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THE INTERNET TAX FREEDOM ACT AND THE "DIGITAL DIVIDE"

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Congress is again considering whether to make the "Internet Tax Freedom Act" (ITFA) permanent. Enacted in 1998 and temporarily renewed in 2001 and 2004, ITFA banned new state and local taxes on "Internet access" services. States and localities were barred from imposing their sales taxes on the typical $10 to $50 monthly fee that companies like AOL, Comcast, and Verizon charge their customers for connecting them to the Internet, enabling them to use communications services like email and instant messaging, and providing them with proprietary content like news summaries and movie clips.

ITFA sunsets on November 1, 2007, and legislation has been introduced to make it permanent. The "Permanent Internet Tax Freedom Act" (S. 156/H.R. 743) is sponsored by Senator Ron Wyden and Rep. Anna Eshoo.

This report examines whether a permanent ITFA is necessary to encourage the spread of high-speed ("broadband") Internet access services and to help close the "digital divide." (The adverse impacts that a permanent ITFA would have on state and local services, as well as other flaws in the proposed legislation, are discussed in a previous report, available at www.cbpp.org/7-11-07sfp.pdf.)

ITFA's New Rationale

When ITFA was first introduced in 1997, it was characterized as a "moratorium" or a "temporary time out." Its original purpose was to give Internet access providers and state and local policymakers

KEY FINDINGS

Proponents of the "Permanent Internet Tax Freedom Act" argue that banning state and local taxes on Internet access is key to encouraging more households to subscribe and incentivizing companies to make broadband more widely available. Considerable real-world evidence refutes this claim:

- **The major barriers to greater household subscribership are lack of computer ownership and not being aware of the potential benefits of being online, not the price of Internet access, according to the Pew Internet Project and the Parks Associates market research firm.**
- **Every country that leads the U.S. in broadband deployment and uptake *does* tax access, often at rates 2-3 times greater than in the U.S..**
- **Rates of broadband deployment and household subscriptions are no lower in states that tax access than in states that do not.**
- **Five of the states currently taxing access are among the first in which Verizon and AT&T are deploying state-of-the-art fiber-optic networks.**

In addition, state and local governments play a critical role in giving many low-income people their first hands-on exposure to the Internet (e.g., in public libraries and schools) and in making broadband more available (e.g., through municipal wireless networks in small towns). Depriving states and localities of the funds they use to support these services by permanently banning taxation of Internet access is likely to widen, not close, the "digital divide."

time to come up with a uniform approach to defining "Internet access" for tax purposes and addressing other questions that arise in taxing a service that can be accessed in multiple locations.[1]

In recent years, however, the rationale for ITFA has changed. ITFA proponents now argue that the law must be made *permanent,* in order to encourage more households to subscribe to high-speed or "broadband" Internet access service. Without greater consumer demand, it is argued, telecommunications and cable TV companies will not have adequate incentives to "build-out" or "deploy" the infrastructure needed to provide broadband service in the many areas of the United States in which it is not yet available. Proponents of a permanent ITFA profess particular concern that allowing state and local governments to tax Internet access services would seriously impede efforts to close the "digital divide"[2] — the still large gap in the rate at which high-income and low-income households subscribe to Internet access service.[3] ITFA supporters also express alarm that the United States is falling further and further behind other advanced nations in both deployment and household uptake of high-speed Internet access services — with adverse consequences for U.S. economic competitiveness.

No Evidence to Support ITFA's New Rationale

These new justifications for making ITFA permanent have no factual or evidentiary basis:

- **No supporting evidence from states grandfathered to tax Internet access.** A number of states were "grandfathered" by ITFA to continue taxing Internet access. Studies by the GAO and economists at the University of Tennessee found that the rates of broadband deployment and household uptake of Internet access service are no lower in states that tax Internet access than in states that do not tax the service.[4] AT&T and Verizon, which are widely recognized as currently deploying the most advanced fiber-optic networks available to residential subscribers, have chosen New Hampshire, Ohio, Texas, Washington, and Wisconsin as among the first states in which to make these services available.[5] All five of these states tax Internet access services under the ITFA grandfather clause.[6]

- **No supporting evidence from foreign countries**. All of the other countries that lead the United States in broadband deployment and uptake *do* tax broadband service, often at rates 2-3 times higher than the typical combined state and local sales tax rates that prevail in the United States. (See Table 1 on the following page.) This demonstrates that reasonable, non-discriminatory taxation of Internet access service is no barrier to healthy rates of deployment and household subscriptions.

- **Factors other than price are the major barriers to uptake by current non-subscribers**. There is concern that the number of households subscribing to broadband services is no longer growing as rapidly as it once was. Whether or not that concern is legitimate,[7] keeping state and local taxes off access services is not a cost-effective means of stimulating demand for broadband. The vast majority of households that do not subscribe don't have computers,[8] simply aren't interested in having Internet access,[9] or have not had enough experience in using the Internet to fully appreciate the potential benefits to themselves or their families of having Internet access at home. (See the text box on page 4.)[10] Broadband Internet access is still not available in many parts of the country.[11] Keeping monthly charges for Internet access 5 or

TABLE 1: RATES OF BROADBAND ADOPTION AND TAXATION IN COUNTRIES WITH HIGHER BROADBAND ADOPTION THAN THE UNITED STATES		
Country	**Broadband Subscribers Per 100 Inhabitants, 2006**	**Rate At Which Broadband Subscription Fees Are Taxed, 2005**
Denmark	31.9	25.0%
Netherlands	31.8	19.0%
Iceland	29.7	24.5%
Korea	29.1	10.0%
Switzerland	28.5	7.6%
Norway	27.7	25.0%
Finland	27.2	22.0%
Sweden	26.0	25.0%
Canada	23.8	6.0% to 16.6%, depending upon province
Belgium	22.5	21.0%
United Kingdom	21.6	17.5%
Luxembourg	20.4	15.0%
France	20.3	19.6%
Japan	20.2	5.0%
United States	19.6	Generally 0%. In 9 states, 4.0% to 8.9%

Sources: Organization for Economic Cooperation and Development, *OECD Broadband Statistics to December 2006,* April, 2007, available at www.oecd.org/sti/ict/broadband; OECD, *Consumption Tax Trends, 2006*, January 2007, Tables 3.5, 3.7, and 3.8. To the best knowledge of staff at the OECD, Internet access services are taxed at the standard (highest) value-added tax or other general consumption tax rate in all OECD countries (email communication to the author from Stéphane Buydens, Administrator, VAT Unit, OECD Centre for Tax Policy and Administration, May 28, 2007).

10 percent cheaper by barring non-discriminatory taxes is unlikely to overcome the most significant barriers that prevent demand from growing.[12]

- **If anything, banning state and local taxation of Internet access is likely to be counterproductive.** Barring states and localities from taxing Internet access services — particularly under ITFA's overly-expansive definition of this service (see the Center's previous report) — seems more likely to widen than to narrow the digital divide. State and local governments play a critical role in providing many low-income individuals with their first hands-on exposure to the Internet in public schools, libraries, and community centers. They provide "e-government" services — such as online drivers' license renewals and tax filing — that give their residents an incentive to subscribe to Internet access service. Increasingly, they are taking a direct role in making broadband available — for example, by deploying city-wide wireless Internet access networks. Depriving states and localities of revenue through a permanent ITFA would interfere with their ability to take these kinds of initiatives. Already, for example, libraries are falling far behind in their ability to provide adequate Internet access facilities to their patrons.[13] The handful of additional subscriptions that might result from keeping two or three dollars of tax off the service each month could be outweighed by the number of people who will lose opportunities to get concrete experience and training in using the Internet — which can lead to a desire to subscribe to broadband service at home.

New Report Concurs that Low Access Prices Will Do Little to Close the Digital Divide

The Pew Internet and American Life Project is a highly-respected research institute that focuses on Americans' use of the Internet. A recent analysis by its Associate Director for Research, John B. Horrigan, "Why It Will Be Hard to Close the Broadband Divide" (August 1, 2007) provides evidence that keeping prices for broadband Internet access artificially low by making ITFA permanent will do relatively little to encourage people who do not currently subscribe to high-speed Internet access services to begin doing so.

Horrigan observes (footnotes in original omitted):

- "The median age of non-internet users is 59, and 25% report having household incomes under $20,000 per year. It is not, however, simply a question of money or age. Non-internet users do not have very positive attitudes about information technology. Many report worries about information overload and few link information technology to greater control over their lives. Moreover, non-internet users are apt to see the online environment as a . . . place with inappropriate or irrelevant content."

- "So, if you are in your 50's, have limited disposable income, find modern gadgetry hard to use and of questionable relevance, what is going to turn you into a home broadband subscriber? Two frequently suggested strategies — reducing prices and improving infrastructure availability — are likely to have limited impacts. Most research on broadband suggests price is not a large factor in the purchasing decision. When asked in Pew Internet Project surveys why they made the switch to broadband, most users cite the desire for more speed; few (4%) say the price had fallen to a level that made it affordable or that a discount offer prompted the switch. Detailed modeling of adoption behavior by Ken Flamm and Anindya Chaudhuri at the University of Texas concludes that 'demand is relatively inelastic' for broadband service. That is, although they find a statistically-significant relationship between a decline in broadband prices and growth in subscribership, it is not a very large one."

- "The usability and relevance of the internet are additional speed-bumps for [current home] dial-up users. Approximately one-quarter of American adults frequently need help from others to get information and communication technology (ICT) to work. Fully 43% of adult Americans say ICTs have not improved their personal productivity. Sizable numbers of Americans say ICTs either give them less control over their lives, or make no difference. The vast majority of these Americans are dial-up internet users, and their indifferent posture toward ICTs may make them reluctant to incur the costs of upgrading to broadband at home."

- "Improving infrastructure availability will help, especially in rural areas, but not by enough to alter the U.S. position in the world [i.e., in broadband adoption rankings]. . . . Assuming most of the gap is concentrated in rural areas and that closing the gap would bring rural broadband penetration in line with the national average, America's home broadband penetration would rise by only 3 percentage points."

Horrigan concludes:

> To be sure, more competition, lower prices, and greater availability of faster infrastructure will be welcomed by American consumers. By themselves, however, they are not likely to be enough to lure non-online users off the digital sidelines. Pew . . . research makes it clear that non-users don't yet see the benefits of home high-speed access. *To reach the underserved, policymakers might consider more aggressive and targeted outreach efforts that educate hard-to-reach populations about the benefits of online connectivity.* [Emphasis added.]

As discussed in the body of this report, state and local governments have a critical role to play in the "more aggressive and targeted outreach efforts" recommended by Horrigan. However, their ability to undertake such efforts will be further constrained by the limits on their revenues imposed by a permanent Internet Tax Freedom Act.

State and Local Taxes Are a Red Herring in the "Digital Divide" Debate

The excessive focus on the alleged threat to broadband deployment and adoption posed by potential state and local taxation of Internet access is diverting attention from other important questions about the proposal to make ITFA permanent:

- **Why are only state and local governments being forced to cut their revenues?** ITFA unfairly singles-out state and local governments. The federal government is effectively forcing them to provide an across-the-board subsidy for broadband by barring the imposition of sales taxes that apply to household purchases of a wide range of other goods and services. If taxes are such a barrier to the deployment of broadband services, why has Congress not considered relieving the taxes the federal government imposes on the industry, such as the corporate income tax? If the goal of ITFA is to minimize prices for consumers in order to stimulate demand, why are Congress and the Federal Communications Commission (FCC) not actively investigating the high monthly fees that broadband providers charge consumers?[14] Such charges in the United States are often several times higher than what customers pay in other countries.[15]

- **Why is the telecom industry opposing state efforts to close the digital divide?** Expressions of concern by telecommunications industry representatives about the availability of broadband to currently under-served segments of the population — such as low-income and rural households — should be viewed skeptically in light of other policy positions and actions of the industry. The major telephone companies have, for example, vociferously fought the direct deployment of broadband networks by municipal governments.[16] They have also opposed requirements that the companies build-out broadband networks to low-income and high-income neighborhoods alike in jurisdictions in which it they have been granted a franchise to provide service.[17] Verizon is currently seeking to shed all of its telephone and broadband lines in the predominantly rural states of Vermont, New Hampshire, and Maine so that it can concentrate on deploying its expensive new fiber-optic "FiOS" network in affluent suburban neighborhoods in other states.[18] AT&T agreed to provide very low cost broadband service as a condition of its merger with BellSouth, but it is not advertising the service and has made information about it very difficult to locate on the firm's Web site.[19] The industry's commitment to closing gaps in broadband availability is open to serious question.

- **Is the federal government doing what it can to spur broadband deployment?** The focus on a permanent ITFA as a major potential contributor to the expanding deployment of broadband and the narrowing of the "digital divide" may be distracting some policymakers from addressing other significant failings in federal broadband policy:

  - Three years ago, members of the FCC identified the lack of accurate, up-to-date information regarding where broadband service is actually available in the United States as a serious impediment to formulating a national broadband deployment strategy.[20] Yet the agency has only just begun a formal inquiry into *how* its information-collection system should be modified; actual improvements in information availability are years away.[21]

  - It has been nearly four years since the federal government collected data that illuminate which segments of the population do and do not have computers and Internet access at home. Only very limited information collection is planned for the future.[22]

- Even more fundamental questions can be raised about the substantive policies the federal government has pursued to spur broadband deployment. For example, many experts argue that the FCC made a critical error several years ago when it dropped requirements that local phone companies make their networks available to competing DSL providers.[23] Regardless of the merits of that claim, such basic policy issues will have a much more significant impact on the future course of broadband deployment than will the presence or absence of state and local taxes on access services. Such issues arguably are more deserving of congressional attention than ITFA is.

A Permanent ITFA: Inefficient, Ineffective, Counterproductive

That demand for a product or service usually falls when its price increases is a fundamental tenet of economic theory. And so, if state and local governments *were* to begin applying their sales taxes to Internet access services, it seems likely that there would be some impact on the number of households that choose to subscribe. All indications are, however, that the impact would be exceedingly small; indeed, the two most comprehensive studies done in the U.S. (by the GAO and the University of Tennessee, mentioned above) suggest that the impact on subscriptions would not even be statistically significant.[24] For this reason, barring state and local taxes is an extremely inefficient mechanism for subsidizing household demand for Internet access. If Congress were considering forgoing federal tax receipts to stimulate such marginal increases in demand — as opposed to forcing state and local governments to forfeit *their* revenues — it seems unlikely that the policy would be given serious consideration.

A permanent ITFA makes even less sense as a means of encouraging broadband *deployment*. Where to make broadband available, and when, are fundamental strategic decisions for telephone, cable TV, and wireless access providers that affect billions of dollars in annual investment spending. These decisions are largely being driven by the income levels of potential customers. They are also strongly influenced by the enormous cost differences incurred in deploying Internet access infrastructure to sparsely populated rural areas, as compared to crowded urban neighborhoods dominated by multifamily buildings or suburban subdivisions in which single-family homes predominate.[25] There is no evidence at all to suggest that these decisions have been influenced to the slightest degree by the presence or absence of existing state and local access taxes.[26] Indeed, as noted above, the most advanced high-speed Internet access services are being deployed in states that do tax access.

In sum, the fundamental rationales now being offered for a permanent Internet Tax Freedom Act — spurring broadband deployment and uptake and closing the digital divide — are logically flawed and contradicted by numerous pieces of empirical evidence. As documented in the Center's previous report on this legislation, a permanent ITFA risks doing substantial damage to the future revenue-raising capacity of states and localities. Not only would this limit the resources available to fund critical services like education and health care; it also, as discussed above, would impair their ability to fund a variety of services and initiatives that help low-income people become experienced Internet users and that are spurring deployment of broadband infrastructure in underserved areas.

For all these reasons, the best course of action would be to allow ITFA to lapse at the end of its nine years of existence on November 1, 2007. If Congress is not prepared to do that, a third temporary extension is all that can be justified. Such an extension is proposed by the Carper/Alexander "Internet Tax Freedom Extension Act," S. 1453.

Notes

[1] For documentation of the fact that ITFA was originally intended as a "time out" to allow for study of *how* Internet access would be taxed by state and local governments, not *whether* it would be taxed, see: Michael Mazerov, "Making the 'Internet Tax Freedom Act' Permanent Could Lead to a Substantial Revenue Loss for States and Localities," Center on Budget and Policy Priorities, Revised August 30, 2007, p. 6. Available at www.cbpp.org/7-11-07sfp.pdf.

[2] For an example of concerns about the "digital divide" expressed by ITFA proponents, see the testimony of Annabelle Canning, Vice President, Verizon Communications, Senate Committee on Commerce, Science, and Transportation, May 23, 2007: "Regressive new taxes on Internet access would hurt efforts to close the digital divide. . . . At the very time that the benefits of competition are coming to low- and moderate-income households, the imposition of new taxes on Internet access would increase prices and make broadband access less affordable to such households. . ."

The company's rhetorical concern about expanding the availability of low-cost Internet access for low-income households is not reflected in some of its actions. As discussed in the sources described in Note 18 below, Verizon has divested itself of conventional telephone and DSL lines in Hawaii, Alabama, Missouri, and Kentucky in recent years and is currently seeking to do the same in New Hampshire, Maine, and Vermont so that it can focus on deploying its expensive, "FiOS" fiber-optic Internet access/TV service. As discussed in the source cited in Note 14 below, Verizon has also recently increased charges to subscribers to its DSL Internet access service who prefer not to — or do not have the financial wherewithal to — lock themselves into annual contracts. As discussed in the sources cited in Note 17, Verizon has played a leading role in lobbying for state video-franchising laws that include provisions banning requirements that telephone companies supply TV and broadband service in high- and low-income neighborhoods equally.

[3] See: Jose Antonio Vargas, "Binary America: Split in Two by a Digital Divide," *Washington Post*, July 23, 2007.

[4] The GAO and University of Tennessee studies are summarized in Michael Mazerov, "Making the 'Internet Tax Freedom Act' Permanent Could Lead to a Substantial Revenue Loss for States and Localities," Center on Budget and Policy Priorities, Revised August 30, 2007, pp. 20-21.

[5] The states in which Verizon's "FiOS" fiber-optic Internet access service is available (in some localities) include New Hampshire, Texas, and Washington. See the map at DSLReports, www.dslreports.com/gmaps/fios. The states in which AT&T's "U-Verse" Internet access service is available include Ohio, Texas, and Wisconsin. See: www.dslreports.com/gmaps/uverse.

[6] Congressional Budget Office Cost Estimate on S. 150, Internet Tax Nondiscrimination Act, September 9, 2003.

[7] The concern that household demand for broadband is slowing appears to be overblown. According to a recent forecast by PricewaterhouseCoopers, the number of broadband household subscribers is expected to grow at an annual rate of 11.9 percent between now and 2011, reaching 89 million households. Reuters, "Web Spending Seen Rising by Double Digits to 2011," CNet News, June 21, 2007. According to a recent survey by the Consumer Electronics Association, 20 percent of households that do not currently subscribe to broadband Internet access expect to do so within two years. Consumer Electronics Association, *Broadband in America: Access, Use, and Outlook*, July 2007, p. 10. Available at www.ce.org/PDF/CEA_Broadband_America.pdf.

[8] Fully 91% of adults with computers manage to afford an Internet access subscription of some type. Conversely, 79% percent of the adults who do not have *any* Internet access at home do not have computers, and 52% of the adults that do not have *broadband* access at home do not have computers. (Calculations using data from Consumer Electronics Association study cited in the previous note.) These data demonstrate that lack of computer ownership, not the cost of Internet access, is the primary cause of the "digital divide." The highly respected anti-digital-divide organization, Connected Nation, Inc., concurred in Senate testimony earlier this year: "[O]ur research indicated that while industry assumed that the monthly fee was a primary barrier to the adoption of household broadband, the lack of a computer at home ranked even higher." Testimony of Brian R. Mefford, President and CEO, Connected Nation, Inc., before the Senate Committee on Commerce, Science, and Transportation, April 24, 2007.

[9] "A little under one-third of U.S. households have no Internet access and do not plan to get it, with most of the holdouts seeing little use for it in their lives, according to a survey released Friday [March 23, 2007]. . . . The second

annual Technology Scan conducted by Parks [Associates] found the main reason potential customers say they do not subscribe to the Internet is because of the low value to their daily lives they perceive rather than concerns over cost. Forty-four percent of these households say they are not interested in anything on the Internet, versus just 22 percent who say they cannot afford a computer or the cost of the Internet service, the survey showed." Reuters, "Survey: Many Americans See Little Point to the Web," March 26, 2007. The Parks survey is available at newsroom.parksassociates.com/article_display.cfm?article_id=3510.

[10] The report discussed in the text box is available at www.pewinternet.org/pdfs/Broadband_Commentary.pdf. The thrust of the Pew report analysis is substantially echoed in the Parks Associates report cited in Note 9 and the Consumer Electronics Association report cited in Note 7. Inexplicably, however, the CEA report concludes that "price is a major deterrent to broadband adoption." That conclusion is belied by other findings in the report. For example, the report finds that "Only 14 percent of all non-subscribers [to broadband who currently have no Internet access at home] say they want it and can't afford it." (Page 6). The report further finds that "income is not a significant factor in differentiating between households with other [i.e., dial-up] Internet connections" — again suggesting that cost is not a major factor explaining why dial-up users have not upgraded to broadband connections.

[11] In the Consumer Electronics Association survey cited in Note 7, 25 percent of current dial-up Internet access subscribers said that the reason they had not upgraded to broadband was that it was not available where they lived. A recent report estimates that 14 percent of American households could not obtain broadband service as of December 2005. Jed Kolko, "A New Measure of Residential Broadband Availability," Public Policy Institute of California, August 2007. (Draft report for presentation at the upcoming 2007 Telecommunications Policy Research Conference.)

In actuality, satellite-based Internet access is available almost everywhere in the United States. However, it cannot be considered a satisfactory substitute for high-speed cable, DSL, or fiber-optic access. It is approximately twice as expensive as DSL service of comparable speed, it is no faster than the slowest DSL available anywhere, and its "upload" speed is so slow that most consumers wishing to transfer photographs or other large files to other Internet users would find it only slightly better than dial-up access for such purposes. (S. Derek Turner, *Shooting the Messenger; Myth vs. Reality: U.S. Broadband Policy and International Broadband Rankings*, Free Press, July 2007, note 6.)

[12] Of the 22 percent of respondents who expressed affordability concerns in the Parks survey cited in Note 9, 14 percent said they couldn't afford a computer while 8 percent said they couldn't afford the cost of the access service. Seventeen percent of non-subscribers who said they had no intention to subscribe cited a lack of knowledge in how to use the Internet.

For a useful perspective on the meaning and policy implications of consumer surveys that report that price is a major barrier to broadband uptake, see also: Andrew Cohill, "Broadband Take Rate Has Nothing to Do with Price." Available at www.designnine.com/news/?Q=node/656. From 1993 to 2002, Cohill was Director of the well-known "Blacksburg Electronic Village" developed by Virginia Tech that was one of the first major experiments in wiring an entire community for high-speed Internet access.

Connected Nation, Inc., cited in Note 8, agrees with Cohill that a key element of closing the digital divide is "creating demand by catalyzing grassroots awareness [and] literacy" in the use of the Internet.

[13] According to a comprehensive nationwide survey conducted in 2006, "Only 20.7% of public library branches indicate that the number of [Internet access] workstations they currently have is adequate to meet patron demand," yet "45.4% of public library branches have no plans to add workstations in the next two years." Moreover, "Roughly 45.0% of public libraries reported a decrease (6.8%) or flat funding (36.6%) in their overall budget as compared to the previous fiscal year. Given inflation and increased personnel and benefits costs, flat funding equates to a cut in funding. Thus, nearly half of public libraries essentially experienced reductions in funding" in 2006. John Carlo Bertot et al., *Public Libraries and the Internet 2006: Study Results and Findings,* College of Information, Florida State University, September 2006, p. 2.

A recent study concludes that: "Upgrading and maintaining these [public library Internet] facilities would be a better use of funds than indiscriminately providing [Internet access] subsidies to households." Anindya Chaudhuri and Kenneth S. Flamm, "Is a Computer Worth a Thousand Books? Internet Access and the Changing Role of Public Libraries," *Review of Policy Research*, 2006.

[14] Internet access providers are not cutting their prices at present. According to a recent *Wall Street Journal* article: "AT&T last year offered introductory broadband rates as low as $12.99 a month, but cancelled the promotion last year. . . .AT&T now charges $19.99 a month for the same bundle, but introduced a slower [speed] tier [of DSL service] for $14.99 a month. . . . Meanwhile, cable operators have been holding the line on price. In the second quarter [of 2007], for example, Comcast's average monthly revenue from a broadband subscriber was $43.37, compared with $43.06, the previous year." Jessica E. Vascellaro, "Is High-Speed Internet Growth Slowing?" *Wall Street Journal*, August 9, 2007.

Verizon recently raised DSL service charges for consumers unless they switched from month-to-month to annual service contracts. See: "Verizon Raises Rates for Existing DSL Customers," *DSL Reports*, June 28, 2007.

[15] According to the latest data from the OECD, in 11 developed countries high-speed Internet access is less expensive than it is in the United States when measured on the basis of cost per million megabits per second of transmission speed. (Those countries include Australia, Denmark, Finland, France, Germany, Italy, Japan, Korea, Norway, Spain, and Sweden.) Source: *OECD Communications Outlook 2007*, Table 7.14. The lowest cost of high-speed Internet access available in Japan is less than 10 percent of the lowest-cost access available in the U.S.; Finland, France, Japan, Korea, and Sweden all have access plans available that cost less than a third of the lowest-cost plan available here. Lower prices prevail in those countries notwithstanding the fact that the OECD price data include the substantial value-added taxes imposed on the service. (E-mail communication from Dimitri Ypsilanti, OECD, July 19, 2007. For value-added taxes imposed on broadband in foreign countries see Table 1 in this report.) See also: Thomas Bleha, "Down to the Wire," *Foreign Affairs*, May/June 2005: "Today, most U.S. homes can access only "basic" broadband, among the slowest, *most expensive*, and least reliable in the developed world, and the United States has fallen even further behind in mobile-phone-based Internet access." [Emphasis added.]

[16] See, for example, Jordan Schrader, "States Weigh Limits on Public Internet: Providers Such as Time Warner, Comcast Say It's Unfair Competition," *USA Today*, July 17, 2007. See also: Matt Richtel, "Pennsylvania Limits Cities in Offering Net Access, *New York Times*, December 2, 2004 (discussing Verizon's success in lobbying for anti-municipal broadband legislation there) and Fiona Morgan, "Touch That Dial," *The Independent Weekly*, July 11, 2007 (discussing how after successfully lobbying for statewide video franchising legislation in North Carolina last year, telecommunications companies like AT&T this year sought to enact legislation restricting municipal broadband initiatives).

[17] For several years now, telephone companies that wish to begin offering television and high-speed Internet access service in competition with traditional cable TV companies have sought federal and state legislation and FCC rulings eliminating the normal requirement that they negotiate a franchise agreement with the individual local jurisdictions in which they wish to provide service (as the cable TV companies have had to do). At the state level, they have lobbied for laws providing for a state-wide franchise agreement negotiated with the state. The companies have often sought to include in such laws language barring the state from putting in the franchise agreement a provision that would require the companies to "build out" their networks to all neighborhoods in their service areas. The inclusion of such language in the bills arguably allows the companies to "cherry-pick" more profitable high-income neighborhoods for deployment and bypass less-profitable low-income and rural areas. For three recent editorials and opinion columns opposing industry-backed statewide video franchising laws — in part because they include bans on jurisdiction-wide "build-out" requirements — see: "Consumers Lose with Pay-TV Bill," *St. Petersburg Times* [Florida], March 21, 2007; Margaret Maherty, Tennessee Municipal League, "AT&T Cable Bill Holds No Promise for State Consumers," *Murfreesboro Daily News Journal* [Tennessee], February 21, 2007; "Keep Cities in Charge of Regulating Cable TV," *Everett Herald* [Washington], February 27, 2007. See also: "The Truth Behind the Baby Bells & 'Franchise Reform'," DSLReports, March 23, 2007 (www.dslreports.com).

[18] See: Carolyn Y. Johnson, "Verizon to Sell Lines in N.H., Vt., and Maine," *Boston Globe*, January 17, 2007; Kate Davidson, "Consumer Advocate Opposes Phone Bid," *Nashua Telegraph*, August 5, 2007.

[19] See: Kim Hart, "Quietly, AT&T Discounts DSL to Meet Merger Demands," *Washington Post*; June 19, 2007; Jon Van, "AT&T DSL Bargain Goes Unadvertised," *Chicago Tribune*, July 13, 2007; Consumers Union, "AT&T's Shenanigans in Hiding $10 DSL Service Go from Exasperating to Infuriating," August 2007.

[20] See the dissenting statements of FCC Commissioners Michael J. Copps and Jonathan S. Adelstein in Federal Communications Commission, *Availability of Advanced Telecommunications Capability in the United States: Fourth Report to Congress*, September 9, 2004.

[21] See Statement of FCC Commissioner Michael J. Copps in *In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunicaitons Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, Federal Communications Commission, March 12, 2007.

[22] The last official federal government survey of which segments of the population have access to the Internet at home was done in October 2003 and was published in October 2005. U.S. Census Bureau, *Computer and Internet Use in the United States: 2003*, October 2005. According to Census Bureau staff, just four questions concerning Internet use are likely to be included in the Fall 2007 Current Population Survey, and no questions will be asked concerning computer ownership and use.

[23] See, for example, S. Derek Turner, *Broadband Reality Check II: The Truth Behind America's Digital Decline, Free Press*, August 2006, p. 20. A recent *Business Week* article discusses in depth the role that such "local loop unbundling" played in making inexpensive, very fast Internet access and Internet-based television available to French consumers. See: Jennifer L. Schenker, "Vive la High-Speed Internet," *Business Week*, July 18, 2007. The same policy is cited as the key to Japan's rapid broadband deployment. See: Blaine Harden, "Japan's Warp-Speed Ride to Internet Future," *Washington Post*, August 29, 2007.

[24] See the source cited in Note 4.

[25] See: Kenneth Flamm, "Diagnosing the Disconnected: Where and Why Is Broadband Unavailable in the U.S.?" preliminary paper presented to the 2006 Telecommunications Tax Policy Research Conference, August 2006. Flamm found that broadband was less likely to be available in zip codes with relatively few people, lower levels of household income and wealth, farm-dominated economies, higher shares of retirees, and more rugged topography. See also: Jed Kolko, "Broadband for All? Gaps in California's Broadband Adoption and Availability," *California Economic Policy*, Public Policy Institute of California, July 2007 (especially the section on "Broadband Economics") and Wei-Min Hu and James E. Prieger, "The Timing of Broadband Provision: The Role of Competition and Demographics," unpublished, October 2006.

[26] The GAO study referenced above (see the source cited in Note 4) specifically examined whether there were differences in broadband *deployment* between the states that currently tax Internet access services and those that do not tax it. The study found that there were no statistically-significant differences in deployment rates.