge” and “core” or various “layers” of the Internet.

Thus, it is possible (but not actually established) that constraints on uses of data by ISPs are important to protect consumers, but such constraints are surely by no means *sufficient* to protect consumers. While edge providers sometimes come under fire themselves for use of customer data (wrongly, in our view), it is an important question whether they are made artificially more powerful if ISPs are constrained, and what effect that will have on consumer welfare.

In fact, all of these companies, including ISPs, have the ability to collect and use consumer data, but are limited by the market dynamics that constrain them, including from interactions with each other. And to the extent that “sufficient competition” is a touchstone for adequate privacy protection, the Commission has not actually evaluated the extent of competition in the relevant markets, nor actually determined whether ISPs face more or less competition along the relevant dimensions than do, say, Google and Amazon.<sup>14</sup>

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<sup>11</sup> *Target Facebook Ads to People on Your Contact List*, FACEBOOK BUSINESS (last accessed Jul. 5, 2016), available at [https://www.facebook.com/business/a/custom-audiences?campaign\\_id=1398023950488031&placement=exact&creative=74979961869&keyword=facebook+custom+audience&extra\\_1=335d5b6d-5d2c-4d67-8c51-95f533d96493](https://www.facebook.com/business/a/custom-audiences?campaign_id=1398023950488031&placement=exact&creative=74979961869&keyword=facebook+custom+audience&extra_1=335d5b6d-5d2c-4d67-8c51-95f533d96493).

<sup>12</sup> David Cohen, *Facebook Tests New Web Browser for Flagship Mobile Apps*, ADWEEK (Jan. 19, 2016) available at <http://www.adweek.com/socialtimes/web-browser-test-flagship-mobile-apps/632995>.

<sup>13</sup> Marcelo Ballvé and Emily Adler, *The Atlas Explainer: Where Facebook’s Atlas ad server fits in the digital-ad ecosystem, and how it works*, BI INTELLIGENCE (Apr. 10, 2015) available at [https://adparlor.zendesk.com/hc/en-us/article\\_attachments/202585149/bii\\_atlasexplainer\\_apr15.pdf](https://adparlor.zendesk.com/hc/en-us/article_attachments/202585149/bii_atlasexplainer_apr15.pdf).

<sup>14</sup> See, e.g., PETER SWIRE, JUSTIN HEMMINGS & ALANA KIRKLAND, *ONLINE PRIVACY AND ISPs: ISP ACCESS TO CONSUMER DATA IS LIMITED AND OFTEN LESS THAN ACCESS BY OTHERS* (Feb. 29, 2016), available at

Numerous limitations exist on an ISP's: increasingly popular encryption,<sup>15</sup> multiple connections between work and home, and a shift to mobile apps all work to frustrate data gathering efforts.<sup>16</sup> And even if ISPs have access to *some* unique data from which they can draw unique insights about consumers, they are still at a significant competitive disadvantage in the relevant (advertising) market. In order to make use of such data, in such a competitive environment, they would have to offer unique, valuable insights to potential advertisers in order to overcome the substantial value that the dominant networks offer — networks which are able to derive unique insights thanks to an ability to track individual users across devices, websites, and locations — and without being hogtied by encryption.<sup>17</sup>

Unless ISPs can replicate the benefits derived from this highly valuable cache of data, advertisers would have no reason to favor ISPs over current, dominant networks. But large data sets so often are filled with meaningless noise that is by no certain that ISPs can gain profitable insights from their data.<sup>18</sup> Far from being juggernauts of potential ad sales, ISPs are much more like market upstarts: new entrants that can bring valuable and potentially innovative competition to the advertising marketplace — but that are more likely never to succeed in the market at all.

It is incumbent upon proponents of privacy regulation, and especially *differential* regulation, to justify any particular proposed regime with evidence that demonstrates that consumer privacy, consumer welfare, and the public interest will be served. The NPRM fails to do so.<sup>19</sup>

## **Data and dollars: Online business models aren't fixed**

Commenters have also opined that it would be inappropriate for ISPs (as opposed to other companies with access to consumer data) to trade broadband access for the use of consumer

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[http://www.iisp.gatech.edu/sites/default/files/images/online\\_privacy\\_and\\_isps.pdf](http://www.iisp.gatech.edu/sites/default/files/images/online_privacy_and_isps.pdf) [hereinafter "Online Privacy and ISPs"].

<sup>15</sup> *See id.*

<sup>16</sup> *See id.*

<sup>17</sup> *See* Jules Polonetsky and Stacey Gray, *Cross Device: Understanding the State of State Management*, (Future of Privacy Forum, Nov. 2015), available at [https://fpf.org/wp-content/uploads/2015/11/FPF\\_FTC\\_CrossDevice\\_F\\_20pg-3.pdf](https://fpf.org/wp-content/uploads/2015/11/FPF_FTC_CrossDevice_F_20pg-3.pdf).

<sup>18</sup> *See, e.g.,* James Glanz, *Is Big Data a Big Dud?*, NEW YORK TIMES (Aug. 17, 2013), available at <http://www.nytimes.com/2013/08/18/sunday-review/is-big-data-an-economic-big-dud.html>.

<sup>19</sup> *See* Comments of the International Center for Law & Economics and Scholars of Law & Economics, In the Matter of Protecting the Privacy of Customers of Broadband and Other Telecommunications Services, WC Docket 16-106 (May 27, 2016) available at <https://www.fcc.gov/ecfs/filing/60001975214/document/60002081125>.

information.<sup>20</sup> But there is no basis for this claim. Although ISPs may, in the past, have typically required cash payment for their services, there is simply no reason to think that this will — or should — persist as the dominant business model.<sup>21</sup> In fact, left with the freedom to innovate, it very well may be the case that ISPs discover some menu of different options that work for both a wider range of consumers and the ISPs. Such a menu could easily include the option of “paying” for broadband access via targeted advertising. If *both* consumers and ISPs are satisfied with such an arrangement, it would be the height of hubris for the Commission to declare such a business model unfit for consumers.<sup>22</sup>

Moreover, finding alternative revenue channels helps promote investment in broadband itself:

For both the edge and the core... the common currency of the [Internet] is information — that is, the ability to collect, track and ultimately monetize a plethora of information to provide enhanced online experiences for consumers. Moreover, it is the ability to monetize information successfully that will encourage, at least in part, the investments by both the edge and core to support the [Internet].<sup>23</sup>

Without this monetization, ISPs face a possible revenue shortfall as a result of the increased commoditization of broadband instigated by the FCC’s prior regulatory decisions.<sup>24</sup> And as even the Commission itself has observed, investment in infrastructure suffers when “service providers... cannot earn enough revenue to cover the costs of deploying and operating

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<sup>20</sup> See, e.g., Comments of the American Civil Liberties Union, In the Matter of Protecting the Privacy of Consumers of Broadband and Other Telecommunications Services, WC Docket No. 16-106, at 6-7 (May 27, 2016), available at <http://apps.fcc.gov/ecfs/document/view?id=60002089529>.

<sup>21</sup> Further, ISPs *have* actually experimented with offering ad-supported, free service. In 1999, for example, NetZero made waves by announcing just such a service with its dial-up option. See Bob Sullivan, *Free Net access gains steam*, ZDNET (Feb. 9, 1999) available at <http://www.zdnet.com/article/free-net-access-gains-steam/>.

<sup>22</sup> On the Google Play Store, for example, over 90% of apps are nominally “free” to users and rely on data and advertising for revenue while less than 10% are subscription based without such tracking. See *42Matters API App Market Data*, 42MATTERS (last accessed Jun. 27, 2016), available at <https://42matters.com/app-market-explorer/android>.

<sup>23</sup> George S. Ford & Lawrence J. Spiwak, *Information, Investment and the Internet of Everything*, US CHAMBER OF COMMERCE FOUNDATION (Sept. 22, 2015), <https://www.uschamberfoundation.org/article/information-investment-and-internet-everything>.

<sup>24</sup> See T. Randolph Beard, George S. Ford, Thomas M. Koutsky, & Lawrence J. Spiwak, *Network Neutrality and Industry Structure*, 29 HASTINGS COMM. & ENT. L.J. 149 (2007), available at <http://www.phoenix-center.org/papers/CommEntNetworkNeutrality.pdf>.



broadband networks, including expected returns on capital, [such that] there is no business case to offer broadband services.”<sup>25</sup>

Data often powers commerce, especially online, as the NPRM recognizes: “[I]t is not unusual for consumers to receive perks in exchange for use of their personal information.”<sup>26</sup> Some commenters clearly believe, however, that the trade-off of data for dollars is outside of consumer expectations when it comes to broadband access, despite the fact that “[i]n the broadband ecosystem, ‘free’ [or reduced price] services in exchange for information are common.”<sup>27</sup>

The commonly employed, multi-sided platform model allows Internet users to access an enormous amount of content at zero nominal price. Nevertheless, the NPRM and many of the supporting comments appear to treat the use of consumer data to drive platform subsidization through ad sales as an unalloyed negative. But exchanging information that is used for advertising purposes for discounted or free products and services is common in the Internet ecosystem and has underwritten its development in significant ways. Not only is there no evidence that subsidizing content access has negative effects, studies on multi-sided platforms suggest that the very success of online platforms depends upon actually adding value for all participants, especially consumers.<sup>28</sup>

Online intermediaries (like Google, Amazon, etc.) use data collected from users to more effectively target advertisements. In order to be successful, users must value the services provided (including the advertisements) more than the cost they incur (which may include the psychic cost of trading personal information for access). Building a search engine, email service, or ISP is not costless. If a multi-sided platform cannot recoup costs by charging one side of the platform (e.g., advertisers), then it will charge another side of the platform (e.g., consumers). Far from helping those with less disposable income,<sup>29</sup> a rule like the one pro-

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<sup>25</sup> CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN 136 (Mar. 16, 2010), *available at* [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-296935A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-296935A1.pdf).

<sup>26</sup> NPRM, *supra* note 9, at ¶ 242. The NPRM does also assert, however, that “it is not clear that consumers generally understand that they are exchanging their information as part of those bargains.”

<sup>27</sup> *Id.*

<sup>28</sup> *See generally* DAVID S. EVANS, PLATFORM ECONOMICS: ESSAYS ON MULTI-SIDED BUSINESSES (2011), *available at* <http://www.marketplatforms.com/wp-content/uploads/Downloads/Platform-Economics-Essays-on-Multi-Sided-Businesses.pdf>.

<sup>29</sup> *See* PK Comment, *supra* note 2, at 32 (“We are deeply concerned about the effects of ‘pay for privacy’ regimes on minority communities, low income neighborhoods, the elderly, and other vulnerable groups. While the current availability of such service (namely AT&T’s \$30 per month “discount” gigabit service) is limited to middle- to high-income areas, such practices in low-income or other vulnerable communities could quickly become prohibitively priced. In households with low income elasticity, even moderate price discrimination between privacy and no-privacy offerings can become coercive inducements. Such inducements could force low-income consumers to choose between exercising their privacy rights, and having a broadband connection

posed by the FCC will likely harm them the most by inflating broadband access prices and precluding pricing models that could subsidize access pricing.

If ISPs opt for differentiated business models that include providing nominally “free” access in exchange for serving targeted ads to consumers, there is no reason to expect consumer harm. Similarly, despite the bare assertions of the NPRM’s supporters that “consumer expectations”<sup>30</sup> do not include trading data for access, there is no reason to believe this to be true. Overall consumer welfare could easily increase as a result of ISPs shifting more of the cost of broadband access to advertisers by charging them more in exchange for more accurate consumer targeting.

The reliance on “consumer expectations,” moreover, rests upon an imagined snapshot of reality held static. OTI argues, for instance, that

The context in which broadband customers share private information with BIAS providers is specific and accompanied by cabined expectations: the customers share the information with BIAS providers to facilitate provision of a service for which they have contracted. The information is therefore most appropriately thought of as on loan to, rather than transferred to, broadband providers. OTI agrees with the FCC’s characterization of private information shared by customers for the purpose of receiving broadband service as a “possession” belonging to the customer.<sup>31</sup>

OTI attempts to substitute its own judgment of what consumers (should) believe about their data for that of consumers themselves. And in the process it posits a “context” that can and will never shift as new technology and new opportunities emerge. Such a view of consumer expectations is flatly anti-innovation and decidedly anti-consumer, consigning broadband users to yesterday’s technology and business models. The rule OTI supports could effectively forbid broadband providers from offering consumers the option to trade data for lower

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at all. This is a choice that no consumer should be required to make, particularly in light of the Commission’s mission of universal access to broadband communications.”).

<sup>30</sup> See, e.g., NPRM, *supra* note 9, at ¶¶ 104-05 (“FTC best practices counsel that consumer choice turns on the extent to which the practice is consistent with the context of the transaction or the consumer’s existing relationship with the business. Consistent with this and our existing rules, we propose that, except as permitted above in Part III.C.1.a, BIAS providers must provide a customer with notice and the opportunity to opt out before they may use that customer’s PI, or share such information with an affiliate that provides communications-related services, to market communications-related services to that customer. We seek comment on this proposal... This approach is similar to the approach taken by our current Section 222 rules, and **we believe it is consistent with customers’ expectations.**”) (emphasis added).

<sup>31</sup> Comments of New America’s Open Technology Institute, In the Matter of Protecting the Privacy of Customers of Broadband and Other Telecommunications Services, WC Docket 16-106, at 7 (Mar. 31, 2016), available at <https://ecfsapi.fcc.gov/file/60002081381.pdf>.

prices. The sad implication of this paternalistic impulse is that consumers are incapable of making choices about their own data, and are further incapable of revising their understanding of the bargains they make. The FCC should forcefully reject such a view.

Of course consumers *could* be harmed if they are not aware of the nature of this tradeoff, but such a speculative harm does not justify invasive rules that strongly deter such transactions entirely;<sup>32</sup> at most it justifies disclosure — notice and choice. And, given that some consumers remain without an Internet connection — many for reasons of price<sup>33</sup>— it remains at least a reasonable presumption that a reduced price service, subsidized by targeted advertising, would yield a net increase in consumer welfare.

Online business models are constantly in flux. Even otherwise-similar companies take different approaches to revenue generation. For instance, there are apps that are subscription-based and others that are ad-supported.<sup>34</sup> The same is true of email providers,<sup>35</sup> search engines,<sup>36</sup> and all manner of other content online.<sup>37</sup> Some popular companies started out without utilizing ads but developed strong advertising networks over time, and others started with an ad-supported model, but moved towards subscriptions. Still others use combinations of both models.<sup>38</sup> The idea that ISPs in particular should be locked into one model because it is how they have tended to operate in the past is completely at odds with the larger reality of the online economy.

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<sup>32</sup> As the FCC seems to note. See NPRM, *supra* note 9, at ¶ 245.

<sup>33</sup> John B. Horrigan & Maeve Duggan, *Barriers to broadband adoption: Cost is now a substantial challenge for many non-users*, PEW RESEARCH CENTER (Dec. 21, 2015), <http://www.pewinternet.org/2015/12/21/3-barriers-to-broadband-adoption-cost-is-now-a-substantial-challenge-for-many-non-users/>.

<sup>34</sup> See, e.g., Ron Medlin, *How Do Apps Make Money: A Complete Guide to App Monetization*, ZAPPOROO (Mar. 14, 2016), <https://zapporoo.com/blog/app-monetization-guide/>.

<sup>35</sup> See, e.g., Wikipedia, *Comparison of webmail providers*, [https://en.wikipedia.org/wiki/Comparison\\_of\\_webmail\\_providers](https://en.wikipedia.org/wiki/Comparison_of_webmail_providers) (as of Jul. 6, 2016, 10:50 AM).[https://en.wikipedia.org/wiki/Comparison\\_of\\_webmail\\_providers](https://en.wikipedia.org/wiki/Comparison_of_webmail_providers) (as of Jul. 6, 2016, 10:50 AM).

<sup>36</sup> Cf. Google & Westlaw.

<sup>37</sup> See, e.g., Wikipedia, *Website monetization*, [https://en.wikipedia.org/wiki/Website\\_monetization](https://en.wikipedia.org/wiki/Website_monetization) (as of Jul. 6, 2016, 10:55 AM).[https://en.wikipedia.org/wiki/Website\\_monetization](https://en.wikipedia.org/wiki/Website_monetization) (as of Jul. 6, 2016, 10:55 AM).

<sup>38</sup> Medlin, *supra* note 34 (“Remember, these app monetization methods are not exclusive. You can combine two or more of them, or even change from one to another at a later date depending on what is working.”).

## **Ignoring reality: Broadband is sufficiently competitive to protect consumer choice, and getting more competitive by the day**

The Commission's claim that ISPs, uniquely among companies in the modern data economy, face insufficient competition in the broadband market is, as noted above, insufficiently supported.

The flawed manner in which the Commission has defined the purported relevant market for broadband distorts the analysis upon which the proposed rules are based, and manufactures a false scarcity in order to justify unduly burdensome privacy regulations for ISPs. Even the Commission's own data suggest that consumer choice is alive and well in broadband. In 2010 the Commission observed that one sixth of customers switch broadband providers each year, and over a third switch every three years.<sup>39</sup> And on the wireless side, carriers experience a churn rate of between 12% and 24%,<sup>40</sup> while simultaneously adding on the order of 18 million new connections each year<sup>41</sup> — indicating that consumers readily switch wireless providers when it suits them.

The reality is that there is in fact enough competition in the broadband market to offer privacy-sensitive consumers options if they are ever faced with what they view as overly invasive broadband business practices. According to the Commission, as of December 2014, 74% of American homes had a choice of two or more wired ISPs delivering download speeds of at least 10 Mbps, and 88% had a choice of at least two providers of 3 Mbps service.<sup>42</sup> Meanwhile, 93% of consumers have access to at least three mobile broadband providers.<sup>43</sup> Looking forward, consumer choice at all download speeds is increasing at rapid rates due to extensive network upgrades and new entry in a highly dynamic market.

And it still remains to be seen whether 25 Mbps — the arbitrary threshold selected by the Commission to define high-speed broadband — should be used as a benchmark. According to the 2015 Broadband Report, less than 30% of all customers who were offered 25 Mbps

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<sup>39</sup> See Federal Communications Commission, *Broadband Decisions: What Drives Consumers to Switch – or Stick With – their Broadband Internet Provider* (2010) available at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-303264A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-303264A1.pdf).

<sup>40</sup> Eighteenth Report, In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless Including Commercial Mobile Services, WT Docket No. 15-125, at ¶ 20 (Feb. 24, 2015), available at [https://apps.fcc.gov/edocs\\_public/attachmatch/DA-15-1487A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DA-15-1487A1.pdf).

<sup>41</sup> *Id.* at ¶ 18

<sup>42</sup> 2015 Broadband Report, *supra* note 6, ¶ 83.

<sup>43</sup> In re Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993: Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Seventeenth Report, 29 F.C.C. Rcd. 15311 ¶ 51, Chart III.A.2 (2014).

service actually ordered it, a fact that suggests that the demand for this level of service may not actually have reached critical mass.<sup>44</sup> It is thus unsurprising that there has not been a ubiquitous rollout of 25 Mbps service when the revealed preference of over 70% of consumers indicates that such a service would be dramatically under-used.

The NPRM also ignores the growth of wireless-only homes, which accounted for 13% of households in 2015.<sup>45</sup> But advertisers — a major driver of revenue online — have noticed this shift: By 2018 it is expected that mobile advertising revenue will outstrip fixed broadband advertising.<sup>46</sup>

And it is even easier for privacy-sensitive consumers to switch among wireless carriers. Many carriers will offer to buy out consumer contracts with competitors in order to attract new customers. Further, wireless consumers are significantly less limited by geography than are traditional fixed-broadband consumers; acquiring a new provider is as easy as signing up for new service, and consumers are able to retain those services as they move to new locations.

Moreover, it is important to remember that ISPs make decisions relating to investment, services offerings, etc. on the margins. Thus, even if a majority of consumers do not in fact have any incentive to switch providers in order to avoid collection of their data, the existence of even a critical number of consumers who *would* make that switch will operate as a constraint on ISPs that prevents them from engaging in harmful practices.

In short, on its own terms, the NPRM fails to make out a coherent defense of the need for special ISP privacy rules based on the extent of broadband competition. Further, because of this competition, the market is likely robust enough to support a range of business models, from highly privacy-sensitive, fee-based services to the very common edge-provider model of subsidized or free access in exchange for use of consumer information.

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<sup>44</sup> 2015 Broadband Report, *supra* note 6, at ¶ 41.

<sup>45</sup> John B. Horrigan & Maeve Duggan, *Home Broadband 2015*, PEW RESEARCH CENTER (Dec. 21, 2015) available at <http://www.pewinternet.org/2015/12/21/1-home-broadband-adoption-modest-decline-from-2013-to-2015/>.

<sup>46</sup> Mark Hoelzel, *Mobile advertising is exploding and will grow much faster than all other digital ad categories*, BUSINESS INSIDER (Apr. 3, 2015) available at <http://www.businessinsider.com/mobile-is-growing-faster-than-all-other-ad-formats-2014-10/>.

## Even where competition might be more restricted, ISPs should not be discriminated against with more onerous rules

Not only has the Commission failed to offer any support for the idea that ISPs' use of data would change as a result of competition, a number of market realities undermine ISPs' ability to pervasively gather information on their users.

First, as Peter Swire has noted, the increasing prevalence of encryption correspondingly limits ISPs' access to much consumer data.<sup>47</sup>

Further, as users increasingly access the web through mobile devices, consumer data to which ISPs have access is curtailed. Mobile users overwhelmingly access online content through apps and not web pages.<sup>48</sup> Even without encryption on a mobile app, an ISP would have a steep hill to climb to piece together all of the data about users of apps. The reality, however, is that much of the mobile ecosystem is moving toward pervasive, end-to-end encryption, further frustrating any hope of data gathering that ISPs may have had.<sup>49</sup>

Additionally, many mobile developers rely on common resources — for instance Amazon Web Services — to power the backend of their apps.<sup>50</sup> Thus, much of the traffic from mobile apps appears to ISPs to be traveling to and from generic services on broadly used infrastructure, which would frustrate any attempt to develop a profile on even a particular app's usage, let alone on what a given user is doing with that app. The edge providers that develop the apps, on the other hand, *will* have a complete view of all relevant user data.

Some comments in support of the proposed rules attempt to cast ISPs as all powerful by virtue of their access to apparently trivial data — IP addresses, access timing, computer ports, etc. — because of the power of predictive analytics.<sup>51</sup> These commenters assert that the possibility of predictive analytics coupled with a large data set undermines research that

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<sup>47</sup> Online Privacy and ISPs, *supra* note 14, at 7.

<sup>48</sup> Greg Sterling, *Apps Eat Digital Media Time, With Top 3 Capturing 80 Percent*, MARKETING LAND (Sep. 23, 2015), <http://marketingland.com/apps-eat-digital-media-time-with-top-3-capturing-80-percent-143555>.

<sup>49</sup> Apple, for instance, added a whole suite of encryption tools as well as a basic level of device encryption to iOS 8. See Cyrus Farivar, *Apple expands data encryption under iOS 8, making handover to cops moot*, ARS TECHNICA (Sep. 18, 2014), <http://arstechnica.com/apple/2014/09/apple-expands-data-encryption-under-ios-8-making-handover-to-cops-moot/>.

<sup>50</sup> Sharon Gaudin, *The cloud gets mobile apps moving*, COMPUTERWORLD (Aug. 17, 2015), <http://www.computerworld.com/article/2971519/cloud-computing/the-cloud-gets-mobile-apps-moving.html>.

<sup>51</sup> PK Comments, *supra*, note 2, at 6–8.

demonstrates that ISPs, thanks to increasing encryption, do not have access to any better quality data, and probably less quality data, than edge providers themselves have.<sup>52</sup>

But this is a curious bit of reasoning. It essentially amounts to the idea that, not only should consumers be permitted to control with whom their data is shared, but that all other parties online should be proscribed from making their own independent observations about consumers. Such a rule would be akin to telling supermarkets that they are not entitled to observe traffic patterns in their stores in order to place particular products in relatively more advantageous places, for example. But the reality is that most data is noise; simply having more of it is not necessarily a boon, and predictive analytics is far from a panacea. In fact, the insights gained from extensive data collection are frequently useless when examining very large data sets, and are better employed by single firms answering particular questions about their users and products.<sup>53</sup>

And, although it is possible to conceive of a future in which ISPs may be able to connect the dots between the various random data points found in their access logs, the fact still remains that any edge provider with a relationship with a third-party data aggregator could basically obtain the same insights. Supporters of the proposed rules yet again have failed to demonstrate not only why it is that this sort of access should be disfavored (or deterred), but also why such a restriction should apply only to ISPs.

Further — and perhaps most important — no one suggests that consumers should be without recourse or protection for misuses of their data. ISPs have not operated in a regulatory vacuum all this time. Rather, the FTC, under its UDAP authority, has monitored ISP privacy and security practices for decades. Moreover, competition in the industry is the same now (if not greater) as it was when ISPs were subject to FTC jurisdiction. Yet there were relatively few complaints of improper use of data by ISPs. The only thing that has changed, in fact, is that the FCC has arrogated to itself power over the broadband industry thanks to its reclassification of broadband as a Title II service. But, fundamentally, consumers are no more exposed today than they were yesterday.

## Conclusion

Imposing restrictive privacy rules on ISPs will stifle robust competition between ISPs and other platforms, and it will suppress ISPs' investment in new lines of business, thereby depriving consumers of new and innovative services, greater choice in the marketplace, and lower prices. The FTC's mode of regulation of ISPs was perfectly successful, and relatively few complaints emerged during its tenure. Meanwhile, the FCC engaged in its own case-by-

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<sup>52</sup> PK Comments, *supra*, note 2, at 9.

<sup>53</sup> See, e.g., James Glanz, *Is Big Data a Big Dud?*, *supra* note 18.

case analysis of privacy harms and further bolstered the effective regulation of the use of data by ISPs. Nothing in the NPRM or the comments supporting it justifies abandoning this successful regulatory paradigm.