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I. Introduction

Thanks to the Federal Trade Commission for organizing this most important hearing, which I believe can mark a new chapter in the development of broadband policy. Over the last ten years, I have analyzed the emerging market for broadband Internet access, first as a senior counsel at the Justice Department's Antitrust Division and currently as a Professor of Law and Telecommunications at the University of Colorado, where I also serve as the Executive Director of the Silicon Flatirons Program. Over the last eight years, Silicon Flatirons has held a number of conferences on the policy issues emerging from the digital broadband migration and has sponsored the Journal on Telecommunications and High Technology Law, which has published many of the relevant articles on the topic (now available at www.neutralitylaw.com).

Over the last several years, I have written a number of articles on competition policy, including a recent one entitled "A Third Way on Network Neutrality," on which I will elaborate in my testimony here today.[1] In particular, I will explain how the Federal Trade Commission can play a critical role both in terms of its analysis of the broadband market as well as in developing a consumer protection enforcement strategy. To set the context for my proposal, I will first explain the state of the broadband marketplace and its regulation and then recommend a three prong consumer protection strategy.

In short, I recommend the FTC follow a strategy similar to the one it embraced as to Internet privacy: admonishing providers to disclose their broadband usage policies and punishing firms for failure to comply with their stated policies. In particular, providers should be expected to post usage policies that would specify critical information, including levels of effective bandwidth, expected performance, any prioritization of traffic measures, and network management policies. By calling for greater transparency and more effective disclosure of providers' broadband policies, the FTC can facilitate more effective competition and enable consumers to act as a check upon offensive conduct, possibly minimizing the need for more aggressive competition policy enforcement.

II. Overview of the Broadband Marketplace

Broadband Internet access is increasingly becoming the *sine qua non* of the information age. Indeed, recent surveys suggest that broadband is the communications service that consumers report that they can "least live without."[2] The development of broadband Internet technology has already transformed the music industry (think: Napster and iTunes), is in the midst of revolutionizing the delivery of voice communications (think: Vonage and Skype), and is beginning to change the video programming industry (think: YouTube).

Because broadband Internet access can support applications of all kinds, developers of new technologies—ranging from the creators of instant messaging (ICQ) to electronic commerce

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[1] My article on "A Third Way on Network Neutrality," co-authored with Robert Atkinson, is available at http://www.itif.org/files/netneutrality.pdf. My other principal work in this area includes *Digital Crossroads: American Telecommunications Policy in the Internet Age* (MIT Press 2005) (with Jonathan E. Nuechterlein); *Modularity, Vertical Integration and Open Access Policies: Towards A Convergence of Antitrust and Regulation in The Internet Age*, 17 Harv. J. L. & Tech. (2003) (with Joseph Farrell), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=452220; *Toward A Next Generation Regulatory Regime*, 35 Loy. L. Rev. 101 (2003), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=454380.

[2] *See* North American Homes Rate Broadband As Key Wireline Service, IG Online (October 27, 2006), available at http://www.arm.com/iqonline/news/marketnews/15168.html.

applications (eBay) to search (Google)—have been able to develop valuable applications without the need to ask permission of network owners. In this sense, the Internet's technical architecture is, as some have put it, "the telephone network turned inside out"—i.e., the management of Internet applications (say, Voice over Internet Protocol) is maintained at the edges of the network whereas the telephone network's applications (say, caller ID) are managed by central office switches. The difference in this architecture is very significant: the development and deployment of the system to enable 1-800 calls, for example, required considerable coordination with the incumbent telephone companies; by contrast, the development and deployment of Skype's Voice over Internet Protocol technology required no cooperation from the network providers, relying instead upon the decisions of millions of end-users to download and install a software program.

The Internet developed, based on its original "end-to-end architecture," as a best efforts network that merely handed data packets from one router to another without assigning priority to the delivery of any particular packets. Under this best efforts model, Internet traffic reaches its destination at varying times, depending on the traffic levels of the relevant Internet communications links. For those who have found emails arriving hours after they were sent, the concept of unpredictable traffic patterns in Internet networks should sound familiar.

Viewed broadly, the relevant communications links can be conceptualized into two categories: local access networks and Internet backbone networks. Depending on the relevant service providers, Internet communications can be handed off between a number of providers along the way to its end destination, meaning that delay can ensue based on congestion at any number of points. In the case of email, for example, delays may not trouble users, as they are not engaged in any mission critical or real-time communications. But for other applications, such as video conferencing or voice communications, delays can be annoying at best or can defeat the utility of the application entirely.

For enterprise consumers, it is not an option to use best efforts connections for mission critical applications (say, delivery of documents via email instead of fax machines). To ensure that enterprises enjoy guaranteed quality of service (QoS) connections, chief information officers regularly contract for "service level agreements" (SLAs) directly with Internet backbone providers (such as Sprint). SLAs vary, but a typical agreement provides limited assurances that the network will not get congested and that relevant information will be delivered in a timely manner. As for firms with major content hosted on websites (like ESPN.com), they limit the opportunities for congestion by contracting with "content delivery networks" (like Akamai) that have built out servers across the county and can store (or "cache") content locally so as to limit the likelihood of congestion along the way.

Even amidst the development of service level agreements by backbone providers and local content caching services, local access networks remain a potential bottleneck for Internet communications. Depending on the behavior of local users, Internet access can be slowed greatly or otherwise compromised by congestion. Notably, the speed at which a web page downloads or a Voice over Internet Protocol application operates is not merely the function of the available bandwidth. In particular, even with a high level of bandwidth, "latency"—delay in the delivery of information—or the presence of "jitter"—variability in a communications link—can undermine the delivery of real-time communications. If there is only latency in a network, there are strategies to manage that issue (at least up to a point), but the presence of both latency and jitter is very difficult to manage for purposes of enabling real-time applications. Because such issues are not always managed effectively, the general rule of thumb for current Internet users is that time-sensitive applications like Voice over Internet Protocol and video programming delivery are often not delivered at the same QoS levels provided by traditional communications platforms

(i.e., wireline telephone networks and cable television). At present, the network neutrality debate often focuses on the question of whether broadband providers should be allowed to offer QoS guarantees at a fee to providers of time-sensitive applications.

Although my testimony focuses on consumer protection issues, it is important to remind the Commission that many of the challenges inherent in broadband policy stem from the absence of competition between rival broadband platforms. In most parts of the United States, only cable and telephone based providers offer broadband services to consumers and, as to some business customers, there may even be only a single provider of broadband service. In many cases, the absence of competition will not affect vertically-related markets, as platform providers generally are interested in promoting applications that increase the value of their platform. There are, however, exceptions to this principle and reasons to be concerned that broadband platform providers might engage in discriminatory conduct.[3] Famously, as the FCC's decision in the Madison River Communications case (banning an effort to block Vonage's voice over Internet Protocol service) makes clear,[4] carriers may well (to protect legacy revenue streams, for example) be motivated to use "dodgy competitive tactic[s]," such as "slow[ing] down Vonage's service" or "giving network precedence to their own revenue-generating services"[5]

The FTC is poised to contribute greatly to both the understanding and enforcement of competition policy issues related to broadband access. On the understanding front, I believe there are three critical issues that the Commission should focus on. First, given that the limited competition among broadband platforms is responsible for much of the concern about anticompetitive conduct, the FTC should pay increasing attention to and advocate for the freeing up of wireless spectrum that can facilitate increased competition through the emergence of wireless broadband technologies. Second, the Commission can raise the level of debate by dissecting the scenarios under which anticompetitive actions are likely to occur and evaluating what effective regulatory strategies should address those particular scenarios.

Finally, and most importantly, the FTC can shed light on when QoS guarantees will facilitate pro-competitive price discrimination and when they will harm competition (and consumers). On one side, some have argued that policy should ban any effort to "extract rents" from applications providers and require that broadband firms simply charge end users for network access. As I see it, outright bans on any arrangements allowing application developers to pay for enhanced network performance would harm consumers because, at least in some cases, such payments would facilitate services that otherwise might not be economical. Consider, for example, that BellSouth assured Movielink greater levels of bandwidth for customers using its service in return for a fee, thereby enabling BellSouth to effectively discount Internet access for some customers while enabling a provider of valuable content to subsidize delivery of its product to particular customers.[6]

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[3] For my discussion of this issue, see Farrell & Weiser, supra note 1.

[4] Madison River Communications LLC, Consent Decree, 20 FCC Rcd 4,295 (2005), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-05-543A2.pdf. There have been some examples abroad as well. *See* Cable TV Operators Block Hana TV, The Korea Times (October 22, 2006), available at http://times.hankooki.com/lpage/biz/200610/kt2006102219434911890.htm.

[5] Daniel Klein, Why Vonage Is Just A Fad, ZDNet (May 19, 2004), available at http://techupdate.zdnet.com/techupdate/stories/main/Why_Vonage_Just_Fad.html?tag=tu.arch.link.

[6] For a discussion of this issue, see Philip J. Weiser, The Future of Video: New Approaches to Communications Regulation 19 (Aspen Institute 2007), available at http://www.aspeninstitute.org/atf/cf/%7BDEB6F227-659B-4EC8-8F84-8DF23CA704F5%7D/C&S_THE_FUTURE_OF_VIDEO.PDF.

To offer a rough analogy, banning the offering of QoS guarantees for a fee would be akin to a ban on the post office's delivery of priority basis mail. Like such a ban, it would leave customers worse off insofar as all mail would only be delivered on a first class basis.[7] To some, such a ban might be consistent with an egalitarian vision of the Internet, but such a perspective fails to account for the economic inefficiency that such a ban would entail and the reality that the Internet is already not an egalitarian medium (thanks to the availability of SLAs and caching services for those firms that can afford them). Looking at the issue using an economic lens, I believe that the critical competition policy question is what would be the impact of providing such guarantees on a selective basis (say, as opposed to a non-discriminatory basis unless a firm could offer a legitimate business reason for engaging in discrimination as to QoS guarantees). Specifically, would selectivity in terms of available QoS guarantees enable pro-consumer price discrimination (to facilitate network investment and innovation), provide a means of engaging in anticompetitive discrimination (say, to protect legacy revenues from competition), or make little or no difference at all? Particularly because the economics of price discrimination are complex and the economic impact of allowing firms to sell QoS guarantees is uncertain, it is important for the FTC to shed valuable light on a topic that has tended to generate lots of heat and too little understanding of the relevant economic issues at stake.

III. The Regulatory Climate and the Consumer Climate

For both competition policy and consumer protection matters, broadband platforms remain in a regulatory never-never land. In 2005, with the Supreme Court's imprimatur, the Federal Communications Commission concluded that broadband Internet access constituted an "information service" beyond the reach of traditional common carrier regulation.[8] Since that time, the FCC has yet to develop any clear strategy for overseeing this service. It has, instead, set forth a policy statement and has imposed conditions on merger approvals involving incumbent telephone companies. For traditional common carriers, consumer protection regulation is often carried out by state public utility commissions, but such commissions may well be barred from regulating broadband access.[9] Given the current regulatory environment, the FTC appropriately recognized that broadband Internet access is not covered by the statutory "common carrier exemption" to the FTC's jurisdiction and the agency has an important role to play in this area.[10] Consequently, the challenge for the FTC is to chart an appropriate consumer protection (and competition policy) strategy.

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[7] Some commentators indeed analogize best efforts service to first class mail and quality of service assurances (e.g., guaranteed delivery, no traffic loss, and delivery confirmation) to priority delivery. *See* Seung Jae Shin et al, *A Progressive Analysis of Internet Market: From Best Efforts to Quality of Service*, 28 Telecommunications Policy 363, 364 (2004).

[8] National Cable & Telecomm. Ass'n v. Brand X Internet Servs., 125 S. Ct. 2688 (2005) (upholding classification of cable modem services as an "information service"); Report and Order and Notice of Proposed Rulemaking, Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, 20 FCC Rcd 14,853 (2005) (classifying DSL connections as a "information service").

[9] *Cf.* Vonage Holding Companies Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission, Memorandum Opinion and Order, 19 FCC Rcd 22,404 (2004) (preempting state regulation of Voice over IP).

[10] *See* Prepared Statement of the FTC Before the Senate Judiciary Committee on FTC Jurisdiction Over Internet Access Services 3 n.4 (June 14, 2006) (citing 15 U.S.C. §§ 44, 45(a)(2)); *see also* Raymond L. Gifford, Testimony to the U.S. Senate Judiciary Committee on "Reconsidering Our Communications Laws: Ensuring Competition and Innovation" (June 16, 2006), available at http://www.pff.org/issues-pubs/testimony/060616gifford_com.pdf.

On the consumer protection front, the reality today is that most consumers are not well informed about the state of their broadband service and, to the extent that network providers engage in any forms of prioritization (or blocking of particular applications), consumers are generally unaware about the existence of such prioritization. Increasingly, technologies are being developed to prioritize different forms of Internet traffic and carriers are likely to adopt such technologies. From the consumer perspective, it is critical that they be informed about the relevant offerings and thereby placed in a position to demand particular levels of performance.

As Justice Brandeis famously put it, "sunlight is often the best disinfectant."[11] Whether the issue is federal regulatory policy or ingredients used in fast food, disclosure can often keep participants honest and enable parties to protect themselves.[12] In the Internet environment, the potential role of consumers as safeguards is quite powerful. Indeed, as Chairman Majoras identified in the Tech-Ade hearings, consumers have played a checking function on a number of occasions, including in pressuring Facebook to give users the option of turning off a feature that some believed invaded their privacy.[13] Notably, that scenario emerged as to a feature that was open and notorious. The challenge in the broadband Internet access context is that network features disliked by consumers may well be subtle and not readily apparent.

A. Disclosure of Broadband Service Offerings

The nature of broadband Internet access is not always clear to consumers and, as noted above, firms operate in a largely unregulated climate in this area. In addition to evaluating the competition policy issues in this debate, the FTC should develop a consumer education and consumer protection enforcement strategy in this area. As explained below, I recommend a three part strategy.

First, it is important that the FTC develop some basic guidance as to what information is important for consumers to understand *vis a vis* their broadband Internet access connections. In general, most consumers are often focused on the "speed" or bandwidth that a provider can offer to the exclusion of other factors. To be sure, the level of bandwidth is important and consumers should be informed of the level of effective bandwidth (as opposed to a hypothetically possible level of bandwidth) provided by their broadband connection,[14] but consumers also need

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[11] LOUIS D. BRANDEIS, OTHER PEOPLE'S MONEY AND HOW THE BANKERS USE IT 92 (1913).

[12] As a former FTC Bureau of Competition put it:

> Agencies enhance understanding of the process and foster better antitrust risk assessment by companies when they explain why they decided to act or not act. Transparency matters. Critical review of agency performance and of outcomes is not possible without access to information.

William J. Baer, Testimony Before the Antitrust Modernization Commission on U.S. Merger Enforcement Policy 12-13 (November 17, 2005), available at http://www.amc.gov/commission_hearings/pdf/Baer_Statement.pdf.

[13] Anne Broache, FTC Chief Warns Against "Unnecessary" Net Rules, CNET News.com (November 7, 2006), available at http://news.com.com/FTC+chief+warns+against+unnecessary+Net+rules/2100-1028_3-6132772.html.

[14] On this point, the Australian Competition & Consumer Commission (ACCC) cautioned against "up to" claims of bandwidth availability where the basis of such claims was theoretically possibility and not practical availability. To avoid engaging in a misleading or deceptive claim, the ACCC suggested that ISPs must be able to substantiate stated maximums as being achievable by their users and, moreover, recommended the advertising of a "typical range of speeds." Australian Competition & Consumer

to know whether guaranteed QoS assurances are available either to them or providers delivering content or services over the network. (Such assurances, as noted above, are likely to address issues related to latency and jitter as well as available bandwidth.) Finally, in addition to disclosing any such arrangements, broadband providers should explain whether particular offerings are suitable for real-time applications (such as voice communications or video conferencing) and whether they are selling applications providers QoS assurances such that those services can be delivered effectively.[15]

Second, it is important that consumers understand the network management policies used by their broadband provider. As almost all observers appreciate, broadband providers must manage their networks and it is quite likely (and healthy) that they will use different strategies to do so. Consider, for example, that peer-to-peer video traffic may well consume as much as 50%-60% of available bandwidth while serving only a limited number of consumers.[16] Whether or not this figure is accurate, the potential for some applications to be bandwidth hogs underscores that there are legitimate reasons that broadband providers will need to give priority to certain applications over others and vendors are indeed developing routers to do just that.[17] My point, therefore, is not only that the FTC should welcome such practices, but also ensure that to the extent firms embrace them, they should disclose them to their customers. Similarly, the FTC might also encourage broadband providers to disclose to consumers any monitoring of their communications, including those required by law (such as the Communications Assistance in Law Enforcement Act, or CALEA).

The third element of my recommendation is that broadband providers should be expected to offer traditional best efforts Internet access when they sell "broadband" Internet access. As I noted above, I believe that paid access for QoS guarantees through *de facto* "fast lanes" of Internet access is a pro-consumer development and one that should not be banned. I also believe, however, that the continued offering of best efforts broadband is critical to: (1) providing consumers what they expect from broadband Internet access; and (2) enabling application

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Commission, Broadband Internet Speed Claims and Trade Practices Act of 1974 (January 2007), available at http://www.accc.gov.au/content/item.phtml?itemId=779405&nodeId=defae98eed0b8c63cbfc6c34155de8f4&fn=Broadband%20internet%20speed%20claims%20and%20the%20Trade%20Practices%20Act%E2%80%94Information%20paper.pdf.

[15] To the extent that a broadband Internet access service is likely to be limited in any regard such that it cannot support commonly used applications effectively, it is important that such limitations be disclosed conspicuously. *See* Broad Architectures, Best Practices & Service Features for The Increased Deployment of High-Speed Residential Internet Access Service, NRIC VII Focus Group 4, Final Draft (September 21, 2005), available at http://www.nric.org/meetings/docs/meeting_20051019/NRICVII_FG4_FinalReport_September_2005.pdf (noting expectation that broadband connections feature levels of latency low enough to be compatible with commonly used applications).

[16] Philip J. Weiser, Center for New West Conference on Network Neutrality Discussion Paper 5 (January 11, 2007), available at http://www.centerfornewwest.org/pdf/TelecomSummary.pdf; Lucas van Grinsven, Google and Cable Firms Warn of Risks From Web TV, USA Today (February 7, 2007), available at http://www.usatoday.com/tech/news/2007-02-07-google-web-tv_x.htm (citing Gartner report that 60% of Internet traffic is peer-to-peer video).

[17] The Cisco SCE 2000 product, for example, recognizes 600 different protocols and allows for controlling traffic by treating different applications differently. *See* Cisco Service Control Application for Broadband User Guide, Rel 3.05, available at http://www.cisco.com/en/US/products/ps6135/products_user_guide09186a9fd.html. Similarly, Packeteer has developed a system for identifying and managing traffic. *See* http://www.packeteer.com/resources/prod-sol/ApplicationDiscovery.pdf.

developers to build new products without first having to enter into arrangements to ensure a reliable level of quality of service.[18] To ensure that the preservation of best efforts Internet access continues, Robert Atkinson and I proposed both that providers not be able to use the term "broadband" without offering a sufficient level of best efforts connectivity (as that is what consumers have come to expect) and that tax incentives for broadband investment be linked to the provision of such a level of best efforts connectivity. Over time, the relevant level of best efforts connectivity needs to evolve, as evinced by the fact that the FCC's early definition of broadband—at least 200 kilobits per second—is increasingly archaic in a world where few broadband consumers subscribe to such connections. If the FTC chooses not to insist on a level of continuing best efforts delivery, it should pay close attention to a broadband provider's disclosures as to what methods of prioritization are used and ensure (perhaps through a conspicuous disclaimer) that consumers appreciate that the traditional best efforts Internet delivery is not offered by that provider.[19]

In insisting on the sale of "best efforts" Internet access as part of "broadband" offerings, the FTC should realize that there are, in effect, two other delivery paths that firms are likely to use. As noted above, firms will also be in a position to sell prioritized Internet access and the sale of such access on a discriminatory basis might well raise competitive concerns. But broadband providers also will use their own "private network" and Internet technology to delivery their own services, such as IPTV or Voice over IP as well as possibly other services. As an initial matter, it is probably prudent to leave those services outside of any regulatory oversight–provided that independent providers are still able to compete. Nonetheless, to the extent that firms seek to avoid the oversight of discriminatory access to QoS assurances by calling the relevant service one delivered on a private network, the rule of forbearance as to regulatory oversight of how private network-based services are offered might need to be revisited.

B. The Role of FTC Enforcement and Self-Regulation

In essence, I believe that the FTC can contribute greatly to broadband policy by promoting a truth-in-advertising model and encouraging industry self-regulation along the lines of its efforts with respect to Internet privacy.[20] This model begins with the development of clear broadband usage policies that can be posted on the websites of broadband providers. As noted above, the FTC should develop a set of guidelines—and they could be relatively informal—for what critical information providers should post as part of broadband usage policies. Similarly, the agency should seek to educate consumers as to what the usage policies mean, including how they might test to see whether their provider is providing the type of service that it promises to deliver. In cases where a provider is promising one set of policies and acting differently, the FTC should use its authority to sanction such behavior.

The Internet industry is still evolving and it remains possible that, particularly with FTC encouragement, forums for self-regulation may well develop. Given the incentive of applications developers to measure network performance and monitor whether it matches the promises of broadband providers, not to mention the vigilance of many Internet users, it is likely that complaints will emerge where performance deviates in practice from what was promised. As an

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[18] The USC Annenberg Network Neutrality principles called this "Basic Access Broadband," defining it as "a meaningful, neutral Internet connectivity service." See http://www.annenberg.edu/news/news.php?id=13.

[19] For a discussion of different systems of prioritization, see Edward W. Felten, The Nut and Bolts of Network Neutrality, available at http://itpolicy.princeton.edu/pub/neutrality.pdf.

[20] *See* Steven Hetcher, *The FTC As An Internet Privacy Norm Entrepreneur*, 53 Vand. L. Rev. 2041 (2000).

initial matter, the FTC may well need to take on the responsibility of managing such cases itself. Over time, I believe that there is a role for a dispute resolution mechanism along the lines of Better Business Bureau's National Advertising Division (whose decisions are reviewed by the National Advertising Review Board), which acts as a self-policing mechanism and refers the truly egregious cases to the FTC for resolution.[21] Moreover, users themselves may engage in the sort of Net activism that Chairman Majoras discussed with respect to Facebook, listing complaints on web sites and calling attention to policies that are either misleading or objectionable.[22]

For the FTC to manage dispute resolution in this context effectively, I recommend that it hire Internet technologists to support its investigations and judgments in this area. Network performance issues may well challenge the abilities of even the best technology-minded lawyers. Moreover, bringing outside experts up-to-speed on the relevant issues is often time consuming and expensive. As Judge Posner put it, "cases in the new economy present unusually difficult questions of fact because of the technical complexity of the products and services produced by new-economy industries," particularly because "[c]omputer science and communications technology are much more difficult areas than the average body of scientific or engineering knowledge that lay judges and jurors are asked to absorb en route to rendering a decision."[23]

C. The Value of A Functioning Disclosure Regime

The Internet is still developing and the FTC has an opportunity to help it develop effectively. Indeed, there are a number of examples where regulatory initiatives that provide more readily understandable and enforced disclosure requirements have facilitated competition and led to consumer benefits. Consider, for example, the development of competition between snack food providers to offer healthy snacks. Today, consumers enjoy a variety of products that offer consumers lower calorie, lower sodium, or lower fat products. But such competition for such products did not emerge effectively until a readily understandable disclosure regime for nutritional information was developed and implemented.[24]

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[21] *See* Jeffrey S. Edelstein, *Self-Regulation of Advertising: An Alternative to Litigation and Government Action*, 43 IDEA 509 (2003) (explaining regime and noting that only 5% of cases are referred to the FTC); Andrew Strenio et al, *Self-Regulatory Techniques for Threading the Antitrust Needle*, Antitrust 57 (Summer 2004) (calling the NAD a "notable example of successful self-regulation"). It is important to note that this regime calls for ultimate FTC oversight, which is significant because self-regulatory regimes can be ineffective to the extent that there is not a credible threat of enforcement and that gaming will be punished to prevent firms from misleading consumers to gain an advantage. *See* Bill Henderson, USNWR Gaming and the Failure of Self-Regulation, Empirical Legal Studies Blog (January 25, 2007), available at http://www.elsblog.org/the_empirical_legal_studi/2007/01/usnwr_gaming_an.html; *see also* Neil Weinstock Netanel, *Cyberspace 2.0*, 79 Tex. L. Rev. 447, 478 (2000) (arguing, based on Internet privacy case, that self-regulatory programs only work when government oversight mechanisms are in place).

[22] A popular Bittorrent client (used for peer-to-peer file sharing), Azureus, has a wiki that allows users to categorize their ISPs in terms of their policies on shaping peer-to-peer traffic. *See* http://www.azureuswiki.com/index.php/Bad_ISPs

[23] *See* Richard A. Posner, *Antitrust in the New Economy*, 68 Antitrust L.J. 925, 936-37 (2001).

[24] As Ellen Goodman related,

> It seems natural that food manufacturers with a relatively good nutritional story to tell would disclose nutritional information. Kraft and Nabisco could then compete on nutritional value or Kraft could use nutritional information to distinguish its premium brands like Progresso. So one might think, and yet the market did not produce widespread disclosure of nutritional information until federal regulation required it. It was the regulation that created a market for nutritional information that now appears to be strong.

The ability of consumers to confidently and reliably purchase products that they know to be of a certain quality is a significant factor in encouraging additional consumption. In the case of restaurants, for example, a program instituted by the Los Angeles County Health Department requiring the posting of understandable grade cards evaluating restaurant hygiene led to increased consumption of restaurant food. The authors of the study documenting this development explained that such cards led restaurants to improve their hygiene and enabled consumers to compare between different options more effectively. As they explained, "the grade cards make consumers more confident about trying restaurants they have not experienced before and make them less captive to the restaurants they have had good experiences at."[25] Similarly, as consumers become more appreciative of the different options available via different broadband options, they will be better able to make informed choices about their broadband connections and available applications.

IV. Conclusion

The market for broadband Internet access is still evolving and we are likely to witness considerable innovation at both the applications level and in the network itself. A thoughtful competition policy and consumer protection strategy thus must embrace and facilitate the remarkable pace of innovation in the Internet sector. Regardless of its approach on competition policy (which is heavily contested), the Federal Trade Commission has an opportunity to launch a consumer protection initiative that will provide considerable benefits and impose minimal burdens on broadband providers interested in treating their customers fairly. I would strongly encourage the Commission to move forward quickly with a program along the lines I have described as, in addition to protecting consumers and facilitating the healthy development of this market, it might well also enable consumers to become a more effective force in checking any potential abuses as to the prioritization of some services over others.

Ellen Goodman, *Stealth Marketing and Editorial Integrity*, 85 Tex. L. Rev. 83, 139 (2007); *see also* Archon Fung et al., The Political Economy of Transparency 16-17 (2004), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_ id=766287 (noting competition based on nutritional information after government regulation set forth framework for disclosure).

[25] Ginger Zhe Jin & Phillip Leslie, The *Case In Support of Restaurant Hygiene Grade Cards*, 20 Choices 97, 100 (2005), available at http://www.stanford.edu/~pleslie/Jin%20and%20Leslie%20Choices%202005.pdf*; id.* at 101 ("By increasing the provision of information to consumers, powerful economic incentives are created for restaurants to improve hygiene, leading to a significant improvement in public health outcomes.")