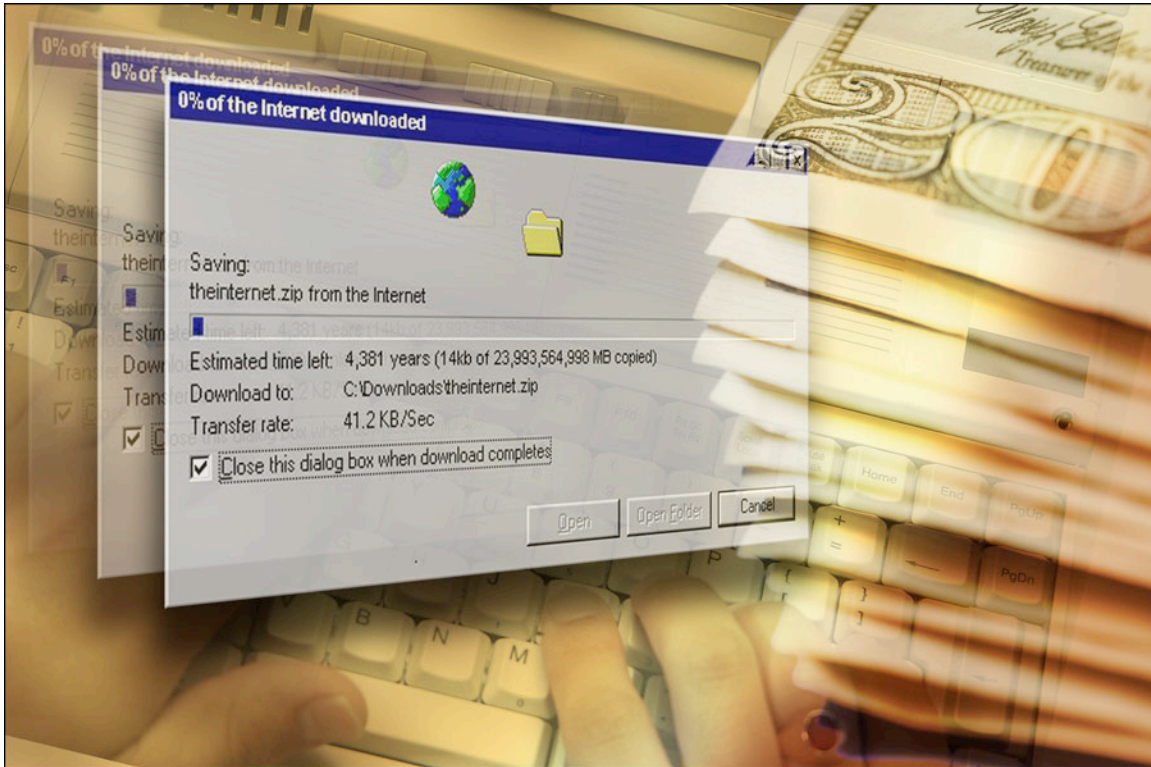


Broadband Reality Check

The FCC ignores America's Digital Divide



August 2005

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Free Press



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Executive Summary

On July 7, 2005, Federal Communications Commission Chairman Kevin Martin published an op-ed in the *Wall Street Journal* titled "The United States of Broadband." In the article, Martin highlighted two key findings from a new FCC report on broadband access and penetration: the United States "leads the world in total number of broadband connections" and "broadband platforms are engaged in fierce competition." He lauded the Supreme Court's recent *Brand X* decision and praised the results of the FCC study, proclaiming that "the dramatic growth in broadband services depicted in this report proves that we are well on our way to accomplishing the president's goal of universal, affordable access to broadband by 2007."

Martin's conclusion is either wildly optimistic or intentionally misleading. Contrary to the chairman's upbeat commentary, the United States is falling dramatically behind the rest of the industrialized world in broadband deployment. The digital divide seriously burdens economic growth and educational opportunity. Universal, affordable broadband remains a distant prospect in the United States, largely because of policies that stifle competition in the name of deregulation. The elimination of open access requirements for cable modem and DSL services by the FCC will only worsen this situation.

The United States lacks a national broadband policy. The FCC and Congress never have seriously addressed the lack of competition in the broadband market; they have not moved to reallocate spectrum to promote new technologies and lower prices; and they have blithely applauded the incumbent industries that have kept the market narrow and the digital divide wide. This report by Free Press, Consumers Union and the Consumer Federation of America highlights recent research demonstrating these problems. Among its findings:

- **The FCC report overstates broadband penetration rates, service quality, and the competitive conditions of the marketplace.**
 - **The standard the FCC uses to measure "high-speed" connections is misleading and low.** The 1996 Telecom Act mandates the FCC to ensure deployment of broadband "that enables users to originate and receive high-quality voice, data, graphics and video telecommunications." However, the standard used by the FCC to measure "high-speed" connections (200 kbps) is barely enough for users to *receive* low-quality streaming video. It is certainly insufficient for users to *originate* high-quality video.
 - **The FCC uses a misleading measure of broadband coverage.** The Commission counts a ZIP code as covered by broadband service if it contains at least *one* broadband subscriber. No consideration is given to the price, speed or availability of connections across the ZIP code.
 - **Broadband costs in the United States remain high, despite growth in the total number of connections.** Meanwhile, the cost of broadband in other countries has dropped dramatically while speeds have increased. On a per megabit basis, U.S. consumers pay 10 to 25 times more than broadband users in Japan.
 - **The average speed of U.S. broadband connections has seen minimal increase over the past five years.** More than half of DSL lines do not offer capacity of 200 kilobits per

second (kbps) in both directions. Consumers in France and South Korea have residential broadband connections with speeds 10 to 20 times higher than those in the United States.

- **Reports of a broadband price war are misguided.** Analysis of “low-priced” introductory offers by companies like SBC and Comcast reveal that these are little more than bait-and-switch gimmicks designed to capture market share.
 - **The “fierce competition” among broadband platforms is seriously overstated.** The FCC’s own report shows that satellite and wireless broadband continue to lose market share. Today, cable and DSL providers control almost 98 percent of the residential and small-business broadband market.
 - **Open access policies create competition in the broadband market.** Open access, or common carriage, for competitive DSL carriers has loosened the dominance of cable modem service in the residential market. Despite gains in service availability, the FCC seems eager to eliminate open access, entrench an incumbent duopoly, and stifle consumer choice.
- **The digital divide persists and shows no sign of narrowing.**
- **The United States continues to fall in the world rankings of broadband penetration.** The United States now stands at 16th worldwide in the number of broadband subscribers per 100 inhabitants, placing it far behind countries such as Canada, Japan, and South Korea. The United States also ranked 16th in the net change in broadband penetration from 2003 to 2004, indicating a comparatively slow pace of broadband adoption within the country.
 - **Broadband adoption is highly dependent on socio-economic status.** Almost 60 percent of households with incomes above \$150,000 have a broadband connection, while less than 10 percent of households with incomes below \$25,000 have a connection.
 - **The gap between rural and urban America persists.** The broadband penetration rate in urban and suburban households is almost double the rate in rural areas.

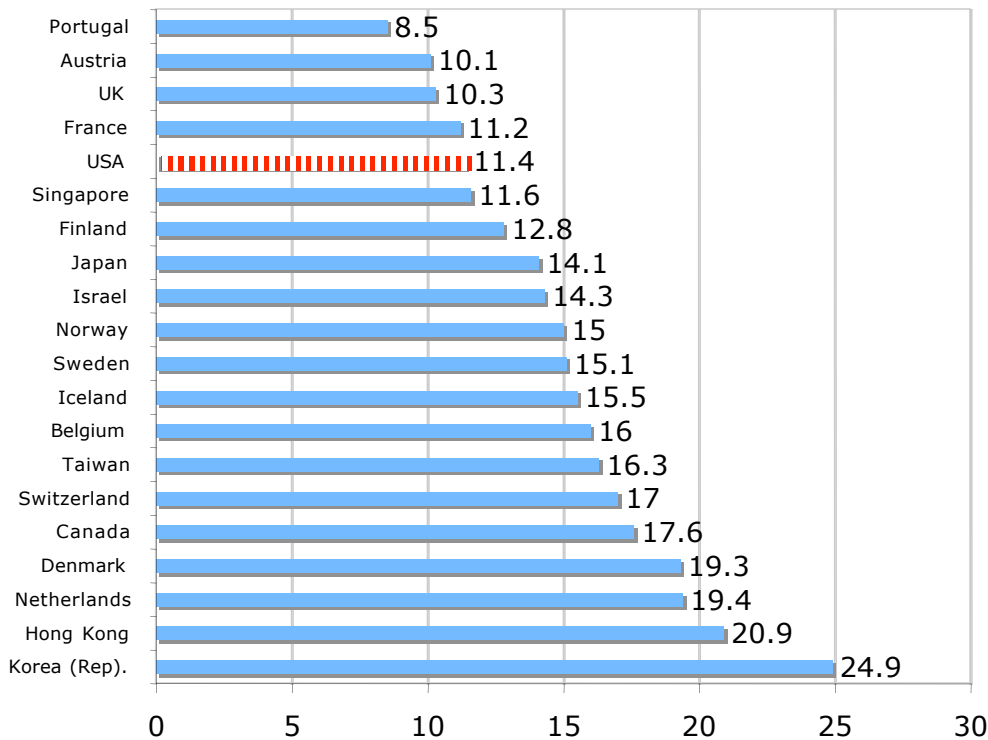
In short, American broadband connections are slow and expensive. A serious debate about broadband policy cannot be based on wishful thinking or misleading interpretations about the marketplace. Congress and the FCC must take a hard look at the data, come to terms with the severity of the digital divide, and construct policies that promote competition and expand low-cost, high-speed service to more American households. Only then can the United States expect to claim its place atop the list of the world’s most advanced broadband nations.

United States Falling Behind in Broadband Penetration

The FCC's latest report on broadband access¹, a study of the broadband market required by Section 706 of the Telecommunications Act of 1996, correctly concludes that the United States leads the world in the total number of broadband connections. However, the United States continues to fall behind most other leading industrialized countries in broadband availability on a per capita basis.

According to the International Telecommunications Union (ITU), last year the United States dropped from 13th to 16th place in broadband penetration, with 11.4 connections per 100 inhabitants. By comparison, South Korea leads the world with 24.9 connections per 100 inhabitants.² According to the 2004 broadband penetration data compiled by the Organization for Economic Co-operation and Development (OECD), the United States was 16th in net increases in broadband penetration from 2003 to 2004.³ This puts the United States near the average for the OECD, and far behind countries such as England and France, which have made rapid progress in broadband adoption.

Figure 1: Broadband Subscribers per 100 Inhabitants



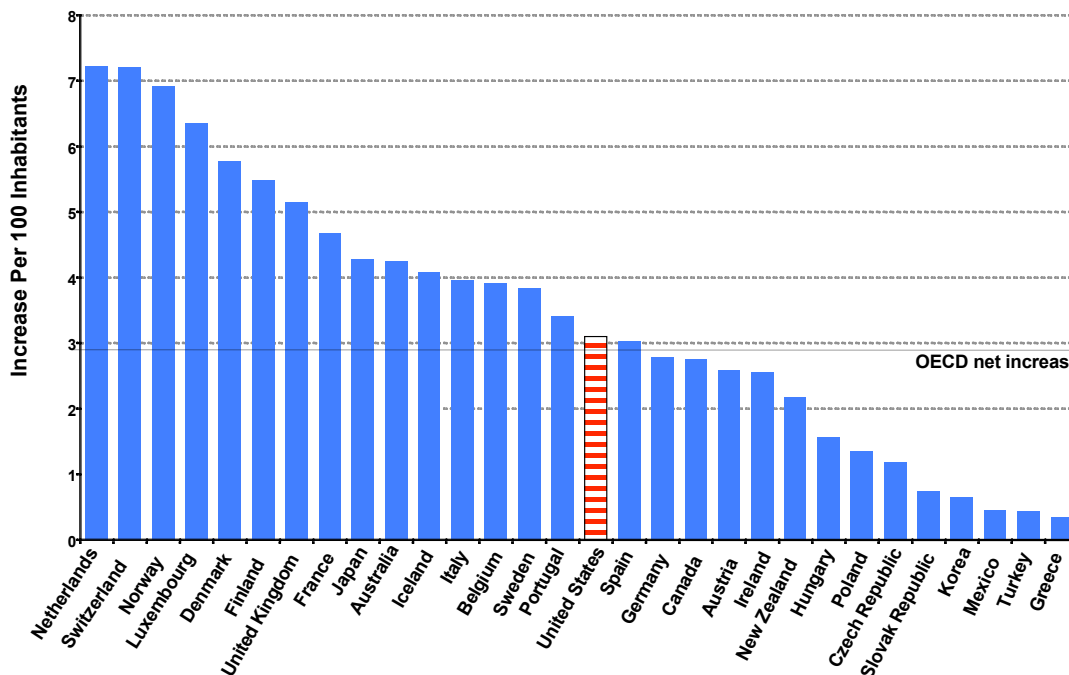
Source: International Telecommunications Union, January 2005

¹ Federal Communications Commission, "High-Speed Services for Internet Access: Status as of December 31, 2004," July 2005. Available at http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/hspd0705.pdf

² ITU, April 13, 2005. Available at <http://www.itu.int/osg/spu/newslog/ITUs+New+Broadband+Statistics+For+1+January+2005.aspx>

³ OECD Broadband Statistics, December 2004. Available at http://www.oecd.org/document/60/0,2340,en_2649_34225_2496764_1_1_1_1,00.html

Figure 2: Net Increase in Broadband Penetration, 2003-2004



Source: OECD, 2005

United States Falling Behind in Broadband Speed

The FCC defines a “high-speed” connection as one capable of transmitting greater than 200 kilobits of data per second (kbps) in one direction — upload or download. This speed is just four times faster than the typical dial-up connection but far below what countries like Canada consider to be “broadband.” Canada defines broadband as a connection capable of transmitting data at greater than 1.5 megabits of data per second (Mbps) in both directions.⁴ This standard ensures at a minimum that consumers can both download and upload video to the Internet. Yet very few of the consumer DSL or cable modem services in the United States meet such a standard.

In the United States, the average Asymmetric Digital Subscriber Line (ADSL) connection offers download speeds between 256 kbps and 1.5 Mbps, and upload speeds between 128 kbps and 384 kbps.⁵ The average cable modem connection provides download speeds between 2 to 3 Mbps, with upload speeds varying between 256 kbps and 384 kbps.⁶ These connections cost consumers \$35 to \$50 per month on average.⁷

⁴ See <http://www.broadband.gc.ca/pub/program/NBTF/recommendations.html#definitions>

⁵ ADSL speeds are higher the closer a user is to the provider’s central office.

⁶ High-speed cable connections are shared, and speeds are affected by user congestion. Though cable has the potential to provide speeds faster than ADSL service, on average a cable modem user will experience download speeds similar to ADSL.

⁷ Average prices determined from standard rates of top providers as of July 11, 2005. Most companies offer low-priced introductory rates, but these often expire after a brief period of time and are subject to early termination fees. Prices for these services are considerably higher if users do not also subscribe to telephone or cable TV service along with broadband.

Figure 3: U.S. Broadband Basics – Speed and Price

Service	Provider	Monthly Fee	Start-Up Costs	Maximum Download Speed#	Maximum Upload Speed
ADSL	Verizon	\$37.95	\$39.95	3.0 Mbps	128 kbps-384 kbps
	Covad	\$39.95	\$99.00	1.5 Mbps	128 kbps
	Speakeasy	\$39.95	\$99.00	728 kbps	128 kbps
	Earthlink	\$44.95	varies	3.0 Mbps	128 kbps-384 kbps
	SBC	\$49.95	\$99.00-\$349.00	1.5 Mbps	128 kbps
	Atlantech	\$59.00	varies	1.5 Mbps	128 kbps
	Bell South	\$45.92	\$0-\$115.00	1.5 Mbps	256 kbps
	Bell South DSL-Lite	\$34.95	\$0-\$115.00	256 kbps	128 kbps
Cable Modem	Comcast	\$42.95	\$39.90-\$149.99	4.0 Mbps	384 kbps
	RoadRunner	\$44.95	varies	5.0 Mbps	384 kbps
	Charter	\$42.99	\$74.00	3.0 Mbps	256 kbps
	Earthlink	\$45.95	varies	4.0 Mbps	384 kbps
	Adelphia	\$43.95	varies	4.0 Mbps	384 kbps
	Cox	\$49.00	varies	4.0 Mbps	512 kbps
	TW/Brightline	\$41.95	varies	5.0 Mbps	384 kbps
Satellite	DirecWay	\$59.95	\$600.00	500 kbps	50 kbps
	Wildblue	\$69.95	\$478.95	1.0 Mbps	200 kbps

ADSL Speeds depend on customer's distance from provider's central office. Cable line speeds can vary due to bandwidth sharing. These speeds are maximum without sharing. Prices are based on customer also subscribing to phone service or cable TV service.

By comparison, Japanese consumers have access to broadband connections with speeds up to 100 Mbps.⁸ Prices for these connections are much lower than in the United States. A 26 Mbps connection in Japan costs approximately \$22 per month.⁹ In France, a 15 Mbps connection costs about \$38 per month.¹⁰ Chairman Martin and other observers point out that these countries are more densely populated than the United States, and therefore face fewer challenges when implementing broadband service.¹¹ But Canada, whose population density is one-tenth that of the United States¹², has a broadband penetration rate more than 50 percent higher. Furthermore, Canadians have access to 4 Mbps connections at less than \$38 per month.¹³ The difference is not population density or topography. The difference is that other nations have national broadband policies designed to create competitive marketplaces.

Indeed, Martin's claim that other nations only appear to be doing better because of higher population density does not withstand closer scrutiny. Using broadband penetration data on the 30 leading OECD nations, and controlling for both income and population density, we find eight nations performing better than the United States. They are Korea, Netherlands, Denmark, Iceland, Canada, Finland, Norway, and Sweden.¹⁴

⁸ This speed is available for some DSL connections. Residential Fiberwire subscribers in Japan have access to speeds over 1,000 Mbps.

⁹ Thomas Bleha, "Down to the Wire," *Foreign Affairs*, May/June 2005.

¹⁰ "Competition Brings French 15 Mbps-18 Mbps Broadband," *The Online Reporter*, Oct. 30 2004.

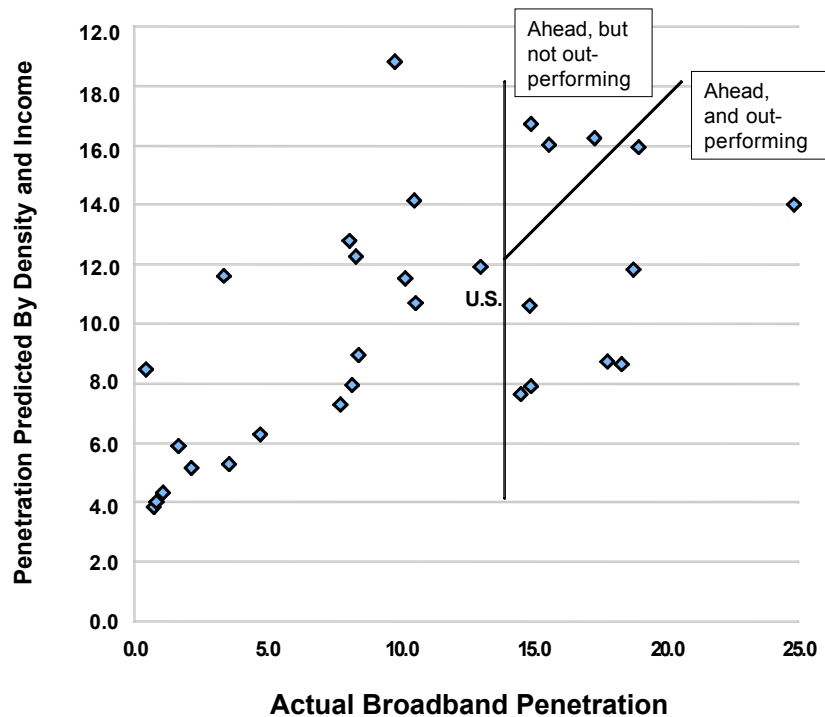
¹¹ Kevin Martin, "United States of Broadband," *Wall Street Journal*, July 7, 2005.

¹² CIA World Fact Book, 2005.

¹³ Standard price offered by Bell Canada as of July 11, 2005.

¹⁴ Another three OECD nations, Israel, Taiwan and Hong Kong, also appear to be outperforming the United States, but complete data were unavailable. Counting these countries would put the US 12th in broadband penetration when income and population density are taken into account.

Figure 4: U.S. vs. Other Nations in Broadband Penetration
Controlling for Income and Population Density



Source: OECD, 2005

FCC Lowers "High-Speed" Standard to Mask Market and Policy Failures





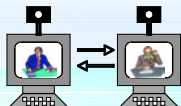

The 1996 Telecommunications Act directs the FCC to “determine whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion.” If not, the FCC is required to “take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market.” Congress defined “advanced telecommunications capability” as “high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.”¹⁵

Given this mandate, the FCC has chosen a truly incomprehensible definition of broadband, setting the standard of “high-speed” at a download connection of 200 kbps, with no minimum definition for upload capacity. Using this standard as its metric for assessing the progress of broadband deployment is problematic on its face. Congress required the FCC to define high-speed connections as those that can *originate and receive* high-quality video transmissions. At 200 kbps, consumers can do neither. Downloading streaming video requires 1 Mbps. One channel of standard quality TV requires at least a 4 Mbps connection; HDTV viewing is only possible with a 20 Mbps connection.¹⁶ The Commission does not explain how it justifies this discrepancy.

¹⁵ Public Law 104-104, Section 706, “Advanced Telecommunications Incentives.”

¹⁶ “Relentless Advance of True Broadband,” *Online Reporter*, June 11, 2005.

Figure 5: Applications and Required Download Speeds

Download Speed	Application	Service Speed & Price
56 kbps	Low Qual. Streaming Audio 	Dial Up - 56 kbps/\$10 - \$24 mo.
90 kbps	VoIP (Vonage) 	
200 kbps	FCC Definition of High-Speed	U.S. DSL Lite - 256 kbps/\$35 mo.
1 Mbps	Streaming Video 	U.S. Satellite - 1 Mbps/\$90 mo. U.S. DSL - 1.5 Mbps/\$50 mo. U.S. Cable - 3 Mbps/\$43 mo.
4 Mbps	SDTV - 1 Channel 	Canada DSL - 4 Mbps/\$38 mo.
6 Mbps	Videoconferencing 	
20 Mbps	HDTV - 1 Channel 	France - 15 Mbps/\$38 mo. Japan - 26 Mbps/\$22 mo.
100 Mbps		

Source: Online Reporter, 2005; Vonage; Free Press research

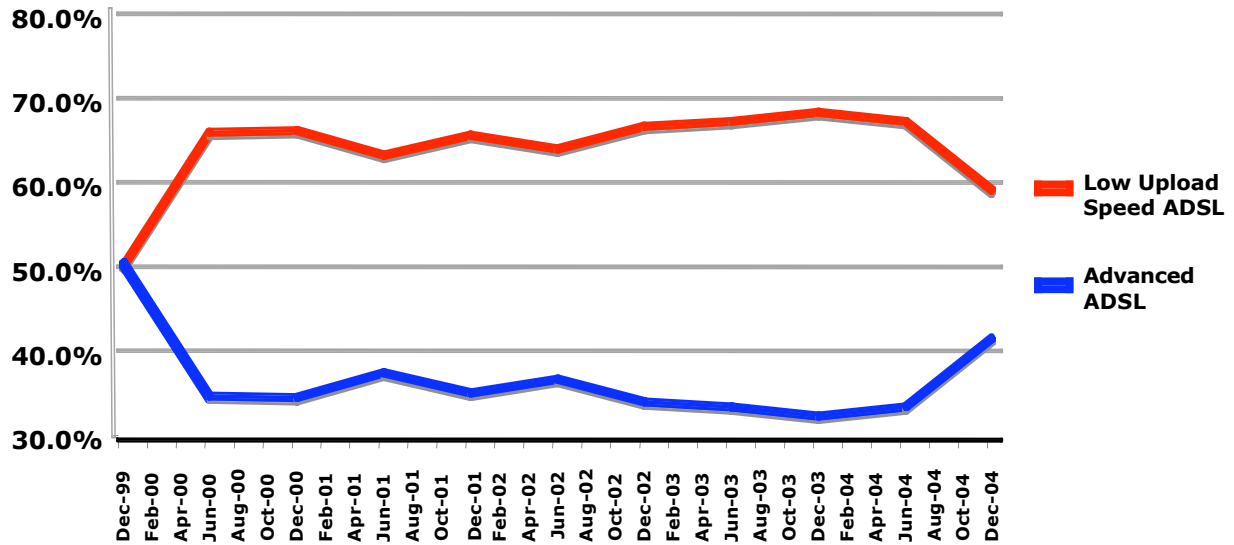
The definition of “high-speed” as greater than 200 kbps in *one direction* indicates a lack of concern at the FCC about the importance of upload speeds. Because the Internet is a two-way medium, sluggish upload speeds will slow down the entire Web, regardless of the ubiquity of fast download connections. As Figure 5 shows, applications like Voice over Internet Protocol (VoIP), high-quality video conferencing, and other interactive programs require fast, symmetrical connections to function properly. Furthermore, if only a minority of content providers have access to fast upload connections, then the Internet starts to look like another one-way broadcast medium rather than a two-way communications network.

Growth in DSL Market Led by Low-Speed Lines

Data from the recent FCC report indicate that almost 60 percent of the ADSL lines currently in service have upload speeds below 200 kbps. This is cause for concern, as nearly half of the new high-speed connections added in 2004 were ADSL lines. Furthermore, Symmetrical Digital Subscriber Lines (SDSL) currently account for only 3 percent of all DSL lines servicing residential or small business users.

Martin's *Wall Street Journal* op-ed shows no concern about upload speeds. Quixotically, his celebration of the current broadband market accepts the proliferation of sub-standard connections as a success. The United States has a broadband market that has not met the standards of Congress, has failed American consumers, and has fallen behind the pace of global development.

Figure 6: Percent of DSL Lines by Upload Speed

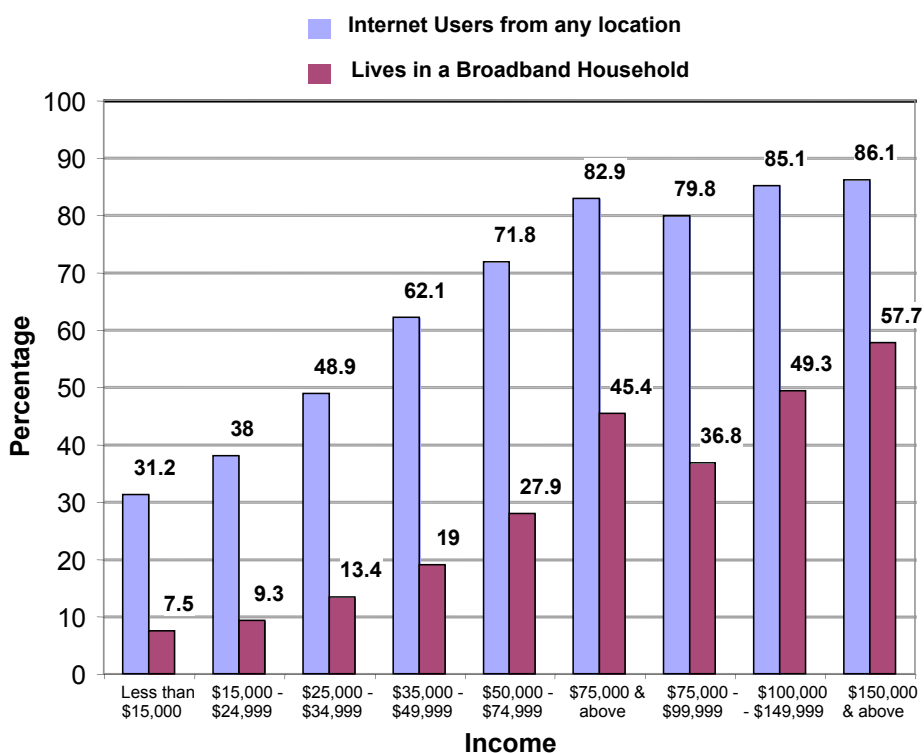


Source: FCC, 2005

The Digital Divide Persists

The gap between those who can afford broadband and those who cannot persists in the United States despite growth in the total number of broadband connections. According to a 2003 Census Bureau survey of homes with an Internet connection, more than half of households with incomes above \$100,000 a year have broadband, while less than one-third of households with incomes below \$100,000 do.¹⁷ At the margins, the gaps are even wider. Almost 60 percent of households with annual incomes above \$150,000 have a broadband connection, while less than 10 percent of households with incomes below \$25,000 do.¹⁸

Figure 7: Internet Usage by Family Income



Source: U.S. Census Bureau, 2003

The most recent data available from the Census Bureau are now two years old. However, given that broadband prices and speeds have remained relatively constant for the past two years, there is no reason to predict a significant decline in the income disparities. There are few improved services to attract reluctant consumers to buy into the market, and the price point remains outside the reach of many households. Even if one generously assumes progress in offering broadband to underserved areas, rural America and low-income urban neighborhoods remain the least likely to have access, the least likely to have affordable prices, and the least likely to have competitive

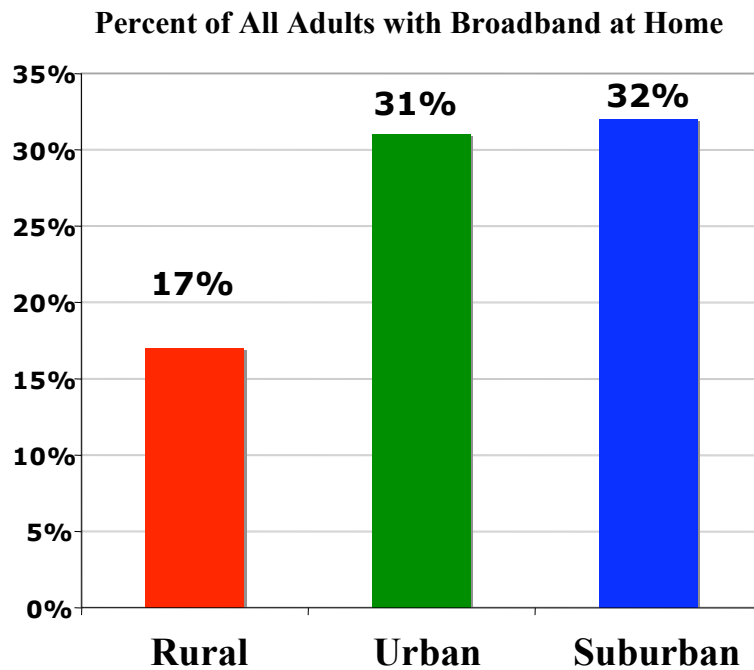
¹⁷ U.S. Census Bureau, Current Population Survey Supplements, October 2003.

¹⁸ Ibid.

service providers from which to choose. These are market failures that demand public policy solutions.

A digital divide also persists between rural and urban/suburban America. The broadband penetration rate in urban and suburban areas is almost double that of rural areas.¹⁹ Broadband subscribers are present in 99 percent of the most densely populated ZIP codes, but in the least populated ZIP codes this figure drops to 75 percent, according to the FCC.²⁰ Furthermore, though the total number of connections has increased, the percentage of U.S. households with no access to broadband has remained constant at 19 percent.²¹

Figure 8: Broadband Adoption by Area



Source: Pew, June 2005

Not Every ZIP Code Has Full Broadband Coverage

The decisive gap between rural and urban America is masked in the FCC’s conclusions about broadband penetration. In the FCC data, a ZIP code is “covered” by broadband if it contains *at least one* broadband subscriber. That means if broadband is available for only a small percentage of households in the ZIP code, it still counts. It also counts if the only service available is a very costly and very slow satellite connection. So long as one person has purchased a connection, the ZIP code meets the single subscriber test.

¹⁹ John B. Horrigan, “Broadband Adoption at Home in the U.S: Growing But Slowing,” Pew Internet and American Life Project, June 2005.

²⁰ “High-Speed Services for Internet Access: Status as of December 31, 2004,” FCC, July 2005.

²¹ Presentation by Kevin J. Martin at the 22nd Annual Institute on Telecommunications Policy & Regulation, December 3, 2004.

For an illustration of the misleading nature of the ZIP code method of accounting for broadband penetration, consider the case of Loudoun County, Virginia, just outside Washington, D.C. A recent survey by the county concluded that one-third of the households in the county (more than 27,000) have no access to high-speed connections.²² This is rather ironic, considering the area is home to Internet giant America Online and next door to a mid-Atlantic communications hub. But Loudon County illustrates why the single subscriber test is not a useful method for understanding the current state of the market, the consumers who remain underserved, and the policies that can help correct these failures.

The Myth of Fierce Competition: Consumer Choice Continues to Decrease

In his recent *Wall Street Journal* op-ed, Martin highlighted nontraditional broadband providers, saying that “broadband platforms are in fierce competition. ... Broadband access is increasingly being delivered to consumers via satellite, wireless, and fiber or powerline providers.”

These statements belie the FCC’s own data. The number of subscribers to these nontraditional broadband services has increased, but the percentage of the market these technologies control has diminished dramatically over the past five years. The market share of satellite and wireless broadband providers has dropped from almost 3 percent to just over 1 percent of the entire residential broadband market.²³ And although broadband over powerlines (BPL) remains promising, its deployment is still in a very early stage. Meanwhile, dominant incumbent providers are seeking legislation at the state and federal level that would preempt municipalities from offering fiber, BPL or wireless broadband — further reducing competition in the market. The role of these new technologies in the marketplace might be deemed “promising,” but they have hardly become “fierce competitors” with cable and DSL.

Figure 9: Residential and Small Business High-Speed Line Market Share by Technology

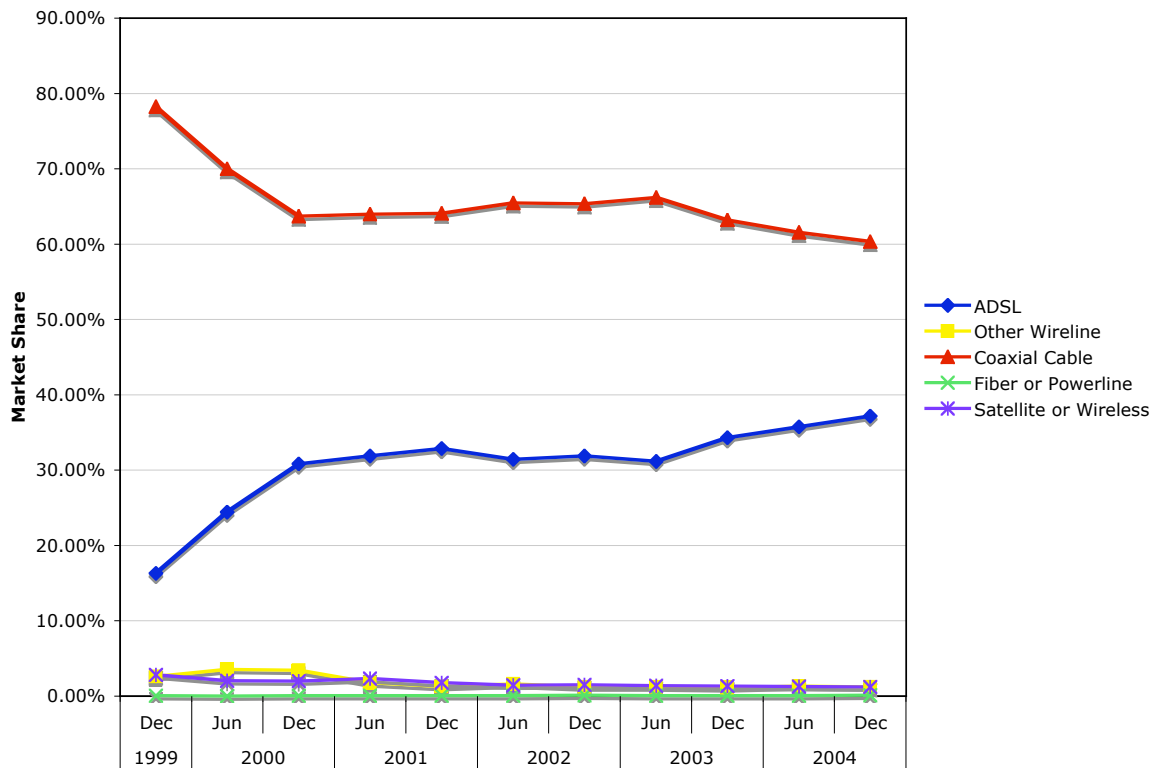
	1999	2000	2001	2002	2003	2004
ADSL	16.3%	30.8%	32.9%	31.9%	34.3%	37.2%
Coaxial Cable	78.2%	63.7%	64.1%	65.3%	63.2%	60.3%
Other Wireline	2.6%	3.4%	1.3%	1.2%	1.1%	1.2%
Fiber or Powerline	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%
Satellite or Wireless	2.8%	2.0%	1.8%	1.5%	1.3%	1.2%
Total Lines	1,792,219	5,170,371	11,005,396	17,356,912	25,976,850	35,266,281

Source: FCC, 2005

²² Michael Laris, “Broadband in County: Haves and Have-nots,” *Washington Post*, July 31, 2005. Available at http://www.washingtonpost.com/wp-dyn/content/article/2005/07/30/AR2005073000043_pf.html

²³ See footnote 2.

**Figure 10:
Residential and Small Business High-Speed Lines by Technology**



Source: FCC. 2005

Large segments of the population find themselves with little choice in broadband service providers. A recent study by The Pew Charitable Trust found that 29 percent of rural Internet users have only one provider available to them, most often a satellite provider.²⁴ But expensive and often slow satellite broadband service is an option of last resort for consumers.

The cost of broadband via satellite can be prohibitive. For example, the satellite Internet service provider Direcway offers 500 kbps (download)/50 kbps (upload) connections for \$59.95 per month (plus an additional \$600 in start-up costs). Customers must pay a \$300 termination fee if they cancel service prior to the end of the 15-month contract period. Also, even though the data transfer rates of this service barely qualify as “high-speed,” users are subject to a “download threshold.” This threshold restricts user downloads to no more than 169 Mbs at a time (or about five minutes of downloading at maximum speed). If users exceed this threshold, the connection speed is throttled to a much slower rate. With all these restrictions, it is easy to see why satellite Internet service is not a feasible alternative. Yet rural areas with no other provider aside from similar satellite connections are deemed “broadband covered” ZIP codes by the FCC.

²⁴ “Rural Areas and the Internet”, Pew Internet and American Life Project, February 2004.

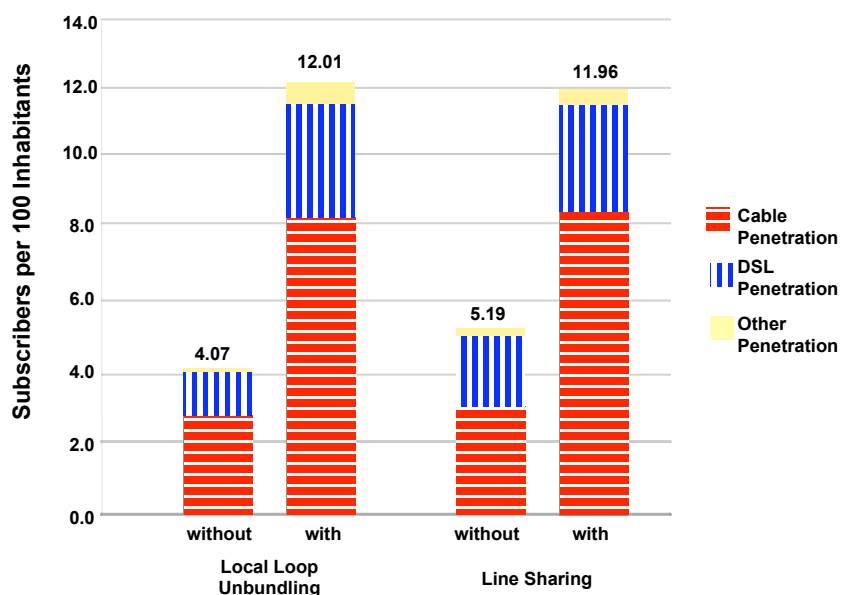
Open Access Creates Competition

Where competition exists, it has been facilitated by federal requirements that incumbent telecommunications service providers offer “open access” to competitors — that is, they must make their networks available for use by other providers. In larger cities, limited competition exists within the DSL market due to these open access rules. Users in markets with multiple providers report cost savings of over 10 percent when compared to users in monopoly markets.²⁵ The ability for competitive local telecommunications companies to compete in the DSL market (mandated by the 1996 Telecom Act) has contributed to the large increase in market share captured by DSL providers from cable companies.

Evidence suggests that the open access rules governing the DSL market have increased the level of broadband penetration into rural areas.²⁶ An empirical analysis of 30 OECD countries also indicates that local loop unbundling and line sharing regulations have led to greater broadband penetration in countries with these rules.²⁷

Yet the FCC has eliminated open access requirements for cable broadband providers — in a decision backed by the Supreme Court — and, most recently, for DSL. The findings of this study highlight the need for Congress to provide for open access within both the cable and DSL markets.

Figure 11: Average Broadband Penetration by Regulation Type in 30 OECD Countries



Source: OECD, 2005

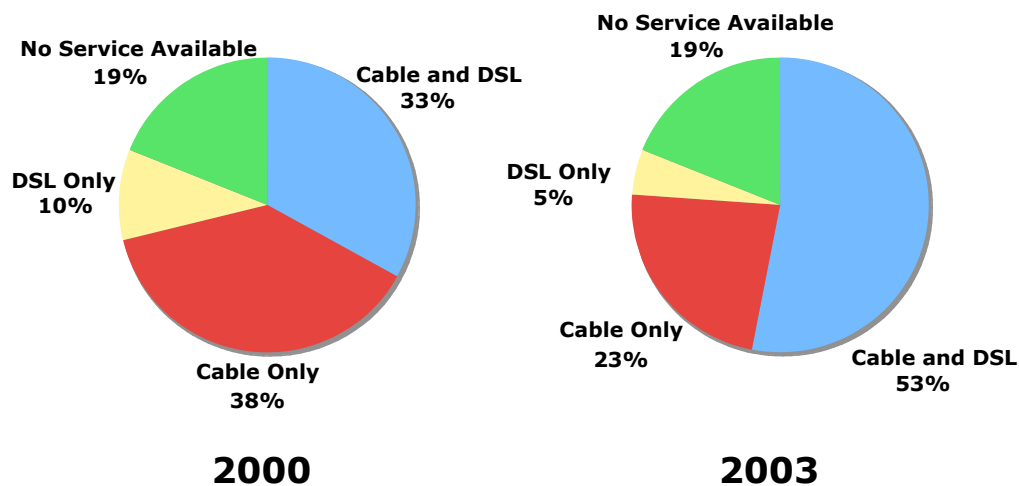
²⁵ See footnote 20.

²⁶ Scott Wallsten, “Broadband Penetration: An Empirical Analysis of State and Federal Policies,” AEI-Brookings Joint Center for Regulatory Studies, Working Paper 05-12, June 2005.

²⁷ Countries with local loop unbundling have an average of 4.5 more broadband users per 100 population members, when controlling for population density and median household income. Countries with line-sharing regulations have an average of 3.4 more DSL user per 100 population members when controlling for density and income.

In many markets, consumers face a duopoly, forced to choose between a single cable provider and single DSL provider — many of which bundle broadband with television or telephone service for a pricier package. A recent FCC decision prevents states from requiring phone companies to sell DSL service as a stand-alone product.²⁸ This will negatively impact consumers, as it translates into a minimum of \$15 to \$20 per month in additional costs for a DSL connection. (It also ignores the growing reality that some consumers choose to have their cellular telephone as their sole phone and have no use for a wired landline connection.) To avoid paying higher fees, cable modem users must purchase their broadband as a “bundle” along with cable TV service. This can add an additional \$20 to \$70 per month to the cost of broadband.²⁹

Figure 12: U.S. Cable/DSL Availability



Source: FCC, 2004

Static Prices Reflect Lack of Competition in Broadband Markets

While the price of computer hardware and software has continued to drop over the past several years, the price of broadband access has remained relatively constant. In 2003, the cost of a monthly cable Internet connection in California was \$42.95.³⁰ Today, the cost remains at \$42.95.³¹ During that same period, the cost of a DSL connection in California has stayed at \$49.95 per month.³² Nationwide the trend is the same.³³ This departure from the normal price drops and speed improvements usually seen in the technology sector indicates that the broadband market is

²⁸ FCC 05-78, March 25, 2005. Available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-05-78A1.pdf

²⁹ Basic cable TV packages are available for approximately \$20 per month, including taxes and fees. Customers who choose to purchase cable Internet service without cable TV bundling will pay a minimum of \$10 more per month over the standard cable modem fee.

³⁰ Standard rate offered by Comcast to Northern California cable TV subscribers. *Sacramento Bee*, December 11, 2003.

³¹ Standard rate offered by Comcast to Northern California cable TV subscribers. *Sacramento Bee*, June 6, 2005.

³² Standard rate offered by SBC to Northern California telephone subscribers in 2003 and 2005. See footnotes 33 and 34.

³³ Pew survey data shows the nationwide average price for broadband was \$38 per month in 2002 and \$39 per month in 2004. These figures do not include start-up costs associated with installation and equipment purchases or rentals.

an oligopoly. Absent significant levels of competition, there is little incentive to innovate, reduce prices or expand services in a timely manner.

The recent “price-wars” in the broadband market, which have received much media attention, are little more than bait-and-switch gimmicks to lure customers back and forth between the duopoly DSL and cable carriers. SBC began this pricing competition with the announcement of a \$14.95 per month rate for their “DSL-express” service³⁴, available in certain areas to new customers who sign up online. But to get this price, customers must bundle DSL with phone services and sign a one-year contract with a \$200 early-termination penalty. After the one-year introductory period, the rate reverts to the standard monthly fee, currently \$49.95 (plus the cost of phone service and taxes/fees). When amortized over three years, the true cost of the SBC offer is \$47.17 per month, not including the cost of the phone line.³⁵

Rick Lindner, the CFO of SBC, recently assuaged SBC shareholders who expressed concern over the low-price offer, indicating that the offer was merely a way to capture market share from the cable companies and entice customers to buy other SBC products. Explaining the long-term objective of this offer, Lindner said that bundling a low-cost DSL line “opens the door to other services” and “suddenly takes you from ... being a \$15 product to being a \$65 or a \$70 customer.” He added sarcastically: “We’re out to pillage and plunder the industry, that’s our objective.”³⁶

³⁴ SBC’s “DSL-express” offers download speeds between 384 kbps and 1.5 Mbps. Upload speeds range between 128 kbps and 384 kbps. The service does not provide a static IP address.

³⁵ This figure is based on the \$14.95 per month (plus \$2.97/mo. universal service fee) for 12 months; \$49.95 for the remaining 24 months; \$12.95 modem shipping charge; and the \$200 installation fee amortized over 36 months. This price does not include the \$99 DSL modem cost, as SBC is currently offering a full rebate for this equipment. Fees were obtained for California from sbc.com. While these rates are drawn directly from the SBC Web site, lower prices may be available. Most customers do not choose professional installation of DSL service. In addition, Customers who contact SBC to sign up for another one-year term are currently offered the second year of service for \$29.95 per month. Rates are subject to change.

³⁶ <http://www.thestreet.com/pf/tech/scottmoritz/10226542.html>

Conclusion and Recommendations

The national goal set by President Bush of achieving universal, affordable broadband by 2007 is a tall order. The United States certainly will not achieve it by ignoring problems and celebrating false successes. The speed and price of broadband technologies in the United States have stalled over the past few years. Rural areas and low-income neighborhoods continue to be stranded on the wrong side of the digital divide — priced out of the marketplace. The United States, traditionally a leading innovator in the high-tech sector, stands idle while the rest of the industrialized world advances at a rapid pace.

Chairman Martin's eagerness to downplay the underlying reality contained in his own agency's report is cause for concern. Coupled with his belief that eliminating open access requirements will foster rather than impede broadband competition, this is cause for alarm. The FCC plays a vital role in encouraging and fostering broadband deployment. The Commission must recognize the difficulties the country faces and pursue policies that promote competition and lower prices, expand deployment, and catalyze new technologies in the marketplace.

Chairman Martin celebrates the *Brand X* Supreme Court decision — which upheld the FCC's ban on open access within the cable Internet industry — saying that it paves the way for the FCC to "remove the legacy regulation that reduces telephone companies' incentives to provide broadband." But the data show that the DSL open access rules themselves have created incentives for the telephone companies to provide broadband. The DSL sector's ability to capture market share from the cable companies is a direct result of the competition that exists within the DSL industry.

Now that these rules have been abandoned, consumers in even the largest markets will be restricted to two choices — the local cable provider or the local DSL provider. This duopoly ensures higher prices, slower connection speeds and poorer customer service.

Congress should take notice of these alarming trends. Wireless technologies can offer incredibly fast connections at a fraction of the cost of cable or DSL. But these technologies are being crippled by the wasteful allocation of the public airwaves and by incumbent-backed legislative efforts to stifle competition and innovation at the local level.

Congress must enact clear statutes that will free the broadband market from duopoly domination and promote new market entrants. Congress should authorize any entity, public or private, that seeks to offer broadband services to American consumers, open up more spectrum for wireless broadband, and ensure open access to all high-speed communications networks. Advances such as these will promote a strong American economy, one able to effectively compete in the global marketplace.