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Congress Should End – Not Extend – the Ban on State and Local Taxation of Internet Access Subscriptions

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The Internet Tax Freedom Act (ITFA), enacted in 1998 and temporarily renewed in 2001, 2004, and 2007, imposed a moratorium on new state and local taxes on monthly Internet access fees while preserving ("grandfathering") existing Internet access taxes. The House Judiciary Committee recently approved a bill to eliminate the grandfather provision and permanently ban all state and local taxation of Internet access subscriptions. *This represents the first time that Congress has seriously considered a permanent ban on taxing Internet service for all states, including those now using these taxes to help support public services.* Rather than extend ITFA indefinitely, Congress should lift the ban and let states decide whether they and their local governments will impose their sales and telecommunications taxes on Internet access charges.

- **Grandfathered states would immediately lose revenue.** Seven states still tax Internet access subscription fees: Hawaii, New Mexico, North Dakota, Ohio, South Dakota, Texas, and Wisconsin. Eliminating the grandfather provision would immediately deprive these states and many of their localities of almost $500 million in annual revenue that helps pay for education, police, and other services. (See Table 1.) These states would have to reduce services or increase other taxes to offset the revenue loss.

- **Non-grandfathered states and their local governments would continue to lose billions in *forgone* revenue each year**. Permanently banning taxation of Internet access charges would deny the non-grandfathered states almost $6.5 billion in potential state and local sales tax revenues each year in perpetuity. (See Table 2.) The forgone revenue would likely grow substantially over time as more people sign up for home and/or mobile Internet access and current subscribers trade up to faster, more expensive, monthly service. Because state and local governments must balance their budgets each year, this forgone revenue results in some combination of lower services (such as larger K-12 class sizes) and higher taxes. Allowing states and localities to collect this revenue would enable them to reduce taxes and/or improve education, health care, roads, and other services and infrastructure.

- **Permanently banning Internet access taxes would compound state and local revenue losses from the growth of online commerce.** States and localities are already experiencing a substantial loss of sales tax revenue because they lack the legal authority to require Internet retailers not physically present within their borders to collect and remit those taxes — a

Table 1

Estimated Revenue Loss from Repealing ITFA Grandfather Provision (as of 2012)

	Total Broadband Connections	Adjusted Broadband Connections*	Annual Taxable Receipts @$40.03/mo.	State Sales Tax Rate	Average Local Sales Tax Rate	Sales Tax Revenue Lost	State's Own Revenue Loss Estimate	Year of State's Estimate
Hawaii	1,217,000	1,034,000	$496,692,240	4.0%	0.0%	$19,867,690	N/A	
New Mexico	1,432,000	1,217,000	$584,598,120	5.1%	2.4%	$43,960,093	N/A	
North Dakota	592,000	503,000	$241,621,080	5.0%	0.8%	$14,049,432	N/A	
Ohio**	1,660,000	1,411,000	$677,787,960	5.8%	1.2%	$47,291,808	$62,846,060	FY 16
South Dakota	608,000	516,000	$247,865,760	4.0%	1.4%	$13,463,889	$13,600,000	FY 13
Texas***	22,694,000	19,289,000	$3,478,964,040	6.3%	1.6%	$271,888,921	$358,000,000	N/A
Wisconsin	4,040,000	3,434,000	$1,649,556,240	5.0%	0.4%	$89,073,497	$127,200,000	FY 15
TOTAL						**$499,595,330**	**$561,646,060**	

*Equals 85 percent of total broadband connections, to account for tax-exempt governmental or non-profit. See Appendix 1 for detailed discussion of methodology used in both Table 1 and Table 2 as well as data sources.
**OH: only monthly fees for access purchased by businesses are taxable; number of connections shown in first column are business only.

***TX: Only first $25 of monthly fee for access is exempt. Annual taxable receipts calculated accordingly.

Sources: Number of broadband connections: Federal Communications Commission. Average monthly cost: U.S. Census Bureau, Service Annual Survey, broadband provider receipts data and FCC broadband connections data. States' revenue loss estimates: letters submitted to Federation of Tax Administrators by state revenue departments.

problem Congress could address by approving the Marketplace Fairness Act (H.R. 684/S. 743). The sales tax base is also eroding significantly as a growing number of consumers switch from taxable cable TV service, landline phones, and music CDs to cheaper (or free) alternatives they can obtain via the Internet, such as Skype for phone calls and Spotify for music. Congress should not compound these revenue problems by forever barring taxation of the one purchase consumers must make as a gateway to all these other services: a monthly Internet access subscription.

- **The bill would unintentionally put at risk numerous taxes that Internet access providers pay in virtually all states.** Eliminating the grandfather provision would open the door to legal challenges by telephone and cable TV companies of many state and local taxes they pay on things they purchase *in order to provide* Internet access service, such as computer servers, fiber-optic cable, or even gasoline for their vehicles. Courts could hold such taxes to be *indirect* taxes on providing Internet access services and therefore voided by ITFA. Companies would have little to fear from bringing such litigation; if ITFA were permanent, Congress would be unlikely to revisit it to close any loopholes that such litigation exploited.

- **Banning taxes on Internet access creates unequal tax treatment of services that are close substitutes for each other.** State and local governments have long applied their sales taxes to other services for which Internet access is a close substitute. If a state taxes cable television service, it is unfair for Congress to exempt the monthly fee for Internet access that other people pay to be able to stream TV shows over the Internet. If a state taxes conventional text messages on a mobile phone, there is no justification for exempting the data plan used to send similar messages via email or Twitter. Far from upholding the principle of "technological neutrality" (an oft-stated objective of ITFA proponents), ITFA violates it.

Table 2

Forgone 2012 Sales Tax Revenue Due to ITFA in Non-Grandfathered States

	Total Broadband Connections	Adjusted Broadband Connections*	Annual Taxable Receipts @ $40.03/mo.	State Sales Tax Rate	Average Local Sales Tax Rate	Potential Sales Tax Revenue Forgone
Alabama	3,404,000	2,893,000	$1,389,861,480	4.0%	3.3%	$101,578,258
Arizona	4,987,000	4,238,000	$2,035,765,680	5.6%	2.6%	$167,640,978
Arkansas	2,118,000	1,800,000	$864,648,000	6.5%	2.0%	$73,517,080
California	32,745,000	27,833,000	$13,369,859,880	7.5%	2.1%	$1,287,478,938
Colorado	4,664,000	3,964,000	$1,904,147,040	2.9%	4.1%	$132,695,528
Connecticut	3,235,000	2,749,000	$1,320,509,640	6.4%	0.0%	$83,852,362
District of Columbia	1,230,000	1,045,000	$501,976,200	5.8%	0.0%	$28,863,632
Florida	17,088,000	14,556,000	$6,944,084,160	6.0%	0.5%	$454,768,814
Georgia	8,129,000	6,909,000	$3,318,807,240	4.0%	2.7%	$223,221,315
Idaho	1,176,000	999,000	$479,879,640	6.0%	0.0%	$28,792,778
Illinois	10,792,000	9,173,000	$4,406,342,280	6.3%	1.4%	$337,336,625
Indiana	4,712,000	4,005,000	$1,923,841,800	7.0%	0.0%	$134,668,926
Iowa	2,086,000	1,773,000	$851,678,280	6.0%	1.8%	$66,439,253
Kansas	2,390,000	2,031,000	$975,611,160	6.2%	2.0%	$79,705,701
Kentucky	3,241,000	2,754,000	$1,322,911,440	6.0%	0.0%	$79,374,686
Louisiana	3,687,000	3,133,000	$1,504,967,880	4.0%	5.3%	$140,291,442
Maine	918,000	780,000	$374,680,800	5.5%	0.0%	$20,607,444
Maryland	5,199,000	4,419,000	$2,122,710,840	6.0%	0.0%	$127,362,650
Massachusetts	5,959,000	5,065,000	$2,433,023,400	6.3%	0.0%	$152,063,963
Michigan	7,852,000	6,674,000	$3,205,922,640	6.0%	0.0%	$192,355,358
Minnesota	4,400,000	3,740,000	$1,796,546,400	6.9%	0.2%	$126,300,111
Mississippi	2,059,000	1,750,000	$840,630,000	7.0%	0.0%	$58,844,100
Missouri	4,692,000	3,988,000	$1,915,675,680	4.2%	2.8%	$134,936,990
Nebraska	1,401,000	1,190,000	$571,628,400	5.5%	1.2%	$38,367,934
Nevada	2,363,000	2,008,000	$964,562,880	6.9%	0.7%	$72,972,392
New Jersey	8,238,000	7,002,000	$3,363,480,720	7.0%	0.0%	$235,443,650
New York	17,434,000	14,818,000	$7,117,974,480	4.0%	4.3%	$590,235,589
North Carolina	7,550,000	16,417,000	$3,082,470,120	4.8%	1.9%	$206,375,410
Oklahoma	2,834,000	2,408,000	$1,156,706,880	4.5%	3.6%	$93,685,263
Pennsylvania	10,298,000	8,753,000	$4,204,591,080	6.0%	0.4%	$270,169,360
Rhode Island	870,000	739,000	$354,986,040	7.0%	0.0%	$24,849,023
South Carolina	3,284,000	2,791,000	$1,340,684,760	6.0%	0.8%	$90,695,983
Tennessee	4,929,000	4,189,000	$2,012,228,040	7.0%	2.2%	$185,395,041
Utah	2,160,000	1,836,000	$881,940,960	4.7%	1.3%	$52,475,487
Vermont	479,000	407,000	$195,506,520	6.0%	0.2%	$12,068,662
Virginia	6,890,000	5,856,000	$2,812,988,160	4.3%	1.0%	$149,088,372
Washington	5,894,000	5,086,000	$2,443,110,960	6.5%	1.4%	$193,834,519
West Virginia	1,157,000	983,0000	$472,193,880	6.0%	0.0%	$28,331,633
Wyoming	447,000	379,000	$182,056,440	4.0%	0.9%	$8,841,604
Total	**213,001,000**	**181,033,000**	**$86,961,011,880**			**$6,485,526,854**

* See Table 1 for assumptions and data sources. States not listed in either Table 1 or 2 do not levy sales taxes. Some sales tax rates shown are rounded to nearest 0.1 percent; actual rates were used in calculation

- **Making ITFA permanent would represent a fundamental change of course from ITFA's original purpose and a breach of faith with state and local governments.** Congress never intended ITFA to ban taxes on access services permanently, nor was the grandfather provision intended only to give states time to phase out existing taxes. The Senate Commerce Committee report on ITFA stated that "A *temporary* moratorium on Internet-specific taxes is necessary to facilitate the development of a *fair and uniform taxing scheme*." (Emphasis added.) A "permanent moratorium" is a contradiction in terms.

For the above reasons, a permanent ITFA would make it harder for states and localities to finance education and other critical services. And it would not achieve one objective that ITFA proponents often assert: encouraging more households to subscribe to Internet access.

- **Taxing Internet access services has not significantly impeded their adoption by households or deployment by providers, studies show.** A Government Accountability Office study found no evidence that the "grandfathered" state and local taxes had a significant impact on whether households subscribed to Internet access services in those states or whether telephone and cable TV companies chose to make high-speed Internet access ("broadband") available in them. Another study by academic researchers reached the same conclusion with regard to household adoption.[1]

- **Consumer surveys conclude that taxes are not a major deterrent to household subscriptions to Internet access services.** Surveys by the Pew Research Center and the Commerce Department reveal that the monthly cost of Internet access service is not a major factor in household decisions not to subscribe to it. Indeed, the Census Bureau reports that 95 percent of households that own computers subscribe to an Internet access service.[2] Banning taxes on the monthly Internet access fee is therefore an extremely costly and inefficient way to encourage greater household adoption.

- **On balance, a permanent ITFA would likely *impede* the goal of getting more households (especially low-income ones) online.** State and local governments give many people their first direct exposure to the Internet in public schools, libraries, and community centers. Moreover, Internet use at home is strongly correlated with overall household education levels; college graduates are 30 percent more likely to subscribe to home Internet access than people with less education, for example. Depriving state and local governments of billions of dollars of potential revenue that they could use to undo deep cuts in K-12 and higher education and to provide more Internet-equipped computers and training classes in libraries runs counter to the goal of expanding household Internet access.

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[1] United States Government Accountability Office, *Broadband Deployment Is Extensive throughout the United States, but It Is Difficult to Assess the Extent of Deployment Gaps in Rural Areas*, report GAO-06-426, May 2006, pp. 21-22, 31-32, and Appendix III. Donald Bruce, John Deskins, and William F. Fox, "Has Internet Access Taxation Affected Internet Use?" *Public Finance Review,* V. 32, No. 2, 2004.

[2] U.S. Census Bureau, Current Population Survey, October 2012, www.census.gov/hhes/computer/files/2012/table3.xls.

ITFA Does Not Prohibit Taxation of Internet Purchases

The primary effect of the Internet Tax Freedom Act is to prohibit states and localities from applying their sales taxes to Internet access services. There is often confusion about whether it also bars state and local governments from applying their sales taxes to goods and services ordered over the Internet — such as a book purchased from Amazon or a movie streamed from Netflix. ITFA does *not* prohibit a sales tax on such transactions, *provided* that the tax would equally apply to the book if purchased in a local store or the movie purchased on a "pay-per-view" basis on cable TV.

However, state and local sales taxes often are *not* charged on goods ordered over the Internet, as most consumers are aware. This is due to a 1992 U.S. Supreme Court decision holding that a state cannot require an out-of-state merchant to charge sales tax to the state's residents unless the seller has a physical presence (such as a warehouse) within the state. If the merchant is not required to charge the tax, the purchaser is legally obligated to self-remit the tax to the state revenue department, but many purchasers are unaware of this requirement or ignore it.

The Marketplace Fairness Act (MFA, H.R. 684/S. 743) would reverse this Supreme Court decision and authorize states and localities to require large Internet merchants to charge sales tax on all taxable sales, even if they are not physically present in a state, provided that the state's sales tax meets certain specified conditions. The Senate approved the MFA in April 2013. A number of senators reportedly wish to see it enacted prior to or in conjunction with ITFA as a condition of their support for an ITFA extension.

- **Congress should not subsidize Internet access services by giving away potential state and local revenue**. While barring new *state and local* taxes on Internet access charges for 15 years, Congress has not forgone related *federal* tax revenue by, for example, allowing Internet service providers to write off their infrastructure investments immediately or giving low-income households a refundable income tax credit for monthly subscription fees. Voting for ITFA allows Congress to take credit for protecting consumers from taxes on Internet access while leaving it to state and local officials to deal with the resulting revenue loss.

Congress has a legitimate role to play in preventing discriminatory state and local taxation of Internet access — and online commerce more broadly. Few if any would object to another temporary extension of a separate ITFA provision banning multiple and discriminatory taxation of electronic commerce. (Such a provision would, for example, prohibit states from taxing Internet access at a higher rate than they tax interstate communications or consumer purchases more broadly.) An extension of the prohibition on multiple and discriminatory taxation should be temporary, however, in part to ensure that Congress periodically reviews the prohibition for harmful, unintended effects.[3]

[3] Leading state and local tax expert Walter Hellerstein of the University of Georgia Law School has labeled ITFA "hideously complex and permeated with technical flaws." See pp. 17-21 of his testimony before a Senate Finance Committee hearing on "Tax Reform: What It Means for State and Local Tax and Fiscal Policy," April 25, 2012, http://www.finance.senate.gov/imo/media/doc/Testimony%20of%20Hellerstein.pdf.

Proposed ITFA Differs From Current Law

On June 17, the House Judiciary Committee approved H.R. 3086, the Permanent Internet Tax Freedom Act. The bill could be brought to the floor as early as July 14.

Congress enacted the original Internet Tax Freedom Act in 1998 and renewed it in 2001, 2004, and 2007. The 2007 renewal expires on November 1, 2014.

ITFA contains two major restrictions on state and local taxing powers. First, it prohibits "multiple" and "discriminatory" taxation of online commerce. An example of "multiple" taxation is taxation of an interstate sale by both the seller's state and the consumer's state. An example of "discriminatory" taxation is the application of a sales tax to a book purchased online that would not be applied to a book purchased in a store. State and local government representatives do not have significant objections to renewing ITFA's ban on multiple and discriminatory taxation of online commerce, so long as the extension is temporary, as discussed below.

ITFA also imposed a temporary "moratorium" on new state and local taxes on Internet access services. That means that additional state and local governments may not levy their normal sales or telecommunications taxes on the typical $30 to $50 monthly charge that households and businesses pay to a company like Comcast or Verizon Wireless for fixed-location or mobile Internet access. ITFA, however, "grandfathered" state and local taxes on Internet access in effect *prior to* 1998, and subsequent renewals of ITFA maintained this provision.

In renewing ITFA, policymakers have broadened its definition of Internet access services to include all telecommunications services used to provide Internet access, such as the high-speed lines that Internet access providers lease to connect to the Internet "backbone" and digital subscriber lines that households use to obtain Internet access where higher-speed cable or fiber-optic lines aren't available. But they have also narrowed the definition to exempt (and therefore permit taxation of) online "content" like downloaded music, as well as Internet-based telephone and television services.

The bills before Congress would make ITFA permanent and eliminate its grandfather provision, thereby requiring states and localities that are still taxing Internet access services to stop. These changes would significantly impede states' and localities' ability to finance critical services like education, health care, public safety, and highway maintenance.

Immediate Revenue Loss in "Grandfathered" States and Localities

Repealing ITFA's grandfather clause would cost seven states (Hawaii, New Mexico, North Dakota, Ohio, South Dakota, Texas, and Wisconsin) and some of their local governments almost $500 million per year they receive by taxing Internet access service. (See Table 1.) This estimate, based on publicly available data, is conservative. It assumes that fully one-third of non-residential Internet access connections are exempt from current taxes because governmental and non-profit organizations purchased these subscriptions. (See Appendix 1 for more detail.) Moreover, the estimate is for calendar year 2012; the current revenue loss is undoubtedly significantly greater given additional subscriptions to Internet access in the past year and a half — especially the rapid growth of mobile phone data plans.

Also, four of the grandfathered states estimate that their annual losses *alone* will exceed $500 million. Such estimates may well be more accurate than those relying on publicly available data to the extent that they draw information from confidential sales tax returns filed by Internet access providers.

In addition, the Congressional Budget Office (CBO) estimates that "the tax collections that would be prohibited [due to elimination of ITFA's grandfather clause] total several hundred million dollars annually."[4] CBO concluded that revenue losses of this magnitude are sufficient to trigger the provisions of the Unfunded Mandates Reform Act of 1995, which classifies federal preemptions of state and local taxing powers as an unfunded federal mandate on state and local governments.

Due to balanced-budget requirements, some of these seven states and their affected local governments may have to reduce services to compensate for the lost revenue, since November 1 falls in the middle of their budget years. In future years they would have the option of raising other taxes.

Loss of Billions of Dollars in Potential Revenue for Other States

Permanently extending the ban on taxing Internet access charges would deny *non*-grandfathered states almost $6.5 billion in potential state and local sales tax revenues each year in perpetuity. (See Table 2.)[5] The potential revenue forgone would likely grow substantially over time as more non-subscribers sign up for home and/or mobile Internet access and current subscribers trade up to faster — and therefore more expensive — monthly service.

Because state and local governments must balance their budgets each year, this forgone revenue inherently results in some combination of lower services (for example, larger K-12 class sizes) and higher income, sales, and property tax rates. Allowing states and localities to collect this revenue would enable them to reduce their sales tax rates, reduce other taxes, and/or improve education, health care, roads, and other critical services and infrastructure. For example, $6.5 billion in annual revenue would be enough to pay a $50,000 salary to 130,000 teachers; local education employment is still down by 280,000 positions since the start of the recession.

Revenue Losses Would Come on Top of Losses Due to Internet Commerce

Permanently banning taxes on Internet access services would compound state and local sales tax revenue losses resulting from the growth of online commerce. These governments already lose tens of billions of dollars each year because they are legally unable to require large Internet retailers not present in their jurisdictions to collect and remit the taxes due on sales to their residents. The Marketplace Fairness Act would address this problem, but it remains stuck in Congress.

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[4] Congressional Budget Office, "Congressional Budget Office Cost Estimate: H.R. 3086, Permanent Internet Tax Freedom Act," June 26, 2014, p. 2; http://www.cbo.gov/sites/default/files/cbofiles/attachments/hr3086.pdf.

[5] The estimated loss of potential revenues would be considerably larger if Table 2 also took into account local telecommunications taxes. Many localities are not authorized to impose broad-based sales taxes, but they are allowed to impose excise taxes on telephone service at rates comparable to typical local sales tax rates. As will be discussed below, Internet access is increasingly substituting in many ways for telephone-based communication and, arguably, localities should be allowed to tax Internet access at reasonable rates if they are also allowed to tax telephone service. The additional revenue that could be realized if that occurred is not included in Table 2.

State and local sales and telecommunications tax bases are also eroding as a growing number of consumers ditch their telephone landlines, "cut the cord" to their cable TV providers, and stop buying DVDs and CDs – all of which are generally subject to tax – in favor of cheaper or free alternatives they can obtain via the Internet, such as Skype for phone calls and Spotify for music.

Making ITFA permanent would add to these problems by forever barring taxation of the one purchase consumers must make as a gateway to all these other online goods and services: monthly Internet access.

Bills Could Invalidate Other Taxes on Internet Access Providers

Proponents of repealing ITFA's grandfather clause say their goal is to ensure that no state or local government ever again taxes Internet access services directly. But repeal would be likely to have much more far-reaching — and unintended — impacts on state and local taxes. Repeal threatens to invalidate the application to Internet access providers of a wide variety of taxes that apply to most or all businesses, because ITFA's definition of a "tax on Internet access" expressly includes taxes on *providers* of Internet access services, not just consumers.

Why Repealing the Grandfather Clause Threatens General Business Taxes

When Congress considered repealing the grandfather clause as part of renewing ITFA in 2003, state and local officials warned that Internet access providers might then stop paying property, income, and many other state and local taxes and then claim that ITFA bars such taxes because they are *indirect* taxes on Internet access services. The grandfather clause prevents most such claims, because even if such taxes do constitute indirect taxes on Internet access, they are permitted if they were in force before October 1, 1998. Nearly all existing state taxes on corporate profits, for example, were in effect well before 1998.

The concerns about the potential consequences of repealing the grandfather provision remain fully justified:

- The version of ITFA first introduced in Congress barred states and localities from imposing taxes "directly or indirectly" on Internet access services, showing that the bill's sponsors recognized that a particular tax can be an indirect tax on a service and wished to bar both direct and indirect taxes on online services. As ultimately enacted, though, ITFA simply bars "taxes on Internet access," leaving ambiguous whether the prohibition applies to *indirect* taxes or only direct ones.

- The IRS defines an "indirect tax" as a "tax [that] can be passed on to another person or group. A business may recover the cost of the taxes it pays by charging higher prices to customers." Internet access providers could use such language to claim, for example, that state and local sales taxes on the computer and telecommunications equipment they purchase constitute "indirect" taxes on the Internet service they sell, because they must recover those costs in what they charge for access service in order to earn a profit.

- ITFA states that its ban on taxing Internet access applies "regardless of whether such tax is imposed on a provider of Internet access or a buyer of Internet access." This opens the door to claims that general business taxes imposed on Internet access *providers* constitute prohibited

indirect taxes on Internet access *services*. Even if the congressional committee reports outlining ITFA's purpose and scope contradicted such claims, these reports would likely be of little or no value to state and local governments in court challenges by Internet access providers because the courts will focus on the language of the statute itself, not its legislative history. For example, in interpreting the Railroad Revitalization and Regulatory Reform ("4-R") Act, which (among other things) restricts state and local taxation of railroads, the courts have voided many state and local tax laws and policies that Congress clearly intended to protect because the language of the 4-R Act itself did not explicitly *preserve* them.[6]

Existing Language Preserving Some Business Taxes Doesn't Solve the Problem

Sponsors of 2004 legislation to make ITFA permanent and repeal the grandfather clause, tacitly acknowledging that the latter could unintentionally bar property, income, and similar general business taxes on Internet access providers, agreed to add to ITFA the following statement: "The term 'tax on Internet access' does not include a tax levied upon or measured by net income, capital stock, net worth, or property value." That statement remained in ITFA when it was renewed in 2004, even though the grandfather clause was also retained. Furthermore, when ITFA was renewed in 2007, additional language was added to the definition of a "tax on Internet access" that specifically excluded the gross receipts-like taxes that Ohio, Texas, and Washington levy in lieu of corporate income taxes.

Although the 2004 and 2007 amendments to ITFA protect from legal challenge several of the most significant general business taxes for which Internet access providers are potentially liable, they are by no means comprehensive. Many other taxes would be at risk, such as:

- sales and use taxes imposed on purchases of goods and services by Internet access providers, especially purchases of computer servers, routers, fiber-optic lines, cell towers, and other telecommunications equipment directly used to provide Internet access services;
- general business taxes (other than the taxes protected by the 2004 and 2007 amendments), including the New Hampshire Business Enterprise Tax and local business license taxes in numerous states;
- payroll taxes, such as state unemployment compensation taxes;
- real estate transfer taxes;
- taxes on gasoline used to fuel trucks and other vehicles used to install and maintain Internet access infrastructure like fiber-optic lines and cell towers; and
- taxes on electricity used to power servers and other Internet access infrastructure.

Moreover, the fact that the 2004 and 2007 amendments explicitly preserved *some* taxes on Internet access providers might lead a court to conclude that Congress intended to ban all *other* taxes.

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[6] Michael Mazerov, "The '4-R Act: A Cautionary Tale for the Proposed 'Internet Tax Freedom Act,'" Center on Budget and Policy Priorities, April 24, 1998.

Legal Challenges to Indirect Taxes Are Likely If Grandfather Clause Expires

In sum, if ITFA's grandfather clause expires, the courts could bar a wide variety of state and local taxes applicable to Internet access providers and other businesses as *indirect* taxes on Internet access service itself. If a repealed grandfather clause is paired with a permanent extension of ITFA, such litigation is all but inevitable.

The fact that Congress has renewed ITFA only temporarily thus far has served as an important check on its use by Internet access providers (and other electronic commerce companies protected by ITFA's prohibition of "discriminatory" taxes) to challenge in court state and local taxes that might otherwise be vulnerable. These companies have known that if they used ITFA to challenge state and local taxes that members of Congress did not intend to invalidate when they approved the law, representatives of state and local government organizations would have an opportunity every few years when the law came up for renewal to seek amendments forestalling such litigation in the future. More importantly, overly aggressive litigation would hand state and local governments potent examples of abuse they could use to argue that the law should be repealed entirely.

Permanently extending ITFA would eliminate that check on aggressive litigation, since Congress might never revisit the law. Indeed, history strongly suggests that it wouldn't revisit the law, regardless of the unintended consequences on states and localities. The 4-R Act mentioned above, for example, has spawned dozens of court challenges to state and local tax practices it was never intended to invalidate,[7] yet Congress has never held an oversight hearing on the impact of these provisions — or on any other major legislation preempting state and local taxing authority.

If Congress wishes to eliminate the risk that Internet access providers will use ITFA to challenge non-discriminatory taxes, it is unrealistic to continue the approach taken in 2004 and 2007 of explicitly "carving out" specific taxes from ITFA's definition of a "tax on Internet access." There simply are too many potentially vulnerable taxes. The practical approach is to *preserve* the grandfather clause, even if ITFA itself is made permanent. As discussed below, the grandfathering of modest *direct* taxes on Internet access services has not significantly inhibited households from subscribing to Internet access or Internet access providers from deploying high-speed service.

ITFA Enshrines Unfair Tax Treatment of Consumers

Far from upholding the principle of "technological neutrality" — an oft-stated objective of ITFA proponents — ITFA violates it. Here are a few examples of how ITFA's ban on taxing Internet access subscriptions leads to unfair tax treatment of consumers of *non*-Internet-based technologies:

- **HBO versus Netflix.** Many states levy their sales taxes on conventional cable television service (including premium channels and pay-per-view movies). Consumers can now obtain video entertainment instead through a high-speed Internet access service supplemented with a subscription to Netflix, Hulu, or Amazon Prime, but even if a state taxes the online video *content* (which ITFA does not prohibit), ITFA bars it from taxing the *access fee* if it is a non-grandfathered state. Accordingly, cable TV subscribers must pay sales tax on their entire monthly cost, while people who have "cut the cord" will pay tax on only part of theirs.

[7] Michael Mazerov, "The '4-R Act: A Cautionary Tale for the Proposed 'Internet Tax Freedom Act,'" Center on Budget and Policy Priorities, April 24, 1998.

- **Walmart versus Spotify.** Music CDs are almost always subject to state and local sales taxes. Consumers can choose instead to subscribe to a high-speed Internet access service and stream their music to a computer either using a free, ad-supported service or for a modest monthly fee for commercial-free listening. ITFA does not prohibit taxing a monthly streaming fee, but it does prohibit taxing an Internet access charge (except in grandfathered states). As a result, people who buy music on physical media in a store will typically pay a 5 percent to 10 percent sales tax, while those who stream the same music to their computer will pay little if any tax.

- **Conventional text messages versus WhatsApp and Twitter.** Many state and local sales and telecommunications taxes apply to charges for conventional (non-Internet) "SMS" text messages. But people can now choose instead to buy a smartphone and use its Internet data plan to send instant messages via free smartphone "apps" like Facebook's "WhatsApp" or Twitter or the phone's propriety Internet-based instant messaging software. ITFA bans taxation of charges for mobile data plans, so subscribers to such plans who use a free instant messaging app or service will never pay tax on it, while users of SMS messaging will pay tax if a state or locality imposes it.

- **Verizon versus Skype.** People who use a landline to make long-distance domestic or international calls will pay sales or telecommunications taxes on both the line and the minutes used in many states and localities. But subscribers to an Internet access service will be able to use free Skype software and will pay no tax on the communications if they live in a non-grandfathered state.

- ***Wall Street Journal* versus WSJ.com.** Newspaper and magazine subscriptions are subject to sales taxes in many states and localities. Many of them are available for free if they are read online. Even if there is a subscription charge for the online version, it is usually considerably lower than that for the hard copy since the publisher saves the cost of printing and delivery. Accordingly, if Internet access is exempt in a state because of ITFA, subscribers to the hard copy versions of taxable publications will generally pay much higher taxes than people who pay for Internet access to be able to read the online versions.

Already widespread, this unequal tax treatment will likely become even more problematic as more services become available via Internet access. This highlights once again how unwise it would be to extend ITFA permanently.

Permanent ITFA Would Be Breach of Faith with State and Local Governments

When ITFA was introduced in 1997, proponents justified its moratorium on taxing Internet access service as a temporary "time out" so states and localities could address, carefully and uniformly, the complex administrative and definitional issues involved. For example, sponsors objected to the fact that some states defined Internet access as a "telecommunications service" while others defined it as an "information service." ITFA supporters did *not* suggest that Internet access needed permanent tax-exempt status.

As Jill Lesser, then-America Online Director for Law and Public Policy, told Congress in 1998:

> We are also not here . . . to set up a system ultimately that basically holds the Internet as

> a tax-free zone. . . [W]e hope at the end of the discussions. . . that there will be a uniformed [sic] system of taxation, one that gives guidance about, for example, what it means to be providing Internet access. . . In addition, where customers should be taxed [and] how we should collect. Once we solve all of those problems, all of the revenues that I spoke about will actually, I imagine, be subject to some kind of taxation.

Similarly, the Senate Commerce Committee report on ITFA stated that a "temporary moratorium on Internet-specific taxes is necessary to facilitate the development of a fair and uniform taxing scheme." And the House Judiciary Committee report on ITFA stated, "this is the appropriate time . . . to pause and examine the welter of issues raised by electronic commerce and to create a coordinated and rational subfederal tax structure."

ITFA established an "Advisory Commission on Electronic Commerce" composed of representatives of online retailers, Internet access providers, and federal, state, and local governments as a forum in which to negotiate a fair and administrable system of taxing electronic commerce. Protected by the ITFA "moratorium," however, the Internet access providers never offered any proposals for a uniform definition of Internet access or other rules permitting taxation. Neither did they present any evidence that they were having any difficulty in complying with Internet access taxes in the grandfathered states. In the absence of any such proposals or evidence, there was no basis for negotiations; the government representatives would have been negotiating with themselves. Instead, the Internet access providers joined all of the business representatives on the commission in voting for a package of recommendations that included a permanent ban and elimination of the grandfather provision. That has been their position ever since.

If Congress approves a permanent ITFA, it will be ratifying the industry's longstanding intransigence. This would be a profound breach of faith with state and local governments and will come back to haunt Congress in the future when it seeks to regulate other aspects of state and local taxation where affected industries might well have more legitimate objectives. Indeed, that already may be happening. For example, state and local governments now are unwilling to support the proposed Digital Goods and Services Tax Fairness Act (H.R. 3724/S. 1364), which would regulate how states and localities tax movie downloads and similar products. Even though they concede that certain provisions of the legislation have merit, they are unwilling to support the bill because they fear that other provisions could severely limit their taxing authority and that once such limits are in place they will never be changed, as appears now to be happening with ITFA.

It is not too late for Congress to choose a better course. If it is not prepared to allow ITFA's moratorium on taxing Internet access to expire, it could at least hold oversight hearings on whether Internet access providers are having difficulty in complying with access taxes in the grandfathered states and how ITFA is working more broadly. It could then make an informed decision about what changes in state and local tax laws and policies should be required as a condition of allowing the moratorium to expire at some point in the future.

Permanent ITFA Not a Cost-Effective Way to Close "Digital Divide"

As the preceding section explained, ITFA's original purpose was to give Internet access providers and state and local policymakers 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.

By 2000, however, ITFA proponents began arguing that Congress needed to make it permanent to encourage more households to subscribe to high-speed "broadband" Internet access service at home. Without greater consumer demand, they argued, telecommunications and cable TV companies would not have adequate incentives to deploy the infrastructure needed to provide broadband service to the many places without it. Proponents of a permanent ITFA also asserted that allowing state and local governments to levy their sales taxes on Internet access services would seriously impede efforts to close the "digital divide"— the still large gap in the rate at which high-income and low-income households subscribe to Internet access service, particularly at home.

These justifications for making ITFA permanent are still being offered, but there is scant evidence to support them:

- **Taxing Internet access services has not significantly impeded Internet adoption.** Studies by the Governmental Accountability Office and economists at the University of Tennessee did not find any significant differences in the rates of broadband deployment and household uptake of Internet access service between states that tax Internet access under ITFA's grandfather provision and states that do not. (See Appendix 2 for more on these studies.) Moreover, AT&T and Verizon, the first companies to deploy advanced fiber-optic networks to residential subscribers, chose four states that taxed residential Internet access services as among the first states in which to make these services available.[8] And Google has chosen Austin — in Texas, which taxes all monthly Internet access charges over $25 — as its second location to deploy the fastest residential Internet service available in the United States; AT&T is seeking to deploy very high-speed Internet access in numerous Texas cities as well.[9]

- **Access charges are not the main barrier to home Internet adoption.** Numerous studies have found that the most significant reasons why some people don't subscribe to Internet access at home are that they lack the language or computer skills to use it effectively or have used the Internet too little to fully appreciate the potential of subscribing. (See Appendix 3 for a summary of these studies.) Keeping Internet access charges 5 or 10 percent cheaper by barring non-discriminatory taxes will not overcome these barriers.[10] The fact that ITFA has

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[8] Those four states are New Hampshire, Texas, Washington, and Wisconsin. Verizon's "FiOS" fiber-optic Internet access service is available (in some localities) in New Hampshire, Texas, and Washington; see http://www.consumerfiber.com/fios-availability. AT&T's "U-Verse" Internet access service is available in Ohio, Texas, and Wisconsin; see: http://www.att-services.net/att-u-verse/availability/#.U7QPR_ldVps. Washington taxes Internet access receipts under its Business and Occupation Tax. New Hampshire subsequently repealed its tax on Internet access service.

[9] Scott Moritz, "AT&T to Expand Fast Web Service in Race Against Google," *Bloomberg News*, April 21, 2014. "AT&T Eyes 100 U.S. Cities and Municipalities for Its Ultra-Fast Fiber Network," *PR Newswire*, April 21, 2014.

[10] ITFA proponents often cite a 2006 study by economist Austan Goolsbee and a 2003 study by Rappoport et al. to support their claims that demand for Internet access is highly price-sensitive or "elastic." However, the consumer surveys on which these two studies were based were conducted in 1999 and 2000, respectively, when broadband was just beginning to become available to residential subscribers and when there were really no major consumer applications that required it – no iTunes store, let alone YouTube or streaming movies on Netflix. In the ensuing 14 years, broadband deployment has become nearly ubiquitous, and 70 percent of households subscribe to wired broadband at home, viewing it as essential to contemporary life as a telephone. Many more have mobile Internet access subscriptions. It is simply not credible to argue that the price elasticity of demand for broadband today is remotely near what those studies estimated.

been in place for 16 years and yet significant gaps persist between high-income and low-income families in residential Internet access adoption strongly supports this conclusion.

- **If anything, banning state and local taxation of Internet access would likely be counterproductive to closing the digital divide.** State and local governments give many low-income individuals their first exposure to the Internet in public schools, libraries, and community centers. They also give residents an incentive to subscribe to Internet access service by providing "e-government" services such as online drivers' license renewals, job applications, and tax filing. Depriving states and localities of revenue through a permanent ITFA interferes with their ability to fund these initiatives. For example, libraries are still falling behind in providing adequate Internet access.[11] The few additional Internet access subscriptions that might result from keeping the service a few dollars cheaper each month could well be outweighed by the number of people who will lose opportunities to get concrete Internet experience in public facilities.

  In addition, home Internet adoption is highly correlated with a person's education level; only 48 percent of adults who haven't graduated high school have home Internet access, compared with 93 percent of college graduates.[12] Helping more students graduate from high school and college could therefore spur Internet adoption significantly over the long term. Unfortunately, states have cut aid to K-12 schools and higher education deeply since the Great Recession began in 2007.[13] The billions of dollars in additional revenue from allowing states to tax Internet access services could help them reinvest in public education.

The most recent estimate of the price elasticity of demand for broadband that we have been able to identify, which is for 2008, comes from Mark A. Dutz, Jonathan M. Orszag, and Robert D. Willig, "The Liftoff of Consumer Benefits from the Broadband Revolution," *Review of Network Economics*, December 2012. At -0.7, it is roughly one-quarter as large as what Goolsbee estimated. Moreover, the study found that the estimated demand elasticity fell by more than half just from 2005 to 2008. It is reasonable to assume that it has fallen just as fast since 2008, again, because a much greater number of people now view services that require a broadband connection (e.g. high-definition video streaming) as valuable and worth paying for.

[11] For a compelling description of the day-to-day challenges in providing adequate Internet access and related training in low-income communities faced by libraries and other "third spaces" (other than home and work) in the face of budget cuts and other resource constraints, see Dharma Dailey et. al, "Broadband Adoption in Low-Income Communities," Social Science Research Council, March 2010, 38-48; http://webarchive.ssrc.org/pdfs/Broadband_Adoption_v1.1.pdf.

Almost two-thirds of public libraries report insufficient numbers of Internet-equipped workstations some or all of the time, and more than 40 percent report that their Internet connection speeds are insufficient some or all of the time. John Carlo Bertot, et al, "2011-2012 Public Library Funding and Technology Access Survey," Information Policy and Access Center, University of Maryland, June 19, 2012.

Another 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.

[12] U.S. Census Bureau, Current Population Survey, October 2012; www.census.gov/hhes/computer/files/2012/table1.xls.

[13] Michael Leachman and Chris Mai, "Most States Funding Schools Less Than Before the Recession," Center on Budget and Policy Priorities, Revised May 20, 2014, http://www.cbpp.org/files/9-12-13sfp.pdf, and Michael Mitchell, Vincent Palacios, and Michael Leachman, "States Are Still Funding Higher Education Below Pre-Recession Levels," Center on Budget and Policy Priorities, May 1, 2014, http://www.cbpp.org/files/5-1-14sfp.pdf.

- **The federal government is not justified in subsidizing Internet access services at state and local expense.** If, in the eyes of Congress, a tax break were an effective way to encourage adoption and deployment of high-speed Internet access, Congress could enact federal tax breaks for broadband access, but it has not done so. While barring new *state and local* taxes on Internet access charges through ITFA, Congress has not forgone related *federal* tax revenue by, for example, allowing service providers to write off their infrastructure investments immediately or giving low-income households a refundable income tax credit for monthly subscription fees. Subsidizing the consumption of Internet access at the expense of states and localities, with no contribution of federal tax revenue, is an affront to the principles of federalism and government accountability.

Expressions of concern by telecommunications industry representatives about broadband availability for underserved groups such as low-income and rural households merit skepticism. The industry's commitment to closing gaps in broadband availability and affordability is open to serious question.

The major telephone companies, for example, have vociferously fought the direct deployment of broadband networks by municipal governments and successfully lobbied for state prohibitions on municipal networks in almost 20 states.[14] Verizon shed all of its telephone and broadband lines in 18 predominantly rural states to concentrate on deploying its expensive fiber-optic "FiOS" network in affluent urban and suburban neighborhoods in other states, then stopped deploying FiOS to new cities and states entirely.[15] AT&T agreed to provide very low-cost broadband service as a condition of its merger with BellSouth but did not advertise the service and made information about it very difficult to locate on its website.[16] When Comcast was seeking Federal Communications Commission (FCC) approval of its 2011 takeover of NBC, it started a program to make low-cost broadband available to low-income families, but it has put numerous restrictions on signing up for

[14] Brian Fung, "Big Cable vs. Public Broadband," *Washington Post*, November 7, 2013. In the article, a Comcast spokeswoman explains the company's opposition to city-owned broadband: "In general, cities have extensive infrastructure needs like roads, bridges, and schools, and we think especially in times of fiscal tradeoffs that taxpayer money should be focused on those needs rather than competing with the private sector." Comcast's concern with local governments' "fiscal tradeoffs" evidently does not extend to those resulting from stripping billions of dollars of potential sales tax revenue on Internet access services from municipal coffers.

[15] See: Carolyn Y. Johnson, "Verizon to Sell Lines in N.H., Vt., and Maine, *Boston Globe*, January 17, 2007 and Amol Sharma, "Verizon Sells Phone Lines in 14 States to Frontier," *Wall Street Journal*, May 19, 2009. Verizon's CFO is quoted there as saying "These are good properties, but they're much more rural in nature, and they really don't fit with the strategy we have for FiOS and broadband." The companies that bought these lines from Verizon reportedly had insufficient capital to provide adequate DSL Internet access services on the lines; indeed the two companies that bought Verizon's lines in Hawaii, New Hampshire, Vermont, and Maine went bankrupt. This allowed Verizon to swoop back in and market more expensive fixed wireless service to its former DSL customers. See: Karl Bode, "Verizon's Dupe of Frontier, Fairpoint Comes Full Circle as Telco Uses Fixed LTE to Lure Back Sold Customers," *DSLReports.com*, December 19, 2012, http://www.dslreports.com/shownews/Verizons-Dupe-of-Frontier-Fairpoint-Comes-Full-Circle-122464, and Roger Cheng, "Verizon to End Rollout of FiOS," *Wall Street Journal*, March 30, 2010; Sean Buckley, "Verizon's McAdam: New FiOS Markets Are Not in the Cards," Fierce Telecom, December 19, 2013, http://www.fiercetelecom.com/story/verizons-mcadam-new-fios-markets-are-not-cards/2013-12-09.

[16] 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.

the program and only about 12 percent of eligible families have done so.[17] A recent study reported that from early 2010 to the end of 2012, prices for "economy" broadband plans rose by 13 percent, while prices for more expensive, higher-speed services fell.[18]

The current, vigorous debate about federal Internet policy focuses on such questions as whether and how the FCC should implement the principle of Internet neutrality, whether Comcast should be permitted to merge with Time Warner Cable, and whether broadband Internet access should be regulated as a public utility in the same way that telephone service has been. The answers to these questions will have far greater impact in the long run on the availability of affordable broadband than whether or not states and localities can levy a 5 percent to 10 percent tax on the monthly fee. Such issues are far more deserving of congressional attention and action than ITFA is.

Should States and Localities Accept Permanent ITFA in Exchange for Marketplace Fairness Act?

Some members of Congress have argued that state and local governments should accept enactment of a permanent ITFA as part of a deal that would also include enactment of the Marketplace Fairness Act (MFA), which would empower them to tax most Internet sales. They point to the fact that the revenue losses from untaxed Internet sales are estimated to be as much as $23 billion annually and seem to assume that the forgone revenue from ITFA is insignificant in comparison.

As shown above, however, the forgone revenue from not taxing Internet access is far from insignificant. It is already on the order of $6.5 billion annually, and the grandfathered taxes that would be eliminated generate an additional $500 million in annual revenue. Moreover, the forgone revenues will likely increase. Household expenditures on Internet access will likely rise sharply as new online services emerge that require more costly, higher-speed access. In addition, consolidation in the Internet access industry — as exemplified by the proposed merger of Comcast and Time Warner Cable — could give Internet access providers much more market power to charge more.

On the other side of the equation, MFA's enactment would likely lead to less than $23 billion in additional revenue. Estimates of the revenue loss from untaxed Internet sales are subject to significant uncertainty, and any version of MFA likely to be enacted will exempt small Internet merchants. It also should be noted that states are not powerless to collect some of the lost revenue on Internet sales even in the absence of MFA, especially if they coordinate their policies and enforcement activities.[19]

These facts do not mean that states and localities would be unwise to accept a permanent prohibition on new state and local taxes on Internet access service in exchange for MFA, but such a deal is not self-evidently good for them. Moreover, accepting a permanent ITFA that *also* eliminates

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[17] Cecilia Kang, "Why Comcast's $10 a Month Internet Isn't All It's Cracked Up to Be," *Washington Post*, May 9, 2014.

[18] John B. Horrigan, "Narrowing Gaps, New Challenges," Knight Foundation, August 2013, pp. 9-10, citing data by Telogical Systems; http://www.knightfoundation.org/media/uploads/publication_pdfs/Knight_Digital_Access_Update_Feb2014.pdf

[19] Michael Mazerov, "New York's 'Amazon Law;: An Important Tool for Collecting Taxes Owed on Internet Purchases, Center on Budget and Policy Priorities, July 23, 2009.

the grandfather clause would be extremely risky, threatening to invalidate a wide variety of existing taxes on Internet access providers. Therefore, state and local government representatives should *not* accept a permanent ITFA that includes repeal of the grandfather provision.

Conclusion: Permanent Extension of ITFA Is Unwarranted

Under its constitutionally granted authority to regulate interstate commerce, Congress has a legitimate role to play in preventing *discriminatory* state and local taxation of Internet access — and online commerce more broadly. Few if any would object to another extension of ITFA's ban on multiple and discriminatory taxation of electronic commerce, *as long as it is temporary*.

It needs to be temporary both to forestall overly aggressive use of the ban in litigation by Internet access providers and Internet merchants and to ensure that Congress periodically reviews the prohibition for unintended effects. Even if new taxes on Internet access were no longer completely banned, extending the ban on *discriminatory* taxes would prevent states and localities from taxing Internet access at higher rates than apply to interstate communications or consumer purchases more broadly. Congress could also legitimately expand the definition of a discriminatory tax to bar states and localities from applying to Internet access services the fixed per-line, 911, and similar fees that often apply to conventional and mobile phones.

Congress first enacted ITFA when Internet commerce was still in its infancy and high-speed Internet access was just becoming available to individual households. Congress sought to balance state and local governments' need to finance essential services against Congress' desire to encourage the development of the Internet industry. Even then, Congress decided that striking that balance entailed grandfathering existing taxes and prohibiting new taxes on Internet access only temporarily.

Today, almost 75 percent of American households subscribe to Internet access services at home, and many of the other 25 percent have a smartphone with a mobile Internet data plan. Hundreds of billions of dollars' worth of commerce is done over the Internet annually. There is no need to continue treating the Internet as an "infant industry" and exempting it from state and local taxes that other industries must pay. But even if Congress wishes to renew ITFA, surely the Internet's current vitality means that its tax treatment should be no more favorable than in 1998 — a temporary exemption for taxes on Internet access service, with pre-1998 taxes still grandfathered.

Appendix 1
Methodology for Revenue Loss Estimates

Table 1 provides estimates of the amount of annual sales tax revenue the seven states grandfathered under ITFA to tax Internet access service (and their local governments) will lose if the grandfather provision is repealed. Table 2 provides estimates of the amount of annual sales tax revenues non-grandfathered states (and their local governments) would realize if they were permitted to apply their sales taxes to Internet access service and did so. Thus, Table 2 is also an estimate of the revenue these states and localities must forgo as a result of ITFA's prohibition on taxing access, again, assuming that they would tax the service if they were permitted to do so. This Appendix describes the methodology used to prepare these estimates.

Step 1: Estimate the nationwide average monthly cost of an Internet connection. The Census Bureau's 2012 "Services Annual Survey" (the most recent available, at http://www2.census.gov/services/sas/data/table4.xls) reports that providers of wireless Internet access received $56.084 billion in sales receipts from providing this service in that year, and that wired providers received $68.344 billion, for a total of $124.428 billion. The Federal Communications Commission reports that as of the end of 2012 there were 259 million broadband connections in the 50 states and the District of Columbia (See: "Internet Access Services, Status as of December 31, 2012," December 2013, Table 15, http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db1224/DOC-324884A1.pdf). Dividing the annual revenue by the number of connections (assuming that the December count prevailed throughout the year) yields an estimate of the average nationwide annual average cost of an Internet connection, and dividing further by 12 yields an estimated nationwide average monthly cost of $40.03. This estimate is in the vicinity of a number of independent estimates of the average nationwide monthly cost. For example, in a 2013 study, the Information Technology and Innovation Foundation estimated that the average annual cost of wired broadband in the United States was $34 to $35 per month.[20] The Open Technology Institute of the New America Foundation put the median monthly cost of a 4 to 6 megabits per second subscription at $46.00 based on a sample of nine major U.S cities.[21] Industry consultants Telogical Systems put the average standard price of wired broadband (before taking initial sign-up discounts into effect) at $49.31 at the end of 2011.[22]

Step 2: Calculate the weighted average local government sales tax rate in states that allow local governments to impose sales taxes. The Census Bureau reports annual general sales tax collections for all states and their local governments for fiscal year 2011 (the most recent year available) at: https://www.census.gov/govs/local/. Since [tax base] times [tax rate] equals [tax collections], dividing the Census's state-by-state data for state sales tax collections by the statutory state sales tax rate provides an estimate of the total state sales tax base. And, using the same equation, local sales tax collections divided by the state/local sales tax base yields the estimates of the weighted-average effective local sales tax rates shown in Tables 1 and 2. (This is based on the

[20] Richard Bennett, Luke A Stewart, and Robert D. Atkinson, "The Whole Picture: Where America's Broadband Networks Really Stand," Information Technology and Innovation Foundation, February 2013, p. 48.

[21] "What's the Real Cost of Connectivity?" 2013.

[22] Telogical Systems, "Trends in U.S. Consumer Broadband Pricing (January 2010 to December 2012)," 2012.

assumption that the tax base for local sales taxes is the same as that of the state – that is, that the same items are taxable and exempt for both levels of government. This is entirely accurate for most states and substantially accurate for all the others.) Statutory state sales tax rates for FY11 were obtained from a database of rates maintained by the Center drawing from a rate table published annually by the Federation of Tax Administrators. These were adjusted for mid-year FY11 rate changes in the few states in which they occurred.

Step 3: Reduce the number of Internet connections that are assumed to be taxable in the absence of ITFA to take into account: a) connections of governmental and non-profit organizations that usually would be tax-exempt; and b) reduced demand due to price increase from sales tax. States and localities often do not apply their sales taxes to goods and services purchased by non-profit organizations and state and local government agencies, and they are barred by the Constitution from taxing the purchases of federal agencies. A downward adjustment to the number of connections that the FCC classifies as "business" needs to be made to take these non-taxable connections into account.

In addition, this report acknowledges in several places that allowing state and local governments to extend their sales taxes to Internet access services could lead to reduced demand for the service at the margin. We question that these effects would be very large at present, given what a necessity of life high-speed Internet access has become to so many people and the fact that, faced with a price increase, most consumers have the option of switching to a less expensive lower-speed service or dropping a wired connection at home and adding a data plan to their mobile phone. Nonetheless, we also make a downward adjustment in the number of connections to account for the "price elasticity of demand."

To take both factors into account, we assume that fully 15 percent of the total Internet connections reported by the FCC for each state will not be taxable should ITFA be enacted. This adjustment renders the revenue loss estimates in Tables 1 and 2 very conservative, as it is roughly equivalent to assuming that one-third of all connections that the FCC classifies as "business" are actually non-profit or governmental *plus* assuming an elasticity of demand between -0.5 and -1.0. (An elasticity of demand of -1.0 means that imposing a 5 percent sales tax would reduce the number of Internet subscriptions by 5 percent.)

Step 4: Estimate the total state-by-state potentially taxable receipts of Internet access providers for providing this service. The average estimated monthly cost for the United States as a whole estimated in Step 1 is assumed to be the average monthly cost in every state.[23] It is multiplied by 12 to annualize it again, and then by the number of state-by-state broadband connections from the FCC (as adjusted downward in Step 3) to calculate total state-by-state receipts of access providers attributable to providing the service.

Step 5: Estimate the potential state and local revenue from taxing Internet access services. Multiply the state-by-state taxable receipts calculated in Step 4 by the sum of the statutory state sales tax rate and the weighted-average effective local sales tax rate calculated in Step 2.

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[23] This assumption is necessitated by the fact that no detailed state-by-state data on broadband costs are available. A recent New America Foundation survey of quoted broadband prices in nine U.S. cities found some providers that appeared to price identical wired broadband services identically in different cities and others that priced them differently. See: Nick Russo, Patrick Lucy, Danielle Kehl, and Hibah Hussain, "Reining in the Cost of Connectivity," January 2014.

Appendix 2
Summaries of Two Studies of the Impact of State Taxes on Internet Adoption and Deployment

Has Internet Access Taxation Affected Internet Use?
Donald Bruce, John Deskins, and William F. Fox
Center for Business and Economics Research, University of Tennessee
Public Finance Review, March 2004, http://web.utk.edu/~dbruce/pfr04.pdf

"We find no empirical evidence that Internet access rates are lower in states that have levied a tax on Internet access, all else equal."

The study examines whether the states that have taxed or still tax Internet access have lower rates of computer ownership, lower rates of household Internet access, or lower rates of Internet access among computer owners alone than do states that have never taxed Internet access. (Internet access was of any type, including both low-speed "dial-up" access and high-speed or "broadband" access.) By all three measures, the study found no statistically significant differences among the states that have and have not taxed Internet access after correcting for other factors that might theoretically explain differences in computer and Internet use, such as education levels and income.

The study used several different statistical techniques to test the relationship between taxation of Internet access and the use of the Internet, and in no case found a statistically significant negative impact of taxes on Internet access.

Their conclusion: "This study has attempted to understand whether Internet access taxation has affected Internet usage in any way. The United States has provided something of a laboratory for such an experiment given that 10 states have taxed Internet access at some point in recent history, whereas the other 40 have not. Regression analysis is conducted to compare Internet access, computer ownership, and Internet access conditional on computer ownership, between the taxing and non-taxing states. Results show that Internet access taxation has had no statistically discernible effect on any of those three measures. Furthermore, this general conclusion is found to be robust to a wide variety of econometric specifications."

All three authors are professors of economics and prominent national experts on state taxation and its impact on the economy. Fox is a past president of the National Tax Association. The *Public Finance Review* is a leading, peer-reviewed journal in its field.

Broadband Deployment Is Extensive Throughout the United States, But It Is Difficult to Assess the Extent of Deployment Gaps in Rural Areas
U.S. Government Accountability Office, Report GAO-06-426, May 2006
http://www.gao.gov/new.items/d06426.pdf

"The imposition of [Internet access] taxes was not a statistically significant factor influencing the *deployment* of broadband." [Emphasis added.] "Deployment" refers to the making available by a telecommunications or cable TV company of high-speed Internet access service in a particular geographic area.

"The imposition of the tax was not a statistically significant factor influencing the *adoption* of broadband service [by consumers in their homes] at the 5 percent level [of statistical significance]. [Emphasis added.] It was statistically significant at the 10 percent level, perhaps suggesting that it is a weakly significant factor. However, giving [sic] the nature of our model, it is unclear whether this finding is related to the tax or other characteristics of the states in which the households resided." [Note: most peer-reviewed journals would reject the hypothesis that taxes affect consumer decisions to subscribe to broadband if results of the model did not satisfy a 5 percent test of statistical significance.]

The study is based on a 2005 survey of approximately 1,500 U.S. households by a private research firm that asked them whether *broadband* (DSL or cable) Internet access was available where they lived and whether they subscribed. GAO deleted some households from the sample if various types of other publicly available data strongly suggested that the household had answered the availability question incorrectly. (For example, the household was deleted if it indicated that DSL was available at its location but the location actually was beyond the physical range at which DSL could, from a technological standpoint, normally be deployed.)

In addition to the presence or absence of state taxation of Internet access services, the study correlated the availability (deployment) of broadband access at the survey respondent's location with such variables as urban/rural status, the distance to a major city, the age distribution of the population, population density, the local per-capita income, and a measure of the educational attainment of the population. In examining uptake of broadband services, the study first eliminated all households that did not have broadband service available. The decision to subscribe was then correlated with the number of competing broadband providers at the respondent's location; the respondent's income, race, age, college graduation status, household size, and occupation; whether there were children in the home; whether the home was in a urban or rural location; and, of course, whether or not Internet access service was taxed in the respondent's state.

Appendix 3
Reports Concur That the Monthly Cost of Internet Access Service Is Not the Primary Barrier to Internet Use or Home Broadband Adoption

- A September 2013 study by the Pew Research Center's Internet and American Life Project found that among adults who do not use the Internet, only 6 percent say that the main reason they don't is that the cost of access itself is too high. Rather, 34 percent say that the Internet is not relevant to them, and another 32 percent cite usability and skill issues. Even among adults who use the Internet but don't have Internet access at home, only 9 percent cite the cost of the Internet connection itself as the main reason. (Source: Kathryn Zickuhr, "Who's Not Online and Why.")

- A February 2013 study by the Information Technology and Innovation Foundation that compared broadband adoption in the United States and foreign nations concluded:

  "[M]ost of America's broadband non-users suffer more from the lack of interest than an inability to pay the fourth lowest entry level broadband bill in the world. …

  "[I]t remains a matter of concern that so few Americans own computers because they have so little interest in joining the broadband revolution. Absent robust and creative public-private partnerships to address this challenge, incomplete adoption will remain the Achilles heel of American broadband. …

  "These [international Internet access price comparison] findings suggest that the price of American broadband service is not, in fact, a barrier to adoption. . . . those who don't subscribe to broadband at all are not holding out for gigabit [i.e., very high-speed] service; they're typically uninterested in what the Internet has to offer. …

  "Given the fact that the United States is among the world leaders when it comes to deploying broadband . . . and that prices for introductory, lower speed services are among the lowest in the world . . . it suggests that one of the most important steps policymakers could take to boost U.S. rankings on broadband adoption per household would be to spur computer adoption and digital literacy. …

  [Based on international comparisons of adoption], "[t]here is no correlation between adoption and prices for connections under 20 [megabits per second]. …

  "[W]hile price may indeed be a barrier to broadband adoption, it is not necessarily indicative of high broadband costs and certainly not an indication of higher U.S. prices. Rather, it is more likely a reflection of the high degree of poverty in America. Along with other goods and services, many Americans simply lack the income to afford even broadband that is cheap relative to other countries' prices."

(Source: Richard Bennett, Luke A. Stewart, and Robert Atkinson, "The Whole Picture: Where America's Broadband Networks Really Stand.")[24]

- A detailed 2011 Census Bureau study of households without home Internet access found that 72 percent of them cited a reason other than "too expensive" as the main reason they didn't subscribe. Some 48 percent cited a lack of interest or need as the main reason, another 13 percent said they did not have a computer (or an adequate one), and 7 percent were classified as "other reason," which would include insufficient skills to use the Internet. Moreover, the 28 percent who said that getting Internet access was "too expensive" included many people who were concerned about the cost of a computer rather than Internet access. Some 63 percent of people with dial-up Internet access cited a reason other than expense as an explanation for why they had not subscribed to high-speed service. Not surprisingly, lower-income households were more likely to cite expense as the main reason they did not have Internet access at home, but even for households with incomes below $25,000, only about one-third cited expense. (Source: July 2011 Current Population Survey supplement on computer and Internet use, summarized in U.S. Department of Commerce, "Exploring the Digital Nation," June 2013.)[25]

- A March 2010 paper by the Social Science Research Council concludes: "Price is only one factor shaping the fragile equilibrium of home broadband adoption [on the part of low-income families], and price pressures go beyond the obvious challenge of high monthly fees. Limited availability, poor quality of service, hardware costs, hidden fees, and billing transparency are major issue for low-income communities." (Source: Dharma Dailey et al., "Broadband Adoption in Low-Income Communities.")

- In an August 2013 paper for the Knight Foundation, John B. Horrigan, a leading expert on the demographics of Internet adoption, observed, "The research on non-adoption also underscores that non-broadband adopters typically have more than one reason for not having service at home. That suggests that approaches to non-adoption must address multiple concerns. That is, low-cost access plans must be tethered to digital skills training, not just discounted service." He concludes that "future efforts to lure non-adopters online, while needing to address cost, will also have to focus on digital skills and relevance in order to reach remaining non-adopters."

- A Federal Communications Commission survey in late 2009 found that 64 percent of people who did not have Internet access at home cited a reason other than cost as the main reason they did not subscribe. Of the 36 percent who did cite cost, only about half cited the monthly access charge as the principal cost factor. (The others cited the cost of the computer, the initial installation fee, or the risk of locking in a long-term contract.) Some 22 percent of non-users

[24] In other publications, the publishers of the cited report have endorsed making ITFA permanent on the apparent grounds that the lower price might make some marginal difference to access and deployment, but their arguments fail to account for the actual and potential loss of revenue to state and local governments.

[25] Supporters of a permanent ITFA often cite a statistic from this report indicating that 41 percent of households that once subscribed to Internet access but no longer do cite the expense as the reason they dropped service. However, this does little to bolster the case for barring state and local taxes. First, this is a very small group of people; according to the Pew Research Center, only 14 percent of adults who don't use the Internet say they once did. (See p. 7 of the first report discussed in this Appendix.) Second, it seems unlikely that a few dollars in tax would make a significant difference in whether or not someone drops service. As valuable as home Internet access is, it is not a necessity for someone who just lost a job or is otherwise in dire financial straits — especially when they can obtain access at a library or in a friend's home.

cited inadequate knowledge about how to use computers and the Internet as the main reason they did not subscribe, and 19 percent indicated that the information and services available on the Internet were not relevant to their lives. Non-users were also asked how much they would be willing to pay monthly for broadband access, and those who provided a figure offered $25 per month on average. As indicated in the body of this report, the average monthly cost of broadband Internet access nationally is around $40.00. Thus, the $4-$5 monthly price reduction that results from forcing states and localities to forgo applying their sales tax to the monthly fee does not provide enough of a financial incentive for the average non-user to begin subscribing. (Federal Communications Commission October/November 2009 survey summarized in: John B. Horrigan, "Broadband Adoption and Use in America," Federal Communications Commission, February 2010.)[26]

[26] Proponents of a permanent ITFA cite this paper's classification of roughly half of Internet non-users as positively disposed toward becoming users – groups the paper labels as "Digital Hopefuls" and "Near Converts." However, the "Digital Hopefuls" generally do not own computers and acknowledge lacking the skills to use the Internet effectively, meaning that the monthly cost of access is not their main obstacle. The "Near Converts," who do often cite the monthly cost of broadband as their main obstacle, comprise less than one-third of the people who don't subscribe to broadband.