

**METERED-USAGE BILLING AND THE BROADBAND INTERNET
FAIRNESS ACT**

Daniel Havivi *

Several metered-usage pricing schemes for broadband Internet are struggling or have already failed, with each experiencing large amounts of end-user backlash. The problem with price experiments is the severity of user backlash in response to even minimal tests of new schemes. Users often perceive pricing tests as threats to low-cost broadband, but Internet Service Providers want to please their customers while profiting from their trade. U.S. House Bill 2902, the Broadband Internet Fairness Act, was introduced as a way to solve these pricing issues, yet it also contains methods for ISPs to continue to profit from subscribers. While the successful passage of the Act seems unlikely, its creation is a step in the right direction for ending the current ISP pricing structure and avoiding excessive fees for bandwidth usage. Regardless of the Act's passage, the ever-increasing use of the Internet in both wired and wireless devices will eventually lead to the extinction of what many users perceive as the current pricing model—unlimited use for a flat fee.

I. INTRODUCTION

Imagine that the United States Postal Service (“USPS”) had the same pricing structure as current Internet Service Providers (“ISPs”). Individuals would never have to buy another stamp, envelope, or box, and, each month, individuals could mail as many letters, reports, and packages as needed. Individuals would only have to pay one large, flat fee to cover all costs associated with sending and receiving. People could even choose how quickly they wanted mail to arrive, depending on which service plan they purchased. The more expensive the plan, the faster letters and belongings would travel. Paying a single price regardless of usage

* J.D. Candidate, University of North Carolina School of Law, 2011.

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seems like an unusual pricing model, but this is how Americans currently buy broadband Internet.¹ For a fixed rate, Americans enjoy seemingly unlimited sending and receiving of e-mail, pictures, and movies.² If we choose to pay more, data can be uploaded and downloaded more quickly, but the restraints on total usage are less obvious.³ This ISP pricing model seems to be preferable to the piecemeal USPS plan, with cost for sending mail depending on size and weight, and ever-increasing stamp and shipping prices.⁴ While the USPS does offer a few flat-rate boxes, they, too, are limited by size and weight.⁵

However, the problem with a flat-fee rate is that not everyone uses the USPS, or the Internet, in the same way or in the same amount. To combat this problem, the USPS charges for every item that passes through the postal system. As a result, frequent users pay more and infrequent users pay less. As of yet, there is no solution⁶ to this unequal usage in the Internet context. ISPs have made several failed attempts to solve the problem of flat-rate but disparate Internet usage, all with negative responses.⁷ A current

¹ See, e.g., Comcast High-Speed Internet Plans and Prices, http://www.comcastinfo.com/high_speed_internet.html (last visited Mar. 15, 2010) (on file with the North Carolina Journal of Law & Technology); Time Warner Cable Carolinas—Order Services, <http://www.yourtwc.com/order/order.aspx?existcust=N&referencetype=CarolinasSmtBox> (last visited Mar. 15, 2010) (on file with the North Carolina Journal of Law & Technology).

² There is no mention of data limits on either Web page. See Comcast High-Speed Internet Plans and Prices, *supra* note 1; Time Warner Cable Carolinas—Order Services, *supra* note 1.

³ See Comcast High-Speed Internet Plans and Prices, *supra* note 1; Time Warner Cable Carolinas—Order Services, *supra* note 1. The various speeds can be seen by clicking through the pricing options on the Comcast and Time Warner Cable Web pages.

⁴ See generally USPS—Postage Rates and Historical Statistics, List of Historical Postage Rates and Their Effective Dates, <http://www.usps.com/postalhistory/ratesandhistoricalstatistics.htm> (last visited Mar. 22, 2010) (on file with the North Carolina Journal of Law & Technology).

⁵ *Id.*

⁶ Some would argue there is no problem with having some heavy users. See *infra* Part III.

⁷ See Matthew Lasar, *Comcast Pays 150K to Put End to Florida Bandwidth Cap Probe*, ARS TECHNICA, Sept. 8, 2008, <http://arstechnica.com/old/content/>

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House bill, the Broadband Internet Fairness Act⁸ (“Act”), is part of the backlash against the ISPs, but the legislation may also be the beginning of a solution.

In Part II, this Recent Development reviews two episodes where an ISP has attempted to limit its customers’ usage of its service. In both instances, the ISPs retreated in response to unhappy customers. Part III explores a third episode in the making: the looming confrontation between iPhone users who have acclimated to surfing the Internet as much as they like, and the ISP that believes users are causing network congestion. Part IV explores a proposed U.S. House bill on broadband Internet fairness, its strengths and weaknesses, and how it would have altered the previous two instances discussed in Part II. As introduced, the Act will face strong resistance from ISPs, as it heavily favors customers by demanding ISP transparency and leans towards network neutrality. Part V offers a preview of what ISPs are planning (if not yet executing) for future pricing and offers a possible solution. Eventually, users will accept the notion of metered pricing, certainly once they consider broadband Internet access to be as important as water and electricity.

II. FAILED EXPERIMENTS

A. Time Warner Cable’s Usage Caps

In early 2009, Time Warner Cable (“TWC”) experimented with data caps in select markets.⁹ TWC offered plans ranging from

2008/09/comcast-pays-150k-to-put-end-to-florida-bandwidth-cap-probe.ars (on file with the North Carolina Journal of Law & Technology); Nate Anderson, *Congressman: There Should Be a Law Against Internet Caps!*, ARS TECHNICA, Apr. 13, 2009, <http://arstechnica.com/tech-policy/news/2009/04/congressman-there-should-be-a-law-against-internet-caps.ars> (on file with the North Carolina Journal of Law & Technology).

⁸ H.R. 2902, 111th Cong. (2009). Introduced by Former Representative Eric Massa of New York.

⁹ See Nate Anderson, *The Price-Gouging Premiums of Time Warner Cable’s Data Caps*, ARS TECHNICA, Apr. 9, 2009, <http://arstechnica.com/tech-policy/news/2009/04/the-price-gouging-premiums-of-time-warner-cables-data-caps.ars> (on file with the North Carolina Journal of Law & Technology).

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five gigabytes (“GB”) per month for \$30, to forty GB per month for \$55.¹⁰ The rationalization was that most people would only need the lower tier, and only people who continually transferred large amounts of data would sign up for the forty GB plan.¹¹ These trial rates were high above other regular rates in the industry.¹² TWC’s claims that the high trial prices were to improve the network might have been a stretch.¹³ For example, Comcast made improvements at the same time, while charging significantly less per GB.¹⁴

The reaction to TWC’s claim of using higher prices to fund network improvement was exacerbated by user backlash that was almost simultaneous with the discovery that “broadband costs had decreased by twelve percent in 2008 even as broadband revenues had increased by eleven percent.”¹⁵ TWC disputed this statistic, saying that its prices were high to keep capacity in line with the increasing demand.¹⁶ This line of reasoning abides by the theory that Internet usage (including TWC customers’) is rapidly overtaking the capacity of the current infrastructure and could lead to Internet “brownouts.”¹⁷ However, evidence exists that these “brownouts” will not happen.¹⁸ More likely, TWC’s pricing scheme is a way to keep profits high.¹⁹ However, this business decision met significant protest.

¹⁰ *Id.*

¹¹ *Id.*

¹² For the lower tier, TWC charged \$6 per GB per month. Compare to AT&T’s DSL, which comes out to \$0.09 per GB per month, to Verizon’s FiOS at \$0.11 per GB per month, or Comcast, \$0.17 per GB per month. *Id.*

¹³ *Id.*

¹⁴ Comcast was charging \$0.56 per GB per month in a comparable market. *Id.*

¹⁵ See Nate Anderson, *Time Warner Tries Again, Fails to Justify Caps and Charges*, ARS TECHNICA, Apr. 10, 2009, <http://arstechnica.com/tech-policy/news/2009/04/time-warner-cable-to-press-stop-questioning-our-caps.ars> (on file with the North Carolina Journal of Law & Technology).

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ “Even as [Internet] traffic increases, traffic costs on major [I]nternet backbones have been decreasing by 50 percent a year” *Id.*

¹⁹ *Id.*

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In response to complaints by customers,²⁰ TWC created a one-GB tier with a slower connection²¹ that cost \$15 per month.²² However, TWC also increased its other caps while keeping the prices the same, so that choices now ranged from ten GB per month to sixty GB per month.²³ In furtherance of TWC's market misreading, this act of appeasement demonstrated that TWC had the capacity to increase caps without increasing prices. Much to Internet users' delight, TWC ended its trials after less than two weeks.²⁴ The entire experiment failed on several levels.²⁵ The trials gathered plenty of negative press and end-user ill will, and spurred a Congressman from one of the trial markets to introduce a bill to the House of Representatives to prevent similar pricing schemes.²⁶

B. Comcast's Earlier Bandwidth Cap Failure

Comcast also experienced backlash and failure in an attempt to set up bandwidth caps for its users. Comcast imposed a loosely defined usage cap on its Florida customers which eventually led to a settlement²⁷ with the Florida Attorney General ("AG") in which Comcast paid \$150,000, but admitted no wrongdoing.²⁸ The AG's office took issue with the vagueness of Comcast's definition of

²⁰ See Nate Anderson, *Time Warner Cable: Please Complain About Our Usage Caps!*, ARS TECHNICA, Apr. 2, 2009, <http://arstechnica.com/tech-policy/news/2009/04/time-warner-cable-please-complain-about-our-usage-caps.ars> (on file with the North Carolina Journal of Law & Technology).

²¹ 768Kbps download speed, 168Kbps upload speed. The previous lowest tier's usage cap was 5GB. Anderson, *supra* note 9.

²² *Id.*

²³ *Id.*

²⁴ See Nate Anderson, *They're Gone! After Outcry, Time Warner Uncaps the Tubes*, ARS TECHNICA, Apr. 16, 2009, <http://arstechnica.com/tech-policy/news/2009/04/theyre-gone-after-outcry-time-warner-uncaps-the-tubes.ars> (on file with the North Carolina Journal of Law & Technology).

²⁵ *Id.*

²⁶ *Id.*

²⁷ Assurance of Voluntary Compliance, In re Comcast Corp, AG Case No. L07-3-1132 (2008), available at [http://myfloridalegal.com/webfiles.nsf/WF/MRAY-7J4RL3/\\$file/ComcastAVC.pdf](http://myfloridalegal.com/webfiles.nsf/WF/MRAY-7J4RL3/$file/ComcastAVC.pdf) [hereinafter Florida Settlement].

²⁸ Lasar, *supra* note 7.

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excessive use.²⁹ At the time, Comcast said that a violation of its excessive use rules would mean a user “would have to send out the equivalent of 20,000 high-res[olution] photos, or 40 million e-mails, or view 8,000 movie trailers” in a single month.³⁰ However, there was no “specific numerical byte ceiling” that, when breached, would constitute excessive use.³¹ Without acknowledging that it was responding to the AG’s complaints, Comcast explained that excessive use was more than 250GB per month.³² As part of the settlement with the AG, Comcast agreed to note in its advertising that unlimited service carried a cap and to specifically define that cap.³³ However, nothing in the settlement changed the way Comcast was required to structure its pricing.³⁴ Therefore, Comcast appears capable of implementing any tiered or metered pricing plan it wants, so long as the caps on usage are specified numerically in the company’s advertisements.

III. THE IPHONE STORM BREWS

While Comcast and TWC are both broadband cable companies, wireless broadband is not immune to usage-cap disputes. The latest development in the war for tiered pricing involves the iPhone, a recent and extremely popular³⁵ cell phone on the AT&T³⁶

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

³² *Id.*; See also Comcast Customer Central Frequently Asked Questions about Excessive Use, <http://customer.comcast.com/Pages/FAQViewer.aspx?seoid=Frequently-Asked-Questions-about-Excessive-Use#excessive> (last visited Mar. 22, 2010) (on file with the North Carolina Journal of Law & Technology).

³³ Lasar, *supra* note 7; Florida Settlement, *supra* note 27, at 6.

³⁴ Florida Settlement, *supra* note 27.

³⁵ Agam Shah, *Apple Q1 Profits Grow as iPhone Shipments Boom*, PCWORLD, Jan. 25, 2010, http://www.pcworld.com/article/187649/apple_q1_profits_grow_as_iphone_shipments_boom.html (on file with the North Carolina Journal of Law & Technology).

³⁶ AT&T is a cellular network, while Time Warner Cable and Comcast are cable networks that also provide broadband Internet access. While broadband Internet access and wireless cellular access are different, because they have similar pricing schemes they will be treated as one for the purposes of this Recent Development.

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network.³⁷ AT&T Mobility CEO Ralph de la Vega claims that “the top three percent of its smartphone users are responsible for as much as forty percent of smartphone data traffic.”³⁸ There is also research that shows that iPhone customers, in general, use several times the amount of data compared to an average cell phone user.³⁹ De la Vega’s revelation led AT&T to the conclusion that heavy Internet users are slowing down the wireless network for all other users.⁴⁰

There is some dispute to de la Vega’s claim, as not everyone believes that the heaviest network users, called “bandwidth hogs,”⁴¹ cause the network congestion.⁴² One analyst explains that telecommunication companies do not monitor if bandwidth hogs cause congestion, but rather take a percentage of the heaviest downloaders and apply the label.⁴³ He states that bandwidth hogs are companies’ scapegoats to change a pricing scheme that the companies themselves created.⁴⁴

While ISPs and the Federal Communications Commission (“FCC”) are working together to find more wireless data spectrum

³⁷ As the iPhone is currently sold exclusively on the AT&T network, it is not clear how a possible pairing with Verizon would affect Verizon’s network.

³⁸ Chris Foresman, *Is AT&T About to Clamp Down on Heaviest iPhone Data Users?*, ARS TECHNICA, Oct. 8, 2009, <http://arstechnica.com/tech-policy/news/2009/10/is-att-about-to-clamp-down-on-heaviest-wireless-data-users.ars> (on file with the North Carolina Journal of Law & Technology).

³⁹ “iPhone users on average consume five to seven times more data per month than average wireless subscribers . . .” Marguerite Reardon, *AT&T Considers Incentives to Curb Heavy Data Usage*, CNET NEWS SIGNAL STRENGTH, Dec. 9, 2009, http://news.cnet.com/8301-30686_3-10412804-266.html (on file with the North Carolina Journal of Law & Technology).

⁴⁰ Foresman, *supra* note 38.

⁴¹ See Nate Anderson, *“Bandwidth Hogs” Joins Unicorns in the Realm of Mythical Creatures*, ARS TECHNICA, Dec. 3, 2009, <http://arstechnica.com/tech-policy/news/2009/12/bandwidth-hogs-dont-even-exist-says-analyst.ars> (on file with the North Carolina Journal of Law & Technology).

⁴² *Id.*; Benoit Felten, *Is the “Bandwidth Hog” a Myth?*, FIBEREVOLUTION, <http://www.fiberevolution.com/2009/12/whats-a-bandwidth-hog-.html> (Dec. 3, 2009) (on file with the North Carolina Journal of Law & Technology).

⁴³ Felten, *supra* note 42.

⁴⁴ *Id.*

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to relieve bandwidth congestion,⁴⁵ they are mostly on opposite sides of the wireless network neutrality debate.⁴⁶ Wireless net neutrality is the FCC-supported idea that users should be allowed to access Internet content of their choice via their preferred wireless device.⁴⁷ If net neutrality regulation were adopted on wireless networks, AT&T believes they would be powerless to do anything to curb heavy users.⁴⁸ For a wireless ISP, there are two ways to control bandwidth: by restricting what content can run on its network and by charging heavy users more. Thus far, AT&T has only employed the former, slowly allowing some applications, such as voice over IP,⁴⁹ to be used on its network, and blocking some video streaming programs.⁵⁰ AT&T is not alone in its application restrictions; Verizon also limits the applications that can be used on its network, forbidding voice over IP and Peer to Peer (“P2P”) programs.⁵¹ However, AT&T is beginning to lean toward the latter option, charging heavier users more while also looking for ways to entice users to reduce their bandwidth usage.⁵² The most obvious way to reduce bandwidth usage is to charge more for it, but thus far, ISPs have not been willing to toe the line between losing customers to high prices and keeping those

⁴⁵ Cellular networks, like all wireless devices, are only authorized to use certain frequencies to transmit and receive data. By acquiring a larger range of frequencies to use, ISPs could alleviate some of the stress on the frequencies they currently have.

⁴⁶ Reardon, *supra* note 39.

⁴⁷ Marguerite Reardon, *Verizon, AT&T: Net neutrality not OK for wireless*, CNET NEWS SIGNAL STRENGTH, Sept. 21, 2009, http://news.cnet.com/8301-30686_3-10357806-266.html (on file with the North Carolina Journal of Law & Technology).

⁴⁸ Foresman, *supra* note 38; *see also* Jacqui Cheng, *AT&T Wants to “Educate,” Charge Heavy Data Users More*, ARS TECHNICA, Dec. 9, 2009, <http://arstechnica.com/gadgets/news/2009/12/att-wants-to-educate-charge-heavy-data-users-more.ars> (on file with the North Carolina Journal of Law & Technology).

⁴⁹ Voice over IP (“VoIP”) is the technology used in services such as Skype and Vonage. In addition to being more bandwidth-intensive, they are one way for customers to make phone calls without using cellular minutes.

⁵⁰ Foresman, *supra* note 38.

⁵¹ *Id.*

⁵² Reardon, *supra* note 39.

customers in the fold—while making sure they pay for the bandwidth they are using.

IV. U.S. HOUSE BILL 2902: A PROPOSED BILL AND LIKELY CONSUMER AND INDUSTRY REACTIONS

House Bill 2902 was introduced as part of the response to TWC's usage caps trial.⁵³ Short-titled the Broadband Internet Fairness Act,⁵⁴ the Act seeks to force ISPs to use transparent and fair processes in determining reasonable rates for Internet service.⁵⁵ The Act aims to base rates on the cost of usage⁵⁶ and prohibit monopoly prices.⁵⁷

The Act requires that all major ISPs submit a “service plan analysis” to the Federal Trade Commission (“FTC”). Among other things, the service plan analysis would identify different tiers of service, specify the rates, terms, and conditions for each, and provide the ISP's rationale for where they would set their prices—an economic self-analysis.⁵⁸ The economic analysis, while onerous, is but a subset of the larger service plan analysis required by the Act.

A. Service Plan Analysis: Economic Analysis

Of these requirements, it is likely that ISPs would find the economic analysis the most burdensome. ISPs, like most companies, would prefer not to bend their business judgment to the will of the government and are unlikely to be interested in the possibly damaging exposure of trade practices and secrets. Therefore, the economic analysis provision seems likely to be the

⁵³ Anderson, *supra* note 7.

⁵⁴ H.R. 2902, 111th Cong. § 1 (2009). The Act's long title is: “To authorize the Federal Trade Commission, in consultation with the Federal Communications Commission, to review volume usage service plans of major broadband Internet service providers to ensure that such plans are fairly based on cost.” *Id.*

⁵⁵ *See id.*

⁵⁶ *Id.* § 2(2).

⁵⁷ *Id.* § 2(3).

⁵⁸ *Id.* § 3(b).

focus of ISPs' protests and the target of their legal challenges. The Act provides three hoops that ISPs would have to jump through in each submitted economic analysis.⁵⁹ The first hoop is that ISPs must explain the "capital costs of deploying the facilities needed to provide such different service tiers."⁶⁰ This would allow ISPs to show that the prices are correlated to their expansion or upgrading of their network. On the other hand, if capital costs suddenly plunged without explanation while prices climbed, this could signal to the FTC that something was amiss and investigation might be warranted. In TWC's usage-cap experiment, the ISP responded to user feedback by increasing the usage caps on all of their plans while keeping prices static.⁶¹ While this appeased the customers, TWC would be much less likely to take such a step if this Act became law, because the service plan analysis would show that TWC was overcharging its customers in the first place. An increase of a usage cap would show the FTC that the prices charged were not "needed to provide such service tiers" because if there was space to increase caps, the ISP was probably charging more than was required to maintain the same level of data usage.

To make it through the Act's second hoop, ISPs must also detail "different operating costs, if any, that are attributable to the provision of different service tiers."⁶² This provision would force ISPs to account for, or at least attempt to explain,⁶³ differences in cost between lower and higher speeds and caps. If an ISP chooses to offer a wide range of speeds and caps, it could charge customers more to cover the differences in speed and the costs associated with their maintenance. An ISP could reason that more data flowing through the network—and at different speeds—would be more taxing on the ISP's infrastructure. However, if an ISP found

⁵⁹ *Id.* § 3(b)(3).

⁶⁰ H.R. 2902 § 3(b)(3)(A).

⁶¹ Anderson, *supra* note 15.

⁶² H.R. 2902 § (3)(b)(3)(B).

⁶³ See Posting of Saul Hansell to NYTimes.com Bits Blog, <http://bits.blogs.nytimes.com/2009/04/08/time-warner-cable-profits-on-broadband-are-great-and-will-grow-because-of-caps/> (Apr. 8, 2009, 17:52 EST) (on file with the North Carolina Journal of Law & Technology).

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a method where it had no operating costs attributable to its tiered prices, the Act is not clear on whether this should be reported or if it simply would not factor into the analysis.⁶⁴ Under the proposed Act, TWC would be required to explain the pricing for its new lowest tier of service, one GB per month for \$15, which it introduced as part of the response to its usage-cap incident.⁶⁵ TWC would have to explain why this level of service exists and how much it cost the company to implement this lowest priced tier.⁶⁶ This requirement could work in an ISP's favor, allowing it to place itself in a more benevolent and pro-consumer light. For example, if the cheapest plans cost the ISP more than it was charging, customers would see an ISP making an effort to cater to all levels of users, and subsequently might subscribe to support the ISP, even if those customers needed to purchase a more expensive plan than one GB of data per month.⁶⁷ ISPs could also profit from overage fees incurred on low-end plans. According to TWC, "30% of its customers use less than 1GB/month."⁶⁸ If this statistic holds true across all ISPs, they could either collect overage fees or higher—and presumably more profitable—subscription rates from the other 70% of users.

Last, the third hoop through which ISPs jump is to incorporate into the economic analysis "other factors and costs specified by the provider"⁶⁹ This provision could trigger an ISP's creativity to come up with additional costs (e.g. multiple IP address, wireless, and rural broadband fees) that incur the wrath of the customers who do not wish to pay for them. However, this residuary provision is a double-edged sword. It allows ISPs to show other costs, such as employee salaries and benefits, but it also forces them to identify where the payment for usage goes.⁷⁰ Even

⁶⁴ H.R. 2902 § (3)(b)(3)(B).

⁶⁵ Anderson, *supra* note 15.

⁶⁶ H.R. 2902 § (3)(b)(3).

⁶⁷ This assumes that an ISP would not offer more than one loss-leader plan.

⁶⁸ Anderson, *supra* note 15.

⁶⁹ H.R. 2902 § 3(b)(3)(C).

⁷⁰ For example, executive bonuses and perks could be revealed.

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expenditures such as Comcast's settlement⁷¹ with the Florida AG office would be disclosed.⁷² This disclosure shows customers how much money a given ISP spends to make lawsuits disappear.⁷³ This amount of transparency makes ISPs uncomfortable because the government and any consumers that discover this information might be spurred to action against the ISPs. Their indignation at having to file their pricing structures with the government aside, ISPs, like many companies, would most likely balk at having to give the economic reasons for how they set their prices. By submitting to this standard of openness, ISPs might be forced to reveal trade secrets and other information that they would much prefer to keep inside the company. Also, by sharing this information with the government, they could be exposing their processes to other companies who could use the information to undercut the ISP's price or harm them in some other way. For example, compliance with this analysis might lead ISPs to divulge their plans for market penetration—possibly allowing a competitor to preemptively entrench itself.

B. *Service Plan Analysis: Defining Widely Used Internet Services*

Another provision of the Act is that the required service plan analysis would entail an assessment of “the impact of such service tiers on the ability of residential consumers to access widely used Internet services”⁷⁴ This assessment would be a point of contention for ISPs because of the vagueness of the stipulation. “Widely used Internet services” is not defined in the Act's definition section;⁷⁵ therefore, exactly what it entails is up for

⁷¹ Of the \$150,000 payment Comcast made in the settlement, \$50,000 was to reimburse the state for the cost of the investigation, while the other \$100,000 went to “fund future investigations on behalf of Florida consumers.” Attorney General Reaches \$150,000 Settlement with Comcast, <http://myfloridalegal.com/newsrel.nsf/newsreleases/D70311C8F6C0FC02852574B400566134> (Aug. 28, 2009) (on file with the North Carolina Journal of Law & Technology).

⁷² See *supra* Part II.B.

⁷³ This would also be a disincentive for ISPs to settle lawsuits at all, since any payments made by them would become public information.

⁷⁴ H.R. 2902 § 3(b)(4).

⁷⁵ *Id.* § 7.

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debate. Lawmakers would likely want it defined in an FTC rule-making,⁷⁶ but this would bring the dilemma of how to govern “widely used Internet services” to a standstill until the rule-making process is complete. In the interim, the FTC would have to withstand lobbying efforts from several groups. ISPs would argue for a narrow definition in order to exclude many services from the law’s jurisdiction so that the ISPs would not have to offer these services. For example, AT&T might seek to re-block voice over IP applications⁷⁷ by having them excluded from the definition. AT&T would likely also advocate keeping services they do not currently support, like some video-streaming applications⁷⁸ outside the scope of the definition. Doing so would allow AT&T to manage the amount of data on its network by picking low-bandwidth services as an alternative measure to charging users more. The services themselves would want to be included in the definition to make their customer base as wide as possible. By being kept off major ISPs, services would be unavailable to large numbers of potential users. Most importantly, users would likely lobby for an expansive definition in order to access to as many services as possible.

C. Service Plan Analysis: Predicting Future Pricing

The last requirement of the service plan analysis would be an ISP’s basis for future rate changes for the next three years, taking “inflation factors and other variables” into account.⁷⁹ While this might not be difficult for an ISP to accomplish, issues of purpose and accuracy immediately present themselves. Because of the rapid pace of change in how people use and access the Internet, any such projection could be easily mooted.⁸⁰ The Act does not

⁷⁶ *Id.* § 5.

⁷⁷ Foresman, *supra* note 38.

⁷⁸ *Id.*

⁷⁹ H.R. 2902 § 3(b)(5).

⁸⁰ Benoit Felten points out that ISPs created the pricing schemes they now want to escape. It is possible that what now appears to be an antiquated price structure seemed to be a good idea at the time it was created. Fiberevolution, *supra* note 42.

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specify why it requires the possible reasoning of future rate changes, though it might be for the ISP's benefit—to plan ahead for future pricing structures. The price prediction requirement could benefit the FTC by comparing an ISP's basis for changes in rates to the FTC's own projections and to those of other ISPs. Achieving accuracy could be difficult, but by showing that an ISP had a process for prediction and that it was accurate, both the ISP and federal reviewers would have explanations of prices to give to customers.

D. Service Plan Analysis: Enforcement

The Act proposes that its enforcement be carried out jointly by the FTC and the FCC.⁸¹ The two commissions are to review each proposed plan for violations.⁸² If violations are found, ISPs would be considered to have breached section 18(a)(1)(B) of the Federal Trade Commission Act.⁸³ This scenario is similar to what happened to Comcast in Florida when it reached a settlement with the AG.⁸⁴ The AG suspected that Comcast's bandwidth cap violated the state's Deceptive and Unfair Trade Practices Act.⁸⁵ Comcast made the issue disappear by settling the case.⁸⁶ Fortunately for ISPs, the proposed Act does not jump to prosecution.⁸⁷ Instead, it offers the ISPs some measure of process through a notification and correction procedure.⁸⁸ After review of the submitted plans, if all or part of the plan would be in contravention of the proposed Act, the FTC would notify the ISP about potential violations and instruct the ISP on how to fix them.⁸⁹

⁸¹ H.R. 2902 § 4(a).

⁸² *Id.*

⁸³ *Id.*; see generally 15 U.S.C. § 57(a)(1)(B) (2006) (stating that the FTC has to power to define unfair trade acts and practices that affect commerce).

⁸⁴ Lasar, *supra* note 7; see *supra* Part II.B.

⁸⁵ See generally FLA. STAT. § 501.201 (2009).

⁸⁶ Lasar, *supra* note 7.

⁸⁷ The FTC first reviews each service plan analysis to make sure that it does not violate § 3(a) and gives guidance to and allows ISPs to correct any flawed plan. H.R. 2902 § 4(b).

⁸⁸ *Id.*

⁸⁹ *Id.* § 4(b).

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Before any legal action is taken, the FTC would review any remedial steps taken by the ISP in order to conform to the statute.⁹⁰ While this might allow the ISPs to correct any potential missteps, it is also a stumbling block to any hope they might have to the quick introduction of new price plans. The inevitable delay during FTC review would slow the process down and take the final release date out of the ISPs' control.

As part of enforcement, the FTC must review the submitted plan analyses for unreasonably discriminatory plans.⁹¹ To do this, the FTC would have to take into account all the previously mentioned requirements of the proposed Act, but it also must consider:

- (5) whether the volume usage service plan unfairly penalizes consumers choosing to use high bandwidth Internet applications and services, including those used for one-way or two-way video; [and]
- (6) whether the volume usage service plan has anti-competitive effects on the market for video delivery or the markets for Internet applications or services[.]⁹²

This is the part of the statute to which ISPs would most likely strongly object, because it singles out high-bandwidth applications as a group, and video specifically, as services that should be competitively offered. ISPs are concerned about heavy data users⁹³ and are actively seeking ways to curb their usage.⁹⁴ According to the Act, the ISPs would have to make sure they do not unfairly penalize those same heavy users whose usage they are currently attempting to minimize.⁹⁵ This would mean that ISPs would have to come up with a way to allow high bandwidth usage while charging a fair price to consumers. Consumers have been woefully unsatisfied by previous attempts to do so.⁹⁶ Video applications are

⁹⁰ *Id.*

⁹¹ *Id.* § 3(a).

⁹² *Id.* §§ 4(c)(5), 4(c)(6).

⁹³ Cheng *supra* note 48; Reardon, *supra* note 39; Foresman, *supra* note 38.

⁹⁴ Reardon, *supra* note 39.

⁹⁵ H.R. 2902 § 4(c)(5).

⁹⁶ Anderson, *supra* note 24; Anderson *supra* note 7.

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a battleground, as video consumes a large amount of bandwidth and is becoming increasingly popular with customers.

Video is specifically mentioned because one-way sites, such as YouTube,⁹⁷ and two-way applications such as Skype,⁹⁸ have become more popular.⁹⁹ Increasing popularity has not lessened bandwidth consumption of video applications, particularly in comparison to similarly popular text-based sites such as Twitter.¹⁰⁰ Also, the “anti-competitive effects” clause of the Act has ramifications when comparing websites with disparate bandwidth needs. The clause’s purpose seems to be to make sure that customers have access to both text-based and video sites. However, by trying to place the two on a level playing field, the Act boxes ISPs into charging the same rate for services that use different amounts of bandwidth and thus cost different amounts to deliver. For example, an ISP could offer a more expensive plan designed for a customer who likes to watch movie trailers or videos, while also offering a cheaper plan for a customer who uses the Internet primarily for email and news feeds. Variable pricing would benefit both the vendor and customer because each customer would pay only for the data he or she uses. The Act prevents this desirable result by stating that there must be

⁹⁷ While users can upload their own videos, YouTube is primarily for viewing content hosted on the site, and there is no live transmission of video from user to user.

⁹⁸ Skype does not host videos, but allows live streams to be transmitted between users. A beta version of Skype allows for HD video which is higher resolution and therefore more bandwidth-intensive. Posting of Peter Parkes to Share Skype Blog, http://share.skype.com/sites/en/2010/01/hd_video_calls.html (Jan. 5, 2010) (on file with the North Carolina Journal of Law & Technology).

⁹⁹ Michael Arrington, *YouTube Video Streams Top 1.2 Billion/Day*, TECHCRUNCH, June 9, 2009, <http://www.techcrunch.com/2009/06/09/youtube-video-streams-top-1-billionday/> (on file with the North Carolina Journal of Law & Technology); Posting of Peter Parkes to Share Skype Blog, http://share.skype.com/sites/en/2009/04/2_million_skype_for_iphone_dow.html (Apr. 8, 2009) (on file with the North Carolina Journal of Law & Technology).

¹⁰⁰ Twitter allows a user to send out a message of 140 characters or fewer to a group of users that has chosen to follow her. Twitter is purely text-based but allows links to other content.

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competition in the market for Internet applications.¹⁰¹ Regardless of a customer's intentions to use only minimal data, a service plan must give access to competitive market prices for more bandwidth-heavy applications.¹⁰² Allowing users to pick and choose their services would allow ISPs more flexibility in offering price plans, but the Act seems to discourage this method.

V. FUTURE PLANS AND A POSSIBLE SOLUTION

Thus far, it seems that ISPs' attempts to change the way customers pay for the Internet have backfired. Despite this, ISPs still believe that there will be a change in pricing structure in the future.¹⁰³ One ISP trusts that wireless carriers will all eventually have to move to metered pricing, but also notes that they do not have immediate plans to do so.¹⁰⁴ The ISP reasons that metered billing will actually cut the bills of many wireless customers, as they will no longer have to support the heavy usage of other users.¹⁰⁵ Also, the ISP predicts that its next generation of wireless, Long Term Evolution ("LTE"),¹⁰⁶ will have the ability to support many different devices.¹⁰⁷ Because there will be many devices simultaneously accessing the Internet from the same home, the ISP is considering charging a base rate for having more than one device on the network, and then metered pricing based on usage.¹⁰⁸

¹⁰¹ H.R. 2902 § 4(c)(6).

¹⁰² *Id.* § 4(c)(7).

¹⁰³ See Nate Anderson, *Verizon: Metered Billing Much Fairer Than All-You-Can-Eat*, ARS TECHNICA, Jan. 11, 2010, <http://arstechnica.com/tech-policy/news/2010/01/verizon-metered-billing-much-fairer-than-all-you-can-eat.ars> (on file with the North Carolina Journal of Law & Technology).

¹⁰⁴ Joseph F. Kovar, *Verizon Exec Proposes Metered Billing For Wireless Data: Report*, CHANNELWEB, Jan. 14, 2010, <http://www.crn.com/mobile/222301053> (on file with the North Carolina Journal of Law & Technology).

¹⁰⁵ *Id.*

¹⁰⁶ LTE can be thought of as a fourth-generation or "4G" network, meaning it has more capacity and speed than the current standard, the "3G" network.

¹⁰⁷ Cecilia Kang, *Chat with Verizon Wireless CTO Lynch on End of All-You-Can-Eat Pricing*, WASH. POST, Jan. 8, 2009, available at http://voices.washingtonpost.com/posttech/2010/01/chat_with_verizon_wireless_cto.html.

¹⁰⁸ *Id.*

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While this model might not receive immediate praise, it has some merit. For now, the Internet is classified as a luxury, but the possibility of a base rate combined with metered billing suggests that perhaps the Internet will be treated as a utility¹⁰⁹ in the future.¹¹⁰ Businesses' reliance on the Internet—and its general ubiquity—would still give the ISPs opportunity to profit regardless of classification change.¹¹¹ Metered billing in some form seems to be a fair solution for ISPs and customers, but how this solution will be deployed and what rate ISPs would charge remains to be seen.

House Bill 2902 has been referred to the House Committee on Energy and Commerce. It is unlikely that the Act will pass in its current state, because of the lack of definition of some of its stipulations¹¹² and because of its non-discrimination rules to which ISPs will strenuously object.¹¹³ In addition, by giving the FTC the power to define what is a “reasonable” service plan, the Act raises the issue of how much profit would be “reasonable” for a given service plan and who would have the privilege of defining reasonable profit.¹¹⁴ There is also the matter of the ISPs' economic analysis and who would have access to that information.¹¹⁵ For this part of the Act to pass, the government would likely have to guarantee ISPs a high level of privacy to protect against criticism and trade espionage. While the Act allows for the eventuality of metered billing, it is unlikely to pass as submitted because of heavy opposition from ISPs and free market advocates who would likely object to such a government imposition on the broadband industry. That being said, the Act is a step in the right direction toward the fair sale of Internet access that is both profitable for ISPs and affordable for consumers.

¹⁰⁹ The regulatory issues involved in Internet access being reclassified as a utility merit their own Recent Development and will not be explored here.

¹¹⁰ Samara Lynn, *The Case For Time Warner Cable's Tiered Pricing*, CHANNELWEB, Apr. 16, 2009, <http://www.crn.com/networking/216600006>.

¹¹¹ *Id.*

¹¹² *See supra* Part IV.A.

¹¹³ *See supra* Part IV.B.

¹¹⁴ H.R. 2902 § 3(a).

¹¹⁵ *Id.* § 4(a). The Act specifically states that the FTC and FCC will review the plans but does not say if the plans would also be subject to public scrutiny.

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VI. CONCLUSION

The Act is too far tilted in favor of the ISP customers and too far against the ISPs to pass in its current state. With some modifications, a compromise might be reached, but the service plan analysis requirement asks too much of the ISPs. While ISPs are desperately trying to get away from flat pricing mechanisms, customers have become acclimated to and spoiled by flat rates. The introduction of caps by ISPs has not gone well, and in retrospect, does not seem to be the most successful path toward metered pricing. Despite this, the eventuality of metered pricing remains. Once users realize that more usage equals higher cost, they will be open to paying for it. The user's lust for bandwidth and simultaneous disdain for exorbitant prices will bring them to a compromise with the ISPs, either in this Act or another.