

## Assessing Broadband in America

By Phil Heidenreich

In the American Recovery and Reinvestment Act passed by Congress and signed into law by President Obama earlier this year, a provision was made for a “national broadband deployment strategy” to increase the penetration of high speed internet throughout the country. To explore their options, the FCC has begun a review of the current broadband policies. Many have used comparisons between the United States and other nations as a reference for new broadband policies. Not surprisingly, these advocates suggest that to remain in international competition, a greater degree of government intervention is required; however, upon further analysis, America has one of the strongest bases of independent internet stability worldwide. The FCC would be wise to avoid aggressive new regulatory policies toward broadband deployment.

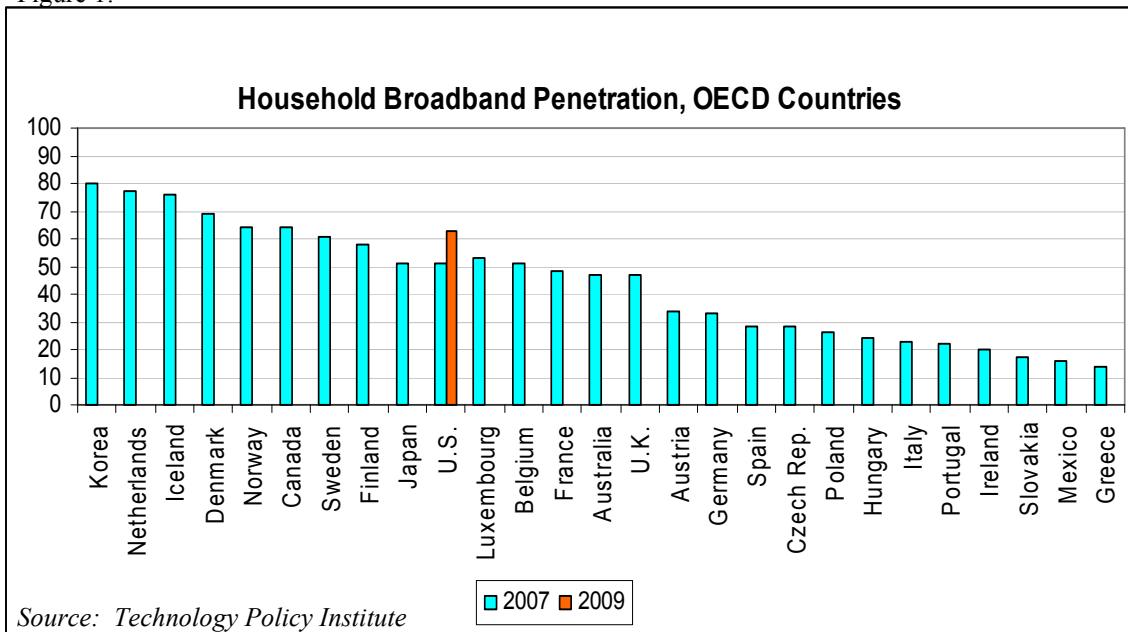
Some suggest that the spread of broadband internet throughout the United States – which has produced global online giants such as Google, Youtube, and Amazon – lags behind the rest of the world. While a few countries have nationalized broadband penetration plans in place to provide access to a vast majority of their people, the United States has maintained a relatively free market for high speed internet. Through the use of the market, America has not only remained competitive compared to global prices and speeds, but is a leader in web innovation. Moreover, recent events in places such as Iran and China demonstrate the importance of a market-based approach to broadband access that facilitates the exchange of information through the internet.

The United States is the world’s leader in total internet subscribers by [more than double](#) any other country at over 77 million users. But being such a large landmass, broadband deployment has been uneven, with many places not developed to the point of gaining broadband connections. Nonetheless, the percentage of households connected to high speed internet in America is 63 percent in 2009 (see Figure 1). Korea’s plan pushed its penetration to 80 percent of households in 2007, most likely approaching its saturation point. An estimate by the Technology Policy Institute projects that, given our current growth rate, the United States will reach 80 percent by 2011.<sup>1</sup> It is important that Congress’s recent call for a national broadband deployment strategy does not impede current progress or delay the estimated deployment levels for 2011. The plan should also avoid increased federal involvement and government spending where the private sector has demonstrated its abilities to expand the broadband network.

---

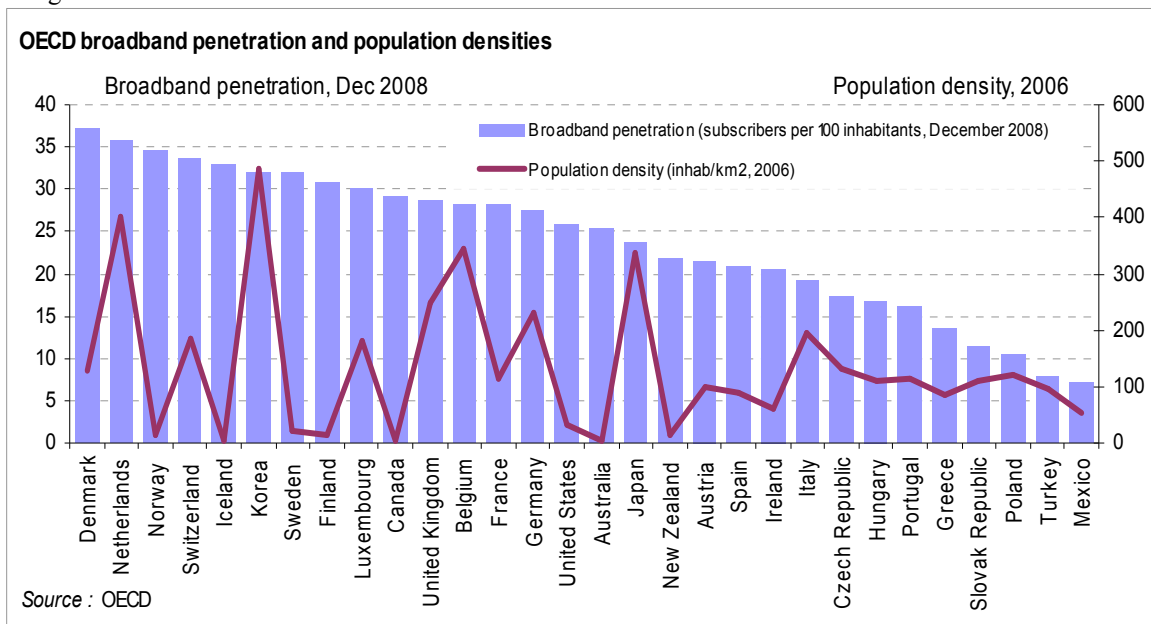
<sup>1</sup> Scott Wallsten, “Understanding International Broadband Comparisons,” *Technology Policy Institute*, June 2009, 12.

Figure 1:

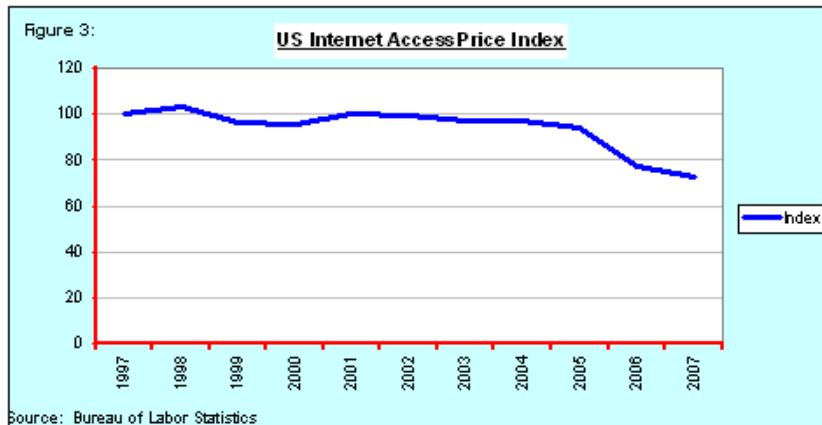


Proponents of an expanded government broadband plan use penetration rates in countries such as Korea and the Netherlands as examples of the success of this approach; however, upon a deeper examination of the issue, the population densities of those countries make the plans more feasible abroad than in the less densely populated United States (see Figure 2). The smaller size and closer proximity of people requires a much lower investment for broadband deployment than in a country the size of the United States.

Figure 2:



Although the United States does not have the cheapest internet in the world, we are far from the most expensive. The Slovak Republic tops the list at just under \$80 per month, and Sweden is the lowest at about \$30, with the United States toward the lower end of the spectrum at close to \$45 per month, and can be seen below (Figure 3) as being on a significant decline.



Furthermore, if the average numbers are broken down into cost per megabyte of bandwidth, the United States is close to the bottom at \$10/mbps with Sweden coming in at about \$18/mbps – just higher than the Slovak Republic’s \$16/mbps.<sup>2</sup> If variety

is what is being compared to other countries, the United States ranks in the top six countries in range from the cheapest options to the most expensive plans. The countries that have the highest penetration rates with the lowest prices have achieved those numbers only through direct government subsidization, meaning the prices shown are artificially lower than the actual cost to the taxpayers. On the other hand, America is “behind only by months” according to the Technology Policy Institute’s estimates of growth, and we have kept up without significant government intervention and bureaucracy taking hold.

The average download speed for Americans is about 6mbps, on par with most other countries besides the four leaders – Korea, Japan, Sweden, and the Netherlands. But if proponents of a government broadband deployment project want to use this as a way of showing our internet as “lagging,” actual downloads by Americans are far higher than any other country. We dominate music purchases and downloads with 24 percent of the market – 8 percent higher than Japan, the next closest. The same goes for movie downloads at 17 percent, 6 percent higher than Japan.<sup>3</sup>

Our freedom to create online marketplaces and innovative websites with minimal government involvement has allowed the web industry to become the pinnacle worldwide. GoogleTalk, a new communications system through Google Inc., has the possibility of completely revolutionizing telecommunication just as Amazon.com, iTunes, and eBay have changed the way we shop. Through free market ingenuity and entrepreneurship, America has become a world leader in web development (Table 1).

<sup>2</sup> Wallsten, 11.

<sup>3</sup> Wallsten, 9.

Table 1:

Top 10 Global Web Parent Companies, Home & Work May 2009				
RANK	PARENT	UNIQUE AUDIENCE (000)	ACTIVE REACH %	TIME PER PERSON (HH:MM:SS)
1	GOOGLE	326,138	0.85	2:14:31
2	MICROSOFT	297,423	0.78	3:22:19
3	YAHOO!	216,036	0.56	2:20:24
4	EBAY	155,877	0.41	1:42:03
5	FACEBOOK	144,344	0.38	3:38:58
6	WIKIMEDIA FOUNDATION	137,113	0.36	0:15:27
7	AOL LLC	134,275	0.35	2:59:25
8	NEWS CORP. ONLINE	119,488	0.31	0:55:05
9	AMAZON	106,716	0.28	0:20:45
10	INTERACTIVECORP	102,427	0.27	0:14:46

Source: Nielsen NetView

Newer fiber-to-the-house (FTTH) innovations have recently been taking hold in the United States, a system partially used by Japan and Korea – though their fiber extends only to the basements of high-rise apartment buildings. FTTH connections would greatly enhance the speed of broadband internet, and Verizon’s FiOS network is in the process of expanding its fiber network throughout the country. The ability of the market to [produce innovations naturally](#) promotes competition and expands consumer choice; for instance, cable companies are also introducing a faster connection through Docsis 3.0. FiOS and Docsis both have speeds of 50Mb/s with the ability to go much higher, and by 2009 FTTH connections were in nearly 4 million households nationwide – behind only Japan and South Korea (see Table 2).

With such [significant intervention](#) into the market in other nations, many of their providers are dependent on the government to provide subsidies and tax-breaks, diminishing the ability for independent competitors to enter the market as well as the ability to innovate and provide new alternative methods of deployment. This intervention can lead to a common carrier system where there is little incentive for innovation or capital

Table 2: 10 largest FTTH/B markets at the end of 2008

Rank	Country	FTTH/B subscribers
1	Japan	14 457 000
2	South Korea	6 758 000
3	USA	3 992 000
4	Hong Kong	645 000
5	Russia	630 000
6	Taiwan	589 000
7	Sweden	401 000
8	Italy	306 500
9	China	229 500
10	France	180 550

Source: IDATE

investment. In contrast, the current competition in the United States between fiber and soon-to-be-introduced Docsis 3.0 cable will allow the public to decide the best options by voting with their own money – not letting the government decide for them.

European companies, which use an [unbundled system](#) (allowing smaller companies to run on a larger provider's line), offer less incentive for the providers to switch to fiber due to the inability to recoup the large capital investments required to upgrade broadband networks. Since networks must provide access to their competitors at regulated rates, it is difficult to earn the necessary returns that foster innovation.

Allowing the government to establish a national broadband system would not only risk greater government intervention online, but also impose new costs and potentially limit the flexibility required to provide internet connections to remote areas. Additionally, it would push toward a common carrier approach, diminishing competition and innovation by using price controls. Competition has kept America in the race for faster, more secure internet usage, and competition will allow the United States to continue to advance its internet capabilities in both the production and consumer online market.