



Digital Divide Update: The Rhetoric Finally Matches the Reality

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As the old adage goes, "every cloud has a silver lining." But when it came to the question of the availability and spread of personal computers (PCs) and Internet access in the late 1990s, the Clinton administration always seemed eager to prove the opposite. In a series of National Telecommunications and Information Administration reports entitled *Falling Through the Net*, the Clinton administration embarked on what future historians may well remember as the silliest Chicken Little crusade of all time, as apocalyptic rhetoric was used to decry the existence of a supposed "digital divide" in America. Luckily, although the Bush Administration decided to continue publication of these reports, its first cut at the issue, *A Nation Online: How Americans Are Expanding Their Use of the Internet*, wisely looks at the [glass as being half full instead of half empty](#).

The pessimistic outlook the Clinton administration held regarding the diffusion of these new technologies was based on the simple fact that not everyone in America immediately gained access to them. That is, some citizens (wealthier and more educated individuals, primarily) gained access to new high-tech gadgets and services before others (lower income households in particular). This is hardly a shocking phenomenon. Nor should it ever have been cause for great concern.

First of all, this class of technologies hardly ranks in the same category as other "life essential" goods, such as heating, indoor plumbing, or electricity. Not every American needs, or even necessarily wants, a computer in their home or a connection to the Internet. Second, it has been the case historically that wealthier households act as "early adopters" (read: guinea pigs) for most new technologies, and if the technologies prove useful, they spread to the masses and their cost falls accordingly. The data shows that this is the case with computers and Internet access.

Finally, unlike many other technologies, it is unlikely America will ever witness anything close to 100 percent household penetration for computers or Net access. Residential penetration rates will always be held down by the fact that workplace access to these technologies is often viewed as a substitute for household access. Moreover, the rapid pace of technological change in this sector may make desktop PCs an anachronism of the past as the world enters a Star Trek-esque age of "[wearable computing](#)" and ubiquitous Web access through multiple devices, especially mobile or wireless gadgets. Who knows how we'll define "household penetration" once our cell phones are sewn into the buttons on our shirts.

But regardless of these seemingly forgotten realities or probable future developments, the current story of computer use and Internet diffusion continues to be nothing short of amazing. As economist Wayne Leighton pointed out in a Cato Institute *Policy Analysis* last August on "[Broadband Deployment and the Digital Divide](#)", "the latest technologies, including computer use and access to the Internet, are being adopted at a faster rate than technologies of only a generation or two ago." Indeed, these technologies are spreading more rapidly throughout American society than almost *any* previous good or service. While it took many older technologies many decades to reach 50 percent of American homes (telephones took 71 years; electricity took 52; radio took 28), personal computers were available to half

of American homes within 19 years of introduction and the Internet hit that mark in just 10 short years. And the Bush administration's new [A Nation Online](#) report makes clear that things will only continue to get better:

- **Net use is exploding:** The rate of growth of Internet use in the United States is currently two million new Internet users per month and more than half of the nation is now online. In September 2001, 143 million Americans (about 54 percent of the population) were using the Internet—an increase of 26 million in 13 months. In September 2001 174 million people (or 66 percent of the population) in the United States used computers. Also, 45 percent of the population now uses e-mail, up from 35 percent in 2000.
- **Income matters less:** Between December 1998 and September 2001, Internet use by individuals in the lowest-income households (those earning less than \$15,000 per year) increased at a 25 percent annual growth rate. Internet use among individuals in the highest-income households (those earning \$75,000 per year or more) increased from a higher base but at a much slower 11 percent annual growth rate. Also, the highest growth rate among different types of households is for single mothers with children (29 percent).
- **Race less of a factor:** Between August 2000 and September 2001, Internet use among African Americans and Hispanics increased at annual rates of 33 and 30 percent, respectively. Whites and Asian Americans experienced growth rates of approximately 20 percent during these same periods.
- **Geography makes less of a difference:** Over the 1998 to 2001 period, growth in Internet use among people living in rural households has been at an average annual rate of 24 percent, and the percentage of Internet users in rural areas (53 percent) is now almost even with the national average (54 percent).
- **Broadband connectivity increasing:** While 80 percent of Americans access the Internet through dial-up service, residential use of broadband service is rapidly expanding. Between August 2000 and September 2001, residential use of high-speed broadband service doubled—from about 5 to 11 percent of all individuals, and from 11 to 20 percent of Internet users.

But perhaps the most exciting and certainly most under appreciated numbers regarding Internet access and broadband availability are contained in the Federal Communication Commission's recently released "[Third Report on the Availability of High Speed and Advanced Telecommunications Capability](#)". Specifically, the new FCC report notes that over 70 percent of homes have cable modem service available to them; 45 percent have telco-provided digital subscriber line (DSL) service available; 55 percent of Americans have terrestrial fixed wireless broadband options; and almost every American household can purchase satellite-delivered broadband today. These numbers are very important because they illustrate that broadband *availability* is increasingly rapidly, regardless of what the subscription data look like. Stated differently, the key issue is not how many people are subscribing to broadband now, but rather how many people have the option to do so. Why aren't more people subscribing? Cost is still an issue for many. So is lack of content or "killer aps," some say. Regardless, there is certainly no role for policymakers in terms of boosting demand outside of eliminating ongoing regulations that hinder deployment efforts. Companies are rolling out broadband and now it's up to consumers to subscribe if they feel that it's worth it.

So, hopefully, now that the rhetoric of recent government reports finally matches marketplace realities, this will put an end to the myopic efforts by some government officials to take "[a snapshot view of a complex world](#)," as Cato Institute executive vice president David Boaz has referred to the static analysis that pervaded past reports. Goodbye "digital divide;" welcome to the world of endless digital opportunities.

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