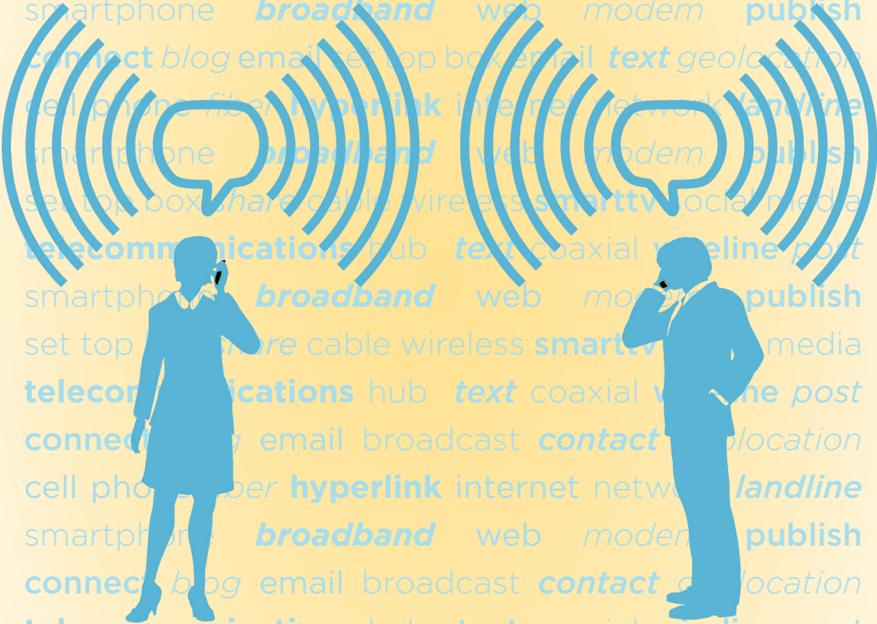


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Telecom Unplugged:

Ushering in a New Digital Era

By Deborah S. Collier
and Thomas A. Schatz

Citizens Against Government Waste

Citizens Against Government Waste (CAGW) is a private, nonprofit, nonpartisan organization dedicated to educating the American public about waste, mismanagement, and inefficiency in the federal government.

CAGW was founded in 1984 by J. Peter Grace and nationally-syndicated columnist Jack Anderson to build public support for implementation of the Grace Commission recommendations and other waste-cutting proposals. Since its inception, CAGW has been at the forefront of the fight for efficiency, economy, and accountability in government.

CAGW has more than 1 million members and supporters nationwide. Since 1986, CAGW and its members have helped save taxpayers more than \$1.3 trillion. CAGW publishes special reports, its official newspaper *Government Waste Watch*, and the monthly newsletter *WasteWatcher* to scrutinize government waste and educate citizens on what they can do to stop it. CAGW's publications and experts are featured regularly in television, radio, print, and Internet media.

CAGW is classified as a Section 501(c)(3) organization under the Internal Revenue Code of 1954 and is recognized as a publicly-supported organization as described in Sections 509(a)(1) and 170(b)(A)(vi) of the code. Individuals, corporations, associations, and foundations are eligible to support the work of CAGW through tax-deductible gifts.

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INTRODUCTION

In October 2007, Citizens Against Government Waste (CAGW) published *Telecom Regulation: Pulling the Plug on Government Interference*. The report noted that the rapid deployment of new technology was leaving a bevy of federal regulations over the telecommunications and cable industries in the dust. Today's converging communications and information technology (IT) environment has greatly enhanced and expanded how people around the world communicate and share information. The rapid adoption of Smartphone technology has enabled people to carry computers in the palms of their hands, and today's college freshmen are routinely equipped with laptops, cell phones, and tablets. The list of new mobile computing devices grows daily. This report, *Telecom Unplugged: Ushering in a New Digital Era*, updates CAGW's 2007 report.

Music and video are no longer limited to the living room but can be enjoyed through a wide range of options, including cable, fiber optic, satellite, and broadband, as well as wireless devices, anywhere at any time. Social media platforms including Facebook, Twitter, Pinterest, and others have become major sources of information sharing. At the 2013 Cable Show, cloud-based video platforms were introduced by Comcast and Time Warner Cable that would provide video programming and storage to consumers. Despite these innovations, the communications industry is still saddled with a regulatory regime that harkens back to the early 1930s and, for common carriers, back to the early days of the railroad industry in the late 1800s.

The Communications Act of 1934 was the first formal attempt to provide regulatory continuity to the growing telephone industry as it began to reach across the nation and connect people thousands of miles away from each other through a copper-wire line. In 1992, the Cable Act was passed in response to concerns that the broadcast industry needed protection when dealing with cable companies. The Telecommunications Act of 1996 further regulated both the telephone and cable industries following the breakup of the Bell companies.

None of those laws foresaw today's rapidly changing innovative marketplace, nor did they account for any future changes in technology that will greatly expand communications. While the communications industry continues to rapidly evolve, the federal government moves at a

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snail's pace to adapt, leaving in place old models governing technology and communications that should no longer apply to modern times. Unfortunately, these obsolete telecommunications regulations are stifling innovation and putting taxpayers and consumers at risk.

In his 1984 book, *Burning Money, The Waste of Your Tax Dollars*, that summarized the Grace Commission's findings, Peter Grace described the technological ignorance pervading the federal government. At the time of the book's publication, the average age of a government computer was 6.7 years; the average computer used by a U.S. business was three years old. Government computer systems were incompatible and required service technicians specifically trained to maintain the outdated equipment. The extra bodies added \$1 billion to the federal payroll over a three-year period. Meanwhile, in the private sector, IBM's General Systems Division updated its computer technology, saving \$360,000 in the first six months after installation, and the Boeing Military Airplane Company's new word processing system saved \$483,000 over a nine-month period.

In the 30 years since Mr. Grace published his book and co-founded CAGW with syndicated columnist Jack Anderson, the federal government's technological ineptitude has persisted. The current telecommunications debates and the federal government's attempts to regulate the industry are symptoms of larger problems.

From 1989 to 2000, 223 bills were introduced in Congress dealing with some portion of the telecommunications industry; 22 of them, including the Telecommunications Act of 1996, were signed into law. From 2001 to 2010, only 78 such bills were introduced, seven of which became law. The 2012 edition of Title 47, the chapter of the U.S. Code governing the telecommunications industry, now encompasses 3,668 pages. While the private sector speeds ahead with more innovation in response to consumer demand, the federal government lags behind trying to play catch up and fails to see the impact of its policies on taxpayers and consumers.

The telecommunications industry generates approximately \$347 billion annually or 2.4 percent of the GDP as measured by output, labor, input, investment and international trade;¹ and provides 2 million

¹ OECD (2013), "STAN Industry Rev. 4," STAN: OECD Structural Analysis Statistics (database), Doi: 10.1787/3151-00649-en, http://www.oecd-ilibrary.org/industry-and-services/data/stan-oecd-structural-analysis-statistics/stan-industry-rev-4_data-00649-en;jsessionid=h5cd4n3j3vr9.x-oecd-live-01?isPartOf=/content/datacollection/stan-data-en.

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direct and indirect jobs.² Yet this innovative and important sector of the economy remains hampered with antiquated laws and regulations.

This paper reviews several areas where government intervention or lack of intervention harms taxpayers and consumers. Topics include the implications of current and proposed Internet tax laws, federally funded broadband deployment, the provision of tools such as spectrum to enable improved communications across the nation, and Internet governance issues in the United States and around the world.

²“Industry Data,” National Cable and Telecommunications Association, <https://www.ncta.com/industry-data>.

CHAPTER I: THE TAXING PROBLEM OF INTERNET TAXATION

The Internet has been generally free from excessive government intervention since it was first opened up for general public use in 1992. However, as state and local governments seek new revenue streams to combat increasingly strained budgets, numerous proposals to tax access to the Internet and the services that it provides have been introduced. The federal Internet tax moratorium expires on November 1, 2014. Some states are already imposing taxes on digital goods. There is an ongoing debate over where to draw the line on online sales taxes. States are seeking guidance from the federal government for clarification on whether, how, and when Internet taxes should apply. This chapter seeks to provide clarification and guidance on these issues.

MAKING THE INTERNET TAX MORATORIUM PERMANENT

The lack of intervention in the development of the Internet has contributed to its remarkable growth. Whether buying products, researching information, or emailing friends or business associates, the Internet has changed how everyone shops, banks, shares information, and communicates around the globe.

In 1998, the Internet Tax Freedom Act placed a moratorium on discriminatory taxes on the Internet. With large bipartisan support, the Internet tax ban was extended in 2001, 2004 and 2008. The most current moratorium expires in November 2014. For 16 years, the ban on these inequitable taxes has benefited millions of Americans by enabling them to conduct transactions on the Internet without discriminatory taxes or taxes on access. As the moratorium's expiration date looms, it is time to make this ban permanent.

As of February 27, 2013, the number of Internet users reached 2.7 billion; almost two billion more users than when the law was first enacted, and consisting of nearly 39 percent of the global population.³ Electronic commerce has become a larger part of the U.S. economy, accounting for \$57 billion in the third quarter of 2012, or 5.2 percent of total sales, and it is

³ International Telecommunications Union, "The World in 2013: ITC Facts and Figures," February 27, 2013, <http://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2013.pdf>.

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increasing at around 15 percent per quarter.⁴

The federal Internet tax moratorium does not prohibit states from collecting sales or use taxes from their residents for purchases made either remotely or online. The moratorium simply prevents states from taxing access to the Internet or placing discriminatory duplicate taxes on Internet services.

During debate on the 2008 extension, some opponents argued that the tax ban hurts states' ability to raise revenues.⁵ However, in the nine states that were grandfathered under the 1998 Internet Tax Freedom Act and allowed to continue to impose taxes on Internet access, the revenue from that tax equals an average of 0.1 percent of the states' budgets. The nine states are: Connecticut, New Mexico, North Dakota, Ohio, South Dakota, Tennessee, Texas, Washington, and Wisconsin.⁶ As a matter of fairness and creating a level playing field among all 50 states, any legislation that permanently eliminates Internet taxes should include the termination of the nine states' authority to tax Internet access.

There is widespread speculation as to how taxes would be levied if the moratorium is not continued or made permanent. The most likely choice is a tax on Internet access as allowed in the grandfathered states. Another suggestion, made and then rescinded by former Federal Communications Commission (FCC) Chairman Julius Genachowski, would involve the imposition of a "fee" on Internet access similar to the Universal Service Fund fee currently found on phone bills for provisioning broadband in unserved or underserved areas of the country. Some have suggested that taxes could also be applied to downloaded files and even emails.⁷

In other words, opening up the Internet to taxes on access would be just the tip of the iceberg. The Internet has never been open to pervasive taxation by government; it is impossible to predict the extent to which politicians may attempt to fill government coffers.

One of many problems with taxing the Internet is that when something becomes more costly, people will engage in less of it. If legislators are truly concerned about continuing to expand the availability and use of the

⁴ U.S. Census Bureau News, "Quarterly Retail E-Commerce Sales 3rd Quarter 2012," November 16, 2012, http://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf.

⁵ Grant Gross, "Internet Tax Moratorium Bill Stalls," *NetworkWorld*, September 28, 2007, <http://www.networkworld.com/news/2007/092807-internet-tax-moratorium.html>.

⁶ E-Commerce Tax Policy Project, September 19, 2007, <http://www.bloch.umkc.edu/ecommercel/nondiscrimact.html>.

⁷ Phil Kerpen, "Coming this Fall: Internet Taxes?" *The National Review*, September 6, 2007, <http://article.nationalreview.com/?q=OGVIZjRiYWMyMDQyYTY4N2VjNzg4YTlTYTJjZGU5ZTQ=>.

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Internet, they should avoid imposing taxes on Internet services. Should the government decide to get involved, Internet businesses will lose customers. It is better to keep the status quo rather than to manipulate the free market.

As Congress faces the expiration of the moratorium, the ban should be made permanent and apply equally to all 50 states and territories. On August 1, 2013, Sens. Ron Wyden (D-Ore.) and John Thune (R-S.D.) introduced S. 1431, which would make the moratorium permanent and equally applied to all states and territories. Similar legislation (H.R. 3086) was introduced on September 12, 2013 by Reps. Bob Goodlatte (R-Va.) and Anna Eshoo (D-Calif.). Internet business and commerce have become an important part of the economy and the tax ban has been a contributing factor. As the economy will undoubtedly continue to be more digitally-focused, America has a lot to gain from keeping online activities unshackled from the burdens that come from excessive regulation and taxation.

ONLINE SALES TAXES AND THE MARKETPLACE FAIRNESS ACT

States and local governments are becoming increasingly concerned about the loss of revenue as Internet sales continue to expand. Instead of recognizing the positive impact of increased levels of production and entrepreneurship, many state and local governments claim that these sales evade their regional and local taxes and ultimately hurt citizens.

In Quill v. North Dakota, the Supreme Court held that under the Commerce Clause of the Constitution a state cannot require an out-of-state retailer to collect use tax unless the retailer has a “substantial nexus” with the taxing state.⁸ Siding with Quill, the court ruled that a taxpayer must have a physical presence, such as an office, branches, warehouse, or employees in a state in order to require collection of sales or use tax for purchases made by in-state customers.

Many states already require their citizens to pay taxes on remote sales, either through collection of sales tax by companies that have a physical presence within the state, or through a use tax which is collected at the end of the year and filed with the individual’s state income tax return. However, in the 45 states that have a use tax, only 1.6 percent of taxpayers in these

⁸ “Sale and Taxation of Goods Over the Internet, Substantial Nexus, Quill Corp. v. North Dakota, 504 U.S. 298 (1992),” Cyberspace Law seminar, University of North Carolina School of Law, May 2010, <http://www.unc.edu/courses/2010spring/law/357c/001/salestaxonline/quill-v-north-dakota.html>.

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states pay the tax.⁹ This is either because the process of reviewing statements for online purchases that did not include a sales tax is cumbersome, people are ignorant of the law, or they are intentionally avoiding the tax. In 1999, then-Governor William Janklow (R-S.D.) joked about using state troopers to pull over Federal Express and United Parcel Service trucks in order to find out which packages did not include state sales taxes. This comment reflected states' desperate efforts to collect as much revenue as possible.

Congress is currently debating the sales tax issue. On May 6, 2013, the Senate passed S. 743, the Marketplace Fairness Act of 2013. This legislation allows member states under the Streamlined Sales and Use Tax Agreement to allow businesses that operate in the state to collect sales and use taxes from out-of-state customers for the state and local jurisdictions in which the customer resides. This mandate would force small businesses not qualifying for the small-seller exemption of \$1 million annually to know and understand the tax laws of all 50 states and every local taxing authority if they want to do business over the Internet. There are nearly 9,600 separate taxing jurisdictions in the United States, and despite the exemption for small sellers, those not qualifying would be burdened with substantial costs to support the new system.¹⁰

The legislation uses this agreement as a baseline for states to follow in requiring remote sellers to collect taxes on their behalf. Participation by states is voluntary, but the proposed legislation would codify its existence, essentially creating an unelected governing body controlling remote sales tax regulations.

Proponents of the legislation claim they are attempting to create a level playing field between online and storefront commerce, often stating that consumers shop online to avoid paying a sales tax on purchases.¹¹ However, as noted, states that collect sales tax have a use tax that requires taxpayers to pay taxes on previously untaxed purchases when filing their state income tax returns. If this legislation becomes law, the playing field will become uneven for small businesses, as they compete against big box stores that are already collecting interstate sales taxes.

The bill's burdensome tax collection procedures will create additional

⁹ Chana Joffe-Walt, "Most People Are Supposed to Pay This Tax. Almost Nobody Actually Pays It," National Public Radio, Planet Money, April 16, 2013, <http://www.npr.org/blogs/money/2013/04/16/177384487/most-people-are-supposed-to-pay-this-tax>.

¹⁰ Paul Demery, "U.S. Senate Passes Web Sales Tax Bill," *Internet Retailer*, May 6, 2013, <http://www.internetretailer.com/2013/05/06/us-senate-passes-web-sales-tax-bill>.

¹¹ Jake Grovum, "The 'Amazon Tax' War Escalates," StateLine, The Pew Charitable Trusts, April 26, 2010, <http://www.pewstates.org/projects/stateline/headlines/the-amazon-tax-war-escalates-85899376821>.

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costs for retailers.¹² These costs will be passed on to consumers through higher retail prices for goods and services and will make it difficult for small, job-creating companies to succeed in today's marketplace.

An alternative to the scheme set up in the Marketplace Fairness Act would be the establishment of an origin-based sales tax system in which the tax is based on the origin of the seller instead of the buyer.¹³ Sellers would be responsible for collecting sales tax, but like brick-and-mortar sellers, they would be responsible for collecting sales taxes only in the jurisdiction in which they are located, rather than collecting for 9,600 other jurisdictions. The benefit to small businesses competing online are obvious; however, in this model, residents of the five states that currently do not charge sales tax (Alaska, Delaware, Montana, New Hampshire, and Oregon) would be subject to a new tax for purchases made remotely outside their states.¹⁴ States that provide an origin-based sales tax format include Arizona, California, Illinois, Mississippi, Missouri, New Mexico, Pennsylvania, Tennessee, Texas, Utah, and Virginia.¹⁵

Rather than trying to collect sales taxes from remote sellers, states should eliminate waste in order to fund needed government services. The Marketplace Fairness Act does not make the marketplace truly fair for brick-and-mortar and remote sales.

WIRELESS TAXES ARE TOO COSTLY TO CONSUMERS

According to a November 2012 survey by the Pew Internet & American Life Project, nearly 85 percent of American adults own a cell phone. These wireless devices now play a key role in many aspects of their daily living. The survey found that 67 percent of cell phone owners regularly check their phones for messages, 44 percent have slept with their phones beside their beds to make sure they don't miss an important call, and 29 percent describe their phones as "something they can't imagine living without."¹⁶

¹² Grant Gross, "Tech Groups Oppose Internet Sales Tax Bill," *PCWorld*, IDG News Service, August 2, 2011, http://www.pcworld.com/article/237030/tech_groups_oppose_internet_sales_tax_bill.html.

¹³ Andrew Moylan, "An 'Original' Solution to Taxation of Online Sales," *InsideALEC*, June 2012, <http://www.alec.org/wp-content/uploads/April-2012-Moylan-Online-Sales1.pdf>.

¹⁴ Hanns Kuttner, "Taxing Sales: Comparing the Origin-Based and Destination-Based Models," Hudson Institute, Economic Policy/Briefing Paper, June 2012, <http://www.hudson.org/files/publications/TaxingSales--Kuttner0612web.pdf>.

¹⁵ "Destination and Origin-based Sales Tax," Sales Tax DataLINK, April 8, 2013, <http://www.salestaxdatalink.com/destination-and-origin-based-sales-tax/>.

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In this era of mobile connectedness, wireless subscribers have grown from 48.7 million in 1997 to 321.7 million in 2012.¹⁷ As the use of wireless communications increases, so does the number of households foregoing land lines or wired telephone service in favor of wireless devices. According to the Centers for Disease Control (CDC), the percentage of adults and children living in households with only wireless telephone service or no telephone service has increased from just over 4 percent in 2004 to approximately 34 percent of adults and 40.6 percent of children in 2012.¹⁸

While the number of wireless consumers is on the rise and a greater number are choosing to “cut the cord” on their landline connections, state and local tax burdens have also skyrocketed. An October 29, 2012, report by Scott Mackey of KSE Partners showed that taxes on wireless consumers are rising at a steady pace.¹⁹

The telecommunications industry, which provides innovation and economic growth to the country, is one of the most heavily taxed businesses in the nation. The Mackey report provides a detailed state-by-state analysis of the taxes wireless consumers now pay. The state of Nebraska has the highest combined wireless tax rate at 24.49 percent and Oregon has the lowest combined tax rate at 7.67 percent. Rounding out the top five highest wireless tax states are Washington (24.44 percent), New York (23.67 percent), Florida (22.41 percent), and Illinois (21.76 percent). According to the report, the average burden from wireless taxes and fees on consumers has increased from 16.26 percent in July 2010 to 17.18 percent in July 2012. Yet the average state and local sales tax for other goods and services is currently 7.33 percent.

One of the primary sources of the 2010-2012 increase is the federal Universal Service Fund (USF) contribution rate, which is a hidden tax passed on to consumers. In 2003, the contribution rate was 7.3 percent. It more than doubled to 15.7 percent by 2012. In addition to increases in the federal USF fee, several states are duplicating the federal government’s efforts by placing a surcharge on intrastate telecommunications services. These funds

¹⁶ “The Best (and Worst) of Mobile Connectivity,” Pew Internet & American Life Project, November 30, 2012, http://www.pewinternet.org/-/media/Files/Reports/2012/PIP_Best_Worst_Mobile_113012.pdf.

¹⁷ “Wireless Quick Facts, CTIA, The Wireless Association, Year-End Figures, 2012,” <http://www.ctia.org/advocacy/research/index.cfm/AID/10323>.

¹⁸ Stephen J. Blumberg, Ph.D., and Julian V. Luke, “Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, January - June 2012,” Centers for Disease Control, December 2012, <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201212.pdf>.

¹⁹ Scott Mackey, “Wireless Taxes and Fees Continue Growth Trend,” State Tax Notes, October 29, 2012, <http://www.ksefocus.com/wordpress-content/uploads/2012/11/mackey-state-tax-notes.pdf>.

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are typically used to support basic local telephone service in areas where it is costly to provide such services. Among the states with their own USF fees are Alaska (5.98 percent), Colorado (1.82 percent), Indiana (.33 percent), Kansas (.17 percent), Louisiana (2.4 percent), Maine (.94 percent), Maryland (.38 percent), Nebraska (4.37 percent), Nevada (.1 percent), New Mexico (2.08 percent), Oklahoma (1.98 percent), Texas (2.7 percent), Utah (.63 percent), Vermont (1.6 percent, including 911), Wisconsin (.1 percent), and Wyoming (.63 percent).²⁰

As noted in the Mackey report, most states also impose a 911 fee on consumers' wireless bills, as well as state and local wireless taxes and other fees. The 911 program provides consumers of telephone services contact to emergency personnel; the Enhanced 911 program (E-911) allows consumers to reach emergency services regardless of the technology used to place the call. Most of the taxes and fees listed in Mackey's report are passed along to subscribers.

On June 12, 2013, legislation was introduced in the House of Representatives to address the disparities and halt the increases in wireless taxes. The Wireless Tax Fairness Act (H.R. 2309) would place a five-year freeze on attempts by state and local governments to raise taxes on wireless services, including mobile services, mobile service providers, or mobile service property. On June 26, 2013, a Senate companion bill, S. 1235, was introduced. Similar legislation passed the House of Representatives during the 112th Congress, but was not considered by the Senate.

With wireless tax rates above the 20 percent mark in some states, these discriminatory taxes hit the poorest in the nation hardest, creating obstacles for them to opt for wireless communications over land lines. The ability to communicate efficiently and effectively through technologies such as wireless broadband and cell phones is essential in today's increasingly connected society and should not be hindered by onerous taxes.

RAIDS ON 911/E-911 FUNDS: PROGRESS BEING MADE

Many of the older 911 communications systems have difficulty in pinpointing an individual's location if that person is using a mobile device to call for help. As more individuals use new technologies to contact 911 services for assistance, these systems must be able to find them regardless of how they are communicating. The existing 911 system is mostly funded by

²⁰ Ibid.

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wireless consumers through the E-911 fee or tax on their communications bill, although wireless providers also invest resources to support 911 services over their wireless networks and devices.

In 2004, Congress enacted the ENHANCE 911 Act (Public Law 108-494) following the 9/11 Commission's recommendation to improve coordination and integrate communications for emergency first responders. The legislation was intended to assist states in modernizing their 911 systems.²¹ This legislation authorized \$250 million per year for matching grants for fiscal years 2005-2009 for 911 improvements. However, if a state or local government used its E-911 taxes, fees or charges for unrelated purposes, it would no longer be eligible for the federal E-911 grant. Following the publication of the final rules for the ENHANCE 911 Act of 2004 on June 5, 2009, grants ranging from \$200,000 to \$5.4 million were awarded to 30 states and territories.²²

On March 10, 2006, the Government Accountability Office (GAO) issued a report on state and local use of funds collected for the purpose of E-911 implementation. The GAO found that several responding states were using the collected E-911 funds for purposes unrelated to the E-911 program, and in some instances had transferred these funds to the state's general fund.²³

During the 110th Congress, the New and Emerging Technologies (NET) 911 Improvement Act (Public Law 110-283) was signed into law on July 23, 2008.²⁴ The NET 911 Act promotes public safety by encouraging states to deploy a national IP-enabled emergency network and improve 911 services for the disabled. To address the findings of the GAO report, the NET 911 Act also required an annual report to Congress by the FCC on the use of funds set aside by states for E-911 services.

In its third annual report issued on November 8, 2011, the FCC announced that seven states were still diverting funds for uses other than the

²¹ 9/11 Commission Report, <http://www.9-11commission.gov/report/911Report.pdf>.

²² Department of Transportation, National Highway Traffic Safety Administration, Department of Commerce, National Telecommunications and Information Administration, 47 CFR Part 400 [Docket No. NHTSA-2008-0142], RIN 2127-AK37, E-911 Grant Program, The Federal Register, Volume 74, No. 107, June 5, 2009, page 26965, http://www.911.gov/pdf/911-Grant_Program_Final_Reg.pdf.

²³ "Telecommunications: States Collection and Use of Funds for Wireless Enhanced 911 Services," U.S. Government Accountability Office, GAO-06-338, March 10, 2006, <http://www.gao.gov/assets/250/249205.pdf>.

²⁴ William Jackson, "Senate passes NET 911 Improvement Act," *Washington Technology*, June 18, 2008, <http://washingtontechnology.com/articles/2008/06/18/senate-passes-net-911-improvement-act.aspx>.

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original intent.²⁵ While this was a reduction from 11 states in 2009 and 12 states in 2008, five of these states (Arizona, Illinois, Oregon, Rhode Island, and Virginia) were previous offenders, diverting more than \$27.9 million from the E-911 funds. Typically, these diversions have gone into the state's general fund to meet budgetary demands and shortfalls.

On January 14, 2013, the FCC released its fourth annual report, which stated that of the 47 states and two territories that provided information for the report, 45 states and Puerto Rico submitted information that indicated they used collected 911/E-911 funds exclusively for 911/E-911 purposes.²⁶ Louisiana, New Hampshire, Rhode Island, the District of Columbia, the Northern Marianas, and the U.S. Virgin Islands did not respond to the FCC requests. Arizona used \$2.2 million to help close a shortfall in the general fund, while Georgia collected \$13.7 million in pre-paid 911 fees, none of which was allocated for 911/E-911 use. Guam appropriated \$486,323 of its 911/E-911 fee collections for other public safety-related issues, such as leasing ambulances and maintaining the territory's public safety radio communications system. Illinois diverted \$2.9 million into its general fund in FY 2012, and \$6.6 million in FY 2011, but has returned \$1.4 million, with the remainder to be returned to the 911/E-911 fund by September 2012. Maine transferred \$24,568 to its general fund for personnel service reduction initiatives and New York diverted \$22.8 million to its general fund in FY 2011/2012.²⁷

On April 18, 2013, GAO issued another report indicating that most states are now using the funds for the purposes for which they were intended; however, the FCC needs to follow best practices for data collection and analysis in order to improve the collection and reporting of information on state 911 funds.²⁸

The telecommunications industry is one of the most heavily taxed industries in the nation; most of these taxes and fees, including the E-911

²⁵ Public Safety and Homeland Security Bureau Seeks Comment on Information Collection and Recommendations to Congress Regarding State 911/E-911 Fees and Expenditures, PS Docket No. 09-14, Federal Communications Commission, November 8, 2011, <http://www.fcc.gov/document/net-911-e911-911-fees-information-collection>.

²⁶ "Report To Congress on State Collection and Distribution of 911 and Enhanced 911 Fees and Charges," Federal Communications Commission, Submitted Pursuant to Public Law 110-283, December 21, 2012, <http://www.fcc.gov/document/annual-report-state-collection-and-distribution-911e911-fees>.

²⁷ Ibid.

²⁸ "911 Services: Most States Used 911 Funds for Intended Purposes, but FCC Could Improve Its Reporting on States Use of Funds," U.S. Government Accountability Office, GAO-13-376, April 18, 2013, <http://www.gao.gov/assets/660/653929.pdf>.

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fee, are passed along to subscribers. Redirecting the E-911 resources for other uses is a disservice to both taxpayers and subscribers. While progress has been made to reducing the number of states raiding the 911/E-911 funds, a few states continue to rely on these funds to reduce the strains on their general budgets. By raiding these funds, states are reducing the available funds that could be used to improve and update 911 systems in their communities, which could seriously delay help from emergency responders when such needs arise.

THE WHAT, WHERE, AND WHEN OF DIGITAL GOODS TAXES

Digital goods can range from music and videos to mobile apps that can, among other things, create grocery lists, communicate with friends through social media, take improved quality photos on wireless devices, and access news and information. A 2012 report by the Recording Industry Association of America profiling the music consumer found that digital music buyers now constitute 44 percent of men and 54 percent of women.²⁹

As state and local government leaders seek new avenues to increase their revenue streams, the digital goods marketplace is becoming an increasingly attractive target. A number of bills have been introduced in state legislatures to subject these products and services, such as movies, books, ringtones, audio and video works, and similar downloadable products, to sales and use tax.

There are currently 13 states that tax digital goods by statute: Indiana, Kentucky, Mississippi, Nebraska, New Jersey, North Carolina, South Dakota, Tennessee, Utah, Vermont, Washington, Wisconsin, and Wyoming. Alabama, Arizona, Colorado, Connecticut, Idaho, Louisiana, Maine, New Mexico, Texas, and the District of Columbia tax digital goods by administrative rule.³⁰ There are no federal or state guidelines to define the source of digital products sold in interstate commerce, which could lead to consumers being taxed twice for the same transaction should they purchase a digital good, such as a song or ebook in another state. Legislation is currently

²⁹ "Music Consumer Profile—2012," The NPD Group/2012 Annual Music Study, Recording Industry Association of America, May 2013, <http://76.74.24.142/55C8603E-3B67-7A3F-6C11-715EA3870C70.pdf>.

³⁰ "Digital Goods Taxability as of 2013," MyWireless Info Chart, June 3, 2013, <http://www.mywireless.org/federal-issues/digital-goods/>.

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moving through the Minnesota legislature that would redefine “tangible goods” to include digital goods, subjecting those goods to taxation.³¹ The rules regarding the taxation of digital goods purchases can be confusing, but they should certainly not be subjected to multiple and discriminatory taxes.

On July 25, 2013, Sens. Ron Wyden (D-Ore.) and John Thune (R-S.D.) introduced S. 1364, the “Digital Goods and Services Tax Fairness Act,” to establish a national framework for the growing digital marketplace so that digital goods and services would be fairly taxed at the state and local levels. This bill would prohibit a state or local jurisdiction from imposing multiple or discriminatory taxes on sales or use of digital goods or services. It would also eliminate tax-related burdens on interstate commerce that could stifle the vital online market, and prevent consumers from being punished with double or even triple taxes on mp3s, videos, or the latest app, while clearly establishing which jurisdiction (the consumer’s home billing address, for example) has the right to tax digital transactions.

As the digital goods marketplace continues to grow and expand, it is critical to provide clarity to the tax laws that govern these goods and services, and to protect consumers from discriminatory or excessive taxes that would harm this growing industry.

³¹ S.F. 35, a bill for an act relating to taxation; sales and use; reducing the sales and use tax rate; taxing digital products; amending Minnesota Statutes 2012, sections 297A.61, subdivisions 3, 10, 24, by adding subdivisions; 297A.62, subdivision 1, Posted February 8, 2013, <https://www.revisor.mn.gov/bills/text.php?session=ls88&number=SF35&version=list>.

CHAPTER 2: BROADBAND DEPLOYMENT IN THE UNITED STATES

“Improving the Internet is just one means, albeit an important one, by which to improve the human condition. It must be done with an appreciation for the civil and human rights that deserve protection—without pretending that access itself is such a right.”³²

In 2009, as required by the American Recovery and Reinvestment Act (ARRA or stimulus), the FCC began the development of a National Broadband Plan (NBP), to ensure that every American has “access to broadband capability.”³³

In early 2010, the NBP called for the establishment of competition policies, ensuring efficient allocation and use of government-owned and government-influenced assets, ensuring universal access to broadband network services, and aligning incentives to maximize broadband use for national priorities.³⁴

The plan’s mission was to ensure that all Americans have access to broadband capability and to establish benchmarks for meeting this goal.³⁵ The FCC expanded the definition of universal service to include broadband services and began transitioning the USF program into an umbrella fund that includes the Connect America Fund (CAF) in October 2011.³⁶

Since the NBP was released, the federal government has increased the minimum upload and download speeds service providers are required to provide in order attain minimum service standards. It has also invested tax dollars to build new broadband infrastructure where it already exists, also known as overbuild, in order to meet the NBP’s goals. The federal government is not alone in overbuilding broadband infrastructure. States and local governments have also invested taxpayer dollars into providing broadband service as a public utility, often in direct competition with existing

³² Vinton G. Cerf, “Internet Access Is Not a Human Right,” *The New York Times*, January 4, 2012, http://www.nytimes.com/2012/01/05/opinion/internet-access-is-not-a-human-right.html?_r=4&pagewanted=all&.

³³ “National Broadband Plan, Connecting America,” Federal Communications Commission, March 2010, <http://www.broadband.gov/plan/>.

³⁴ “The National Broadband Plan, Executive Summary,” Federal Communications Commission, March 2010, <http://www.broadband.gov/plan/>.

³⁵ *Ibid.*

³⁶ Sharon Gillett and Michael Byrne, Chief of the Wireline Competition Bureau and Geographic Information Officer, “Connect America Fund: Putting Consumers on the Map,” Federal Communications Commission, October 12, 2011, <http://www.fcc.gov/blog/connect-america-fund-putting-consumers-map>.

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private companies that have already heavily invested in such services.

This chapter will explore efforts to increase Internet use at the taxpayers' expense.

THE NATIONAL BROADBAND PLAN

In addition to bringing broadband access to all Americans by 2020, the NBP calls for providing 100 million U.S. homes with affordable access to download speeds of at least 100 megabits per second (Mbps) and upload speeds of at least 50 Mbps; leading the world in mobile innovation, with the fastest and most extensive wireless networks of any nation; giving every American affordable access to robust broadband service, and the means and skills to subscribe if they so choose; increasing the speed of broadband service to at least 1 gigabit per second to anchor institutions such as schools, hospitals, and government buildings; providing first responders with access to a nationwide, wireless, interoperable broadband public safety network; and, ensuring that all Americans are able to use broadband to track and manage their real-time energy consumption.³⁷

On August 21, 2012, the FCC issued its eighth annual report on advanced communications capability in America, pursuant to Section 706 of the Telecommunications Act of 1996.³⁸ In its findings, the FCC determined that 19 million Americans currently do not have fixed broadband capabilities. That means that 95 percent of Americans have access to broadband Internet services compared to 15 percent in 2003, yet the FCC concluded in its findings that its “implementation work is far from complete.”

Because 5 percent of the population was still either underserved or unserved by broadband at a certain minimum acceptable speed, the FCC called for an increase in federal funds to deploy broadband services. Underpinning the details of the FCC's report is the implication that the U.S. is lagging behind other countries in broadband deployment and, therefore, needs government intervention to improve the nation's standing globally.

In contrast to the FCC's assessment of the country's global competitiveness, Akamai's State of the Internet report for the fourth quarter of

³⁷ Ibid.

³⁸ Inquiry Concerning the Deployment of Advanced Telecommunications 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, as Amended by the Broadband Data Improvement Act, Federal Communications Commission, August 21, 2012, <http://www.fcc.gov/document/progress-made-broadband-deployment-availability-gaps-remain>.

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2012 found that the U.S. ranked seventh in high speed broadband adoption, and the average peak broadband connections in North America reached more than 30,000 kilobits per second (Kbps), compared to 25,000 Kbps in Europe and 22,000 Kbps in Asia.³⁹ U.S. Telecom estimated that private sector investment reached \$66 billion in 2011 for a total of \$1.2 trillion of improved broadband services across the nation since 1996.⁴⁰ The FCC report acknowledges private-sector investments in the pursuit of expanding mobile broadband, but discounts these substantial investments and achievements in its final analysis of the success of broadband deployment toward meeting the NBP's goals.

On June 14, 2013, the White House released a report on the state of broadband. According to the report, in 2000, 4.4 percent of American households had a broadband connection in their homes; by 2010 that number had reached 68 percent. Average delivered speeds have doubled since 2009.⁴¹ In 2012, the average mobile data connection speed was 2.6 Mbps, nearly twice that available in Western Europe, and more than five times the global average.⁴²

In his dissenting views to the FCC's August 2012 report, Commissioner Robert M. McDowell stated that in 2011 more than \$25 billion had been invested in wireless infrastructure in the U.S., with nine out of every 10 Americans having a choice among at least five wireless service providers. In addition, Commissioner McDowell noted that the U.S. leads the world in 4G mobile broadband deployment.⁴³ Even as mobile technology advances, the FCC continues to focus on fixed broadband technology in its findings as the only meaningful measure of broadband access.

As Commissioner Ajit Pai stated in his dissenting remarks, "The

³⁹ "The State of the Internet, 4th Quarter, 2012 Executive Summary, Volume 5, Number 4," Akamai, January 2012, http://www.akamai.com/dl/akamai/akamai_soti_q412_exec_summary.pdf.

⁴⁰ "Broadband Investment," U.S. Telecom, The Broadband Association, <http://www.ustelecom.org/broadband-industry/broadband-industry-stats/investment>.

⁴¹ "Four Years of Broadband Growth," Office of Technology Policy and The National Economic Council, The White House, June 2013, http://www.whitehouse.gov/sites/default/files/broadband_report_final.pdf.

⁴² *Ibid.*

⁴³ Robert McDowell, "Dissenting Statement of Commissioner Robert McDowell Regarding the Inquiry Concerning the Deployment of Advanced Telecommunications 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, as Amended by the Broadband Data Improvement Act, GN Docket No. 11-121," Federal Communications Commission, August 21, 2012, http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0821/FCC-12-90A3.pdf.

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Commission's authority to enforce net neutrality, subsidize broadband for low-income households, or support digital literacy programs hangs in the balance each year, dependent on a finding that broadband is not being deployed in a reasonable and timely fashion." Pai continued, "if we believe instead that data should drive our decisions—not vice versa—then section 706(b) can never be a reliable authority for implementing good policy since we will eventually be forced to concede once again that broadband is being deployed in a timely and reasonable fashion."⁴⁴

Commissioners Pai and McDowell make the same point that CAGW has been making about the NBP: it defines broadband in such a way that taxpayer dollars will continue to be invested in broadband infrastructure despite proof that the private sector has been and will continue to be more efficient and capable of providing these services.

NEED A PHONE? UNIVERSAL SERVICE FUND CAN HELP

The Universal Service Fund (USF) was created following enactment of the Telecommunications Act of 1996 in order to meet the Act's universal service goals. USF fees are paid by the telecommunications industry, using a formula called the contribution factor. These fees are typically passed along to subscribers as a hidden tax on their monthly telephone bills.

The USF yields approximately \$8 billion annually.⁴⁵ There are four programs that receive USF funds: the Schools and Libraries program, also known as E-Rate; the High Cost program, which provides grants to build out telecommunications infrastructure in underserved or unserved areas of the country; the Rural Healthcare program, which provides telecommunications services, including broadband, to eligible health care providers; and the Low-Income Support program, which includes the Lifeline and Link-Up

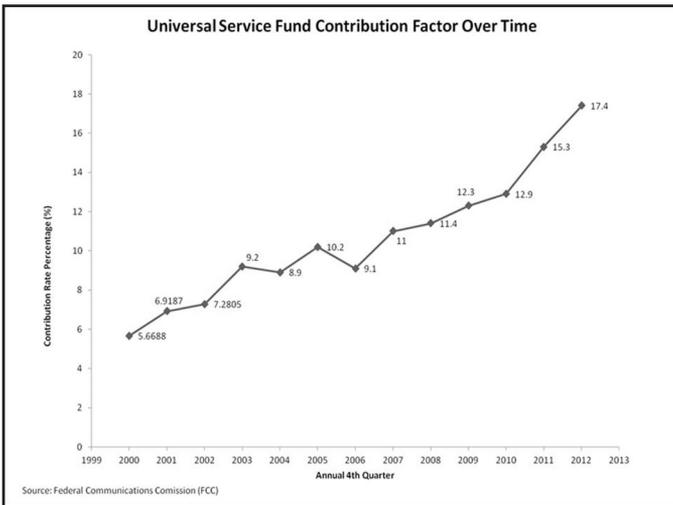
⁴⁴ Ajit Pai, "Dissenting Statement of Commissioner Ajit Pai Regarding the Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, GN Docket No. 11-121," Federal Communications Commission, August 21, 2012, http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0821/FCC-12-90A6.pdf.

⁴⁵ "Universal Service Monitoring Report," Federal Communications Commission, CC Docket No. 98-202, Data Received Through October 2012, Prepared by Federal and State Staff for the Federal-State Joint Board on Universal Service in CC Docket No. 96-45, 2012, table 1.12, pp. 1-19, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-319744A1.pdf.

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programs. The Link-Up program provides a one-time discount of up to \$30 off of either the initial installation fee for one traditional wireline phone service to the home or the activation fee for one wireless phone service. The Lifeline program discounts the basic monthly phone service by up to \$10.00 per month for either a wireline phone or a wireless phone.⁴⁶

The USF contribution factor is recalculated quarterly solely by the FCC to ensure that the USF fund will have enough capital to meet its program obligations, based on demand for each of the four programs supported by the USF. Between 2000 and 2012, the fees paid into the USF increased by 205 percent, from 5.7 percent to 17.4 percent of subscriber phone charges.



Prepared by CAGW; Data source, Federal Communications Commission Quarterly Contribution Factor Reports 2000 to 2012.

While the demand for the E-Rate program and the Rural Healthcare program have remained relatively stable, with only slight increases due to economic factors, the program demands of both the High Cost program and the Lifeline/Linkup programs have dramatically increased. In 2000, the USF spent a total of \$4 billion, with \$1.9 billion provided for the High Cost program, \$1.6 billion for the E-Rate program, less than \$50 million for the Rural Healthcare program, and \$500,000 for the Lifeline/Link-Up

⁴⁶ “Universal Service Program for Low-Income Consumers,” Federal Communications Commission, September 12, 2013, http://transition.fcc.gov/wcb/tapd/universal_service/lowincome.html.

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programs.⁴⁷ In 2012, the USF spent a total of \$8.71 billion, with \$4.15 billion provided for the High Cost program, \$2.22 billion for the E-Rate program, \$2.19 billion for the Lifeline/Link-Up programs, and \$106 million for the Rural Healthcare program.⁴⁸

A large part of the reason for the significant increase in the contribution factor occurred in 2005, when the Lifeline program was expanded to allow telephone companies to provide discounted wireless service, including prepaid wireless phones, to certain eligible individuals in some states. In October 2010, GAO published a report on the Lifeline and Link-Up programs that showed a significant increase in demand for them from 2008 to 2009, attributable in part to the increased availability of discounted wireless service for eligible individuals.⁴⁹ From 2005 to 2008, payments ranged from between \$802 million to \$823 million annually. However, in 2009, these payments increased to approximately \$1 billion.⁵⁰

An August 17, 2012 article in the *Middletown Journal* exemplified the explosive growth of the Lifeline program in Ohio, noting that “compared to the first quarter of 2011, the number of people in the program nearly doubled to more than a million.”⁵¹ Program costs increased from \$15.6 million in the first quarter of 2011 to \$26.9 million in the first quarter of 2012. Continued growth of the program could result in increased fees on the average telephone bill as the contribution fee is recalculated to account for the increased costs.

Not only did the October 2010 GAO report detail a dramatic increase in the nationwide use of Lifeline services, but it also revealed multiple instances of fraud and abuse within the program. For example, some recipients were using Craigslist to advertise the sale of Lifeline-subsidized phones and service. In other instances, Lifeline beneficiaries violated the one phone line

⁴⁷ Donald B. Marron, Acting Director, Congressional Budget Office, “Potential Future Spending from the Universal Service Fund,” Testimony before the Subcommittee on Telecommunications and the Internet, Committee on Energy and Commerce, U.S. House of Representatives, June 21, 2006, <http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/73xx/doc7312/06-21-usf-testimony.pdf>.

⁴⁸ “FAQs about Universal Service and the USAC,” Universal Service Administration Company, Q8, viewed September 5, 2013, <http://www.usac.org/about/about/universal-service/faqs.aspx>.

⁴⁹ “Telecommunications: Improved Management Can Enhance FCC Decision Making for the Universal Service Fund Low-Income Program,” U.S. Government Accountability Office, GAO-11-11, October 28, 2010, <http://www.gao.gov/assets/320/312708.pdf>.

⁵⁰ Ibid.

⁵¹ Josh Sweigart, “1 million Ohioans using free phone program: Fees on phone bills pay for \$1.5 billion national Lifeline program,” *Middletown Journal*, August 17, 2012, <http://www.middletownjournal.com/news/news/subsidized-cell-phone-program-nearly-doubles-in-oh/nRDqC/>.

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restriction of the program by signing up for service from multiple carriers. On June 29, 2011, the FCC published final rules to address the fraud and eligibility issues highlighted in the GAO report, codifying the restriction that an eligible low-income consumer could not receive more than one Lifeline-supported service at a time and ordering that any subscriber receiving multiple benefits in violation of the rule must be removed from the program.⁵²

In remarks before Third Way on January 9, 2012, then-FCC Chairman Julius Genachowski laid out plans to close loopholes in the program's eligibility requirements and strengthen cost controls in an effort to further reduce the amount of waste, fraud and abuse.⁵³ He also detailed an expansion of the Lifeline program to include broadband services as one of the choices individuals would be eligible to receive, emphasizing that the current service options are outdated by providing only basic telephone service. On January 10, 2012, the FCC announced it would be considering the chairman's reform proposal to its Lifeline/Link-Up programs at its next meeting scheduled for January 31, 2012.⁵⁴ This change was included in the NBP,⁵⁵ which also proposed transforming the USF High Cost program into the Connect America Fund.⁵⁶

On January 31, 2013, the FCC's Wireline Competition Bureau released its final report on the Lifeline program savings target for 2012, noting that the FCC's reforms resulted in \$213 million in savings to the USF compared to projected distributions to eligible carriers before implementation

⁵² Federal Communications Commission, Lifeline and Link-up Reform and Modernization, Federal-State Joint Board on Universal Service, Lifeline and Link-up, Final Rule, Federal Register, Volume 76, Number 125, Federal Communications Commission, June 29, 2011, <http://www.gpo.gov/fdsys/pkg/FR-2011-06-29/pdf/2011-16312.pdf>.

⁵³ "FCC Chairman Genachowski Addresses Smart, Responsible Government and Reforms to Modernize the Lifeline Program for Broadband," Remarks before Third Way, Washington, D.C., January 9, 2012, http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0109/DOC-311894A1.pdf.

⁵⁴ "FCC Announces Tentative Agenda for January Open Meeting," Federal Communications Commission, January 10, 2012, http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0110/DOC-311940A1.pdf.

⁵⁵ "National Broadband Plan, Connecting America," Federal Communications Commission, 2010, <http://www.broadband.gov/plan/>.

⁵⁶ FCC 11-161, In the Matter of Connect America Fund, WC Docket No. 10-90, A National Broadband Plan for Our Future, GN Docket No. 09-51, Establishing Just and Reasonable Rates for Local Exchange Carriers, WC Docket No. 07-135, High-Cost Universal Service Support, WC Docket no. 05-337, Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92, Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Lifeline and Link-Up, WC Docket No. 03-109, and Universal Service Reform—Mobility Fund, WT Docket No. 10-208, Federal Communications Commission, November 18, 2011, http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-161A1.pdf.

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of the reforms.⁵⁷ The Wireline Bureau anticipates additional savings to the USF in 2013 and later years as a result of the reforms implemented in 2012.⁵⁸

The telecommunications industry is one of the most heavily taxed sectors of the economy. The cost burden of the USF fee for taxpayers will only continue to rise, particularly with the expansion of broadband through the Connect America Fund.⁵⁹ As the FCC continues reviewing the Lifeline and Link-Up programs, it should evaluate the fiscal impact of additional subsidies on average, middle-class Americans, who are being skewered by their monthly communications bills.

CONNECTING AMERICA ONE HIDDEN TAX AT A TIME

On February 8, 2011, the FCC initiated USF reform proceedings in an effort to reduce waste, fraud and abuse in the program, as well as to expand the program to include broadband services to underserved and unserved areas of the country. Using the NBP as guidance, the commission voted unanimously on October 27, 2011, to approve its 759-page plan to merge the USF and Intercarrier Compensation (ICC) into the Connect America Fund (CAF).⁶⁰

The original USF program defined universal service as telephone services for rural and underserved areas of the country, where the cost of providing these services was too high for communications companies to bear alone. In expanding the definition of universal service to include broadband services, the FCC stated that Section 254(c) (1) of the Telecommunications

⁵⁷ “Wireline Competition Bureau Issues Final Report on Lifeline Program Savings Target,” Federal Communications Commission, January 31, 2013, <http://www.fcc.gov/document/lifeline-year-end-savings-report-2012-savings-target-exceeded>.

⁵⁸ *Ibid.*

⁵⁹ “FCC Releases Connect America Fund Order, Reforms USF/ICC for Broadband,” Federal Communications Commission, FCC 11-161, Connect America Fund WC Docket No. 10-90; A National Broadband Plan for Our Future GN Docket No. 09-51; Establishing Just and Reasonable Rates for Local Exchange Carriers WC Docket No. 07-135; High-Cost Universal Service Support WC Docket No. 05-337; Developing a Unified Intercarrier Compensation Regime CC Docket No. 01-92; Federal-State Joint Board on Universal Service CC Docket No. 96-45; Lifeline and Link-Up WC Docket No. 03-109; Universal Service Reform—Mobility Fund WT Docket No. 10-208, November 18, 2011, http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-161A1.pdf.

⁶⁰ *Ibid.*

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Act of 1996 defined universal service as “evolving.”⁶¹ In its November 28, 2011, order and report, the FCC adopted a new principle that provides “support for advanced services” as a universal service, which will likely result in the continuation of the USF fee in perpetuity.

The intent of the FCC’s reform efforts is to provide a response to the evolution and modernization of digital technology, as well as address issues of waste within both the USF and ICC programs. With many companies hiring job applicants online, schools relying more frequently on web-based textbooks, and colleges and universities offering online courses, access to the Internet has become an important component in the nation’s economic and educational future. According to the FCC’s website, “Broadband has gone from being a luxury to a necessity for full participation in our economy and society—for all Americans.”⁶² This statement raises the specter of government turning broadband into a new entitlement program at taxpayers’ expense.

Although 96.2 percent of Americans have the ability to access phone service, funding to companies that support the USF high-cost component grew from \$2.6 billion in 2001 to \$4.5 billion in 2011, despite the fact that wireless service is less costly and more efficient. Former FCC Chairman Genachowski stated on October 6, 2011, that the USF is wasteful and inefficient; paying some companies almost \$2,000 a month for a single home phone line.⁶³

The FCC anticipates that the CAF program will be able to connect seven million unserved and underserved rural Americans to fixed broadband in six years and connect all 19 million unserved and underserved rural residents by 2020.⁶⁴ In 2012, the FCC launched Phase 1 of the program, distributing approximately \$115 million in public funding, coupled with private investments, to expand broadband infrastructure in rural areas across the country. Phase II of the plan will use a forward-looking broadband cost model and competitive bidding to support deployment of networks that will provide both voice and broadband service for the next five years. Without

⁶¹ “Section 254, Universal Service,” Federal Communications Commission, <http://transition.fcc.gov/learnnet/254.html>.

⁶² “Connect America Fund,” Federal Communications Commission, <http://www.fcc.gov/encyclopedia/connecting-america>.

⁶³ Federal Communications Commission Chairman Julius Genachowski, “Connecting America: A Plan to Reform and Modernize the Universal Service Fund and Intercarrier Compensation System,” Federal Communications Commission, October 6, 2011, <http://www.fcc.gov/document/genachowski-universal-service-fund-reform>.

⁶⁴ “Connect America Fund (CAF) Phase I,” Federal Communications Commission, May 31, 2013, <http://www.fcc.gov/maps/connect-america-fund-caf-phase-i>.

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a concise and accurate definition of “underserved” to determine eligibility for federal assistance, funding could be distributed to regions that already have adequate services offered by the private sector, creating federally-funded overbuild projects.

The USF should be drawn down with the ultimate goal of elimination rather than expansion. Without the USF, the rigorous market-driven competition that is occurring in the telecommunications industry, particularly wireless, will address access and pricing problems. Unless the USF is terminated, the FCC can further expand universal service, and continue this hidden and unnecessary tax and regulatory scheme.

E-RATE REFORMS TO BRING DIGITAL LEARNING TO AMERICAN SCHOOLS

When the Telecommunications Act of 1996 was enacted, 14 percent of schools had Internet access and most were connected through dial-up modems. Today, virtually all schools and libraries are connected to the Internet.⁶⁵

In 2010, the FCC began the process of updating the E-Rate program to bring high-speed, affordable broadband to schools and libraries, and make the program more effective and efficient. Participants can use E-Rate funds to connect to the Internet in the most cost-effective manner available; make available “school spots” for students to use in their local communities after schools are closed; and, provide learning “On the Go,” which is off-campus wireless Internet connectivity for mobile learning devices.⁶⁶

While it has helped to provide connectivity to schools and libraries, the E-Rate program has also been subject to waste, abuse, and mismanagement. The program application process has an imbalanced priority system and fails to review applications in a technology-neutral manner. Currently, telephone services are considered priority one services. Applications for such services receive more funds than other services, such as broadband connectivity, which are designated as priority two services. The process for applying for the grants is also complicated, making it difficult for

⁶⁵ “Revitalizing E-Rate,” Federal Communications Commission, July 19, 2013, <http://www.fcc.gov/e-rate-update>.

⁶⁶ “FCC Enables High-Speed, Affordable Broadband For Schools and Libraries,” News Release, Federal Communications Commission, September 23, 2010, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301649A1.pdf.

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smaller schools and libraries to compete for E-Rate funding. In addition, according to Commissioner Pai, nearly \$800 million of E-Rate funding from 2012 has not yet been distributed.⁶⁷

A June 2004 CNET article cited approximately 40 fraud cases under investigation at that time by the FCC, the Department of Justice and the FBI.⁶⁸ In 2010, it was revealed that three employees of the Houston Independent School District had allegedly accepted meals and gifts from E-Rate vendors, causing the school district to lose \$105 million in federal funding.⁶⁹ In February 2012, the former owner of two telecommunications companies in Illinois was sentenced to 30 months for conspiring to provide kickbacks and bribes to several school officials responsible for procuring bids for Internet service access under the E-Rate program.⁷⁰ Investigations by the Department of Justice's Antitrust Division led to 24 people pleading guilty, being convicted at trial, or entering into civil settlements. Fines and restitution from these investigations total more than \$40 million.⁷¹

According to a report released during The Cable Show in June 2013 from Cable in the Classroom on "Trends in K12 Education," 33 percent of schools currently use social media in teaching, 46 percent plan to exclusively use online assessment tests within the next five years, 50 percent of schools have adopted a formal plan to transition to digital textbooks by 2018, and 20 states have already shifted their funding from print to digital textbooks. Yet 80 percent of the schools surveyed for the report indicated that their existing broadband connections are insufficient to meet their current needs.⁷²

Broadband brings technology innovation to the classroom, including digital textbooks, interactive learning games, digital instruction personalized for each student, and online courses from colleges and universities. In May 2013, the Georgia Institute of Technology announced plans to offer a massive

⁶⁷ Ajit Pai, "Modernizing the E-rate Program for Schools and Libraries, CC Docket No. 13-184," Federal Communications Commission, July 19, 2013, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-322284A4.pdf.

⁶⁸ Marguerite Reardon, "Eroding E-Rate: Fraud Threatens Internet Program for U.S. Schools," CNET, June 17, 2004, http://news.cnet.com/Eroding-E-rate/2009-1028_3-5236723.html.

⁶⁹ Lynn Walsh, "Employee Names Involved in HISD E-Rate Scandal Need to be Released: Attorney General," Texas Watchdog, June 23, 2010, <http://www.texaswatchdog.org/2010/06/-employee-names-involved-in-hisd-erate-scandal-need-to-be/1277302301.column>.

⁷⁰ Grant Gross, "Business Owner Sentenced for E-Rate Fraud," IDG News Service, *PCWorld*, February 9, 2012, http://www.pcworld.com/article/249673/business_owner_sentenced_for_erate_fraud.html.

⁷¹ Ibid.

⁷² "Trends in K12 Education: Why Cable Content and Service Providers Should Care," Cable in the Classroom, June 2013.

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open online course (MOOC) for a master's degree in computer science in collaboration with Udacity Inc. and AT&T for \$7,000, a significant cost savings for those seeking higher education.⁷³

Several proposals have been made to revamp the E-Rate program. On April 11, 2013, FCC Commissioner Jessica Rosenworcel laid out her suggestions at the Washington Education Technology Policy Summit.⁷⁴ Her E-Rate 2.0 proposal called upon the FCC to perform additional auditing to find savings and root out waste in the program; increase broadband capacity to schools by delivering 100 percent access to 100 Mbps per every 1,000 students by 2015 and 1 gigabit per second (Gbps) per every 1,000 students by the end of the decade; develop new and creative public-private partnerships to provide students and teachers access to content and devices; reduce the administrative paperwork and expense by simplifying the process for applicants; and, find ways to make broadband access more affordable to low-income households.

On June 6, 2013, President Obama announced his new ConnectED program, which would use federal resources to bring a minimum of 100 Mbps broadband with a goal of 1 Gbps to 99 percent of all schools by 2015. The program would be included in the E-Rate program, which would force increases in the USF fees paid by consumers on their communications bills. According to a speech by Department of Education Secretary Arne Duncan at The Cable Show on June 12, the cost would amount to the price of a postage stamp on these bills. On August 13, 2013, an article in *The Washington Post* noted the effort “would cost billions of dollars, and Obama wants to pay for it by raising fees for mobile-phone users.”⁷⁵

On July 16, 2013, Commissioner Pai unveiled his E-Rate reform proposals as a cost-effective alternative to the President's ConnectED program at an event sponsored by the American Enterprise Institute (AEI).⁷⁶

⁷³ Brittany Ballenstedt, “Get a Computer Science Degree for Just \$7,000,” *NextGov*, May 24, 2013, <http://www.nextgov.com/cio-briefing/wired-workplace/2013/05/get-computer-science-degree-just-7000/63662/?oref=ng-HPriver>.

⁷⁴ “Remarks of Commissioner Jessica Rosenworcel,” Washington Education Technology Policy Summit, Washington, D.C., Federal Communications Commission, April 11, 2013, http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0411/DOC-320122A1.pdf.

⁷⁵ Zachary A. Goldfarb, “Obama Pushes Ambitious Internet Access Plan for Schools,” *The Washington Post*, August 13, 2013, http://www.washingtonpost.com/politics/obama-pushes-ambitious-internet-access-plan/2013/08/13/646bf410-f321-11e2-bdae-0d1f78989e8a_story.html?hpid=z4.

⁷⁶ “Remarks of Commissioner Ajit Pai on Connecting the American Classroom: A Student-Centered E-Rate Program,” American Enterprise Institute, Washington, D.C., July 16, 2013, http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0716/DOC-322201A1.pdf.

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Rather than expanding the funding stream by increasing USF fees, Pai offered commonsense reforms that would reduce bureaucratic red tape and place funding directly where it is needed most. Citing delays in processing complicated applications, programs that are heavily focused on bureaucracy instead of the students, and misplaced or out-of-date priorities in the administration of E-Rate funds as well as lack of oversight in the program, Pai called upon his fellow commissioners to increase transparency and oversight and reform the program to a “Student-Centered E-Rate Program.”

Unlike the manner in which the E-Rate program is currently administered, which requires school districts to file complicated applications and undergo lengthy appeal processes, Pai proposed the following: allocate the existing E-Rate budget across every school in the country, divided up on a per student basis, with rural schools and poorer communities receiving a higher per student rate than more urban or affluent communities; re-direct funding currently being used for telephone services toward technology to prepare the nation’s students for the future; simplify the E-Rate application process; and, require schools to spend \$1 for every \$3 in funding they receive through the program on communications services and new technologies, with school administration officials certifying that funds are used to the direct benefit of students.

On July 17, 2013, the Senate Committee on Commerce, Science and Transportation held a hearing titled “E-Rate 2.0: Connecting Every Child to the Transformative Power of Technology.”⁷⁷ Witnesses recommended that the application process for the E-Rate program should be simplified; funds should be more equitably distributed across all communities, particularly those in extremely rural regions of the country; technology should be put directly into the hands of students; and, the U.S. should retain its technological competitiveness in the global economy. They also called for increased funding to the E-Rate program and a lifting of the current funding cap on the program to accommodate current financial needs of both existing applicants and future program growth.

On July 19, 2013, the FCC met to discuss, among other items, E-Rate reforms. Following the meeting, the FCC issued a Notice of Proposed Rule Making (NPRM) to obtain comments on how the program can be

⁷⁷ “E-Rate 2.0: Connecting Every Child to the Transformative Power of Technology,” U.S. Senate Committee on Commerce, Science, & Transportation, July 17, 2013, http://www.commerce.senate.gov/public/index.cfm?p=Hearings&ContentRecord_id=4395bf05-e4b9-4477-93df-e54faf2a81c5%20-%20hearingParticipants.

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reorganized to meet the goals of the President's ConnectED program.⁷⁸ The NPRM seeks to provide increased connectivity to high-capacity broadband; create efficient purchasing of services through bulk buying, consortia, and competitive bidding improvements; and, cut the red tape in order to speed, streamline, and increase transparency in application reviews.

Although the USF should be eliminated entirely, while the E-Rate program exists every effort to reduce inefficiencies, waste and abuse must be undertaken. The FCC reform efforts will increase fiscal responsibility and improve management. Efforts to improve digital learning across the country are laudable; many private sector companies are already stepping up to the plate to improve technology and digital literacy in schools through programs like Connect2Compete,⁷⁹ EveryoneOn,⁸⁰ and Comcast's Internet Essentials.⁸¹

On October 29, 2013, Comcast Executive Vice President David L. Cohen testified on "Broadband Adoption: The Next Mile" before the Senate Committee on Commerce, Science, and Transportation Subcommittee on Communications, Technology and the Internet. In his testimony, Cohen announced that Comcast's Internet Essentials program had connected an estimated 1 million low-income individuals, or more than 250,000 families to the Internet at home.⁸² Through their efforts and partnerships with community organizations such as the Boys and Girls Clubs of America, Comcast is working to improve digital literacy for the youth of America in order to help them succeed. These private sector efforts will end up making ConnectED another wasteful program that will fail to meet its stated goals at the taxpayers' expense.

Ultimately, the future of the E-Rate program lies with the FCC. As Commissioner Pai stated in his remarks before AEI, the NPRM is the beginning of the process, and the goal is to implement the final reforms in time for the start of the school year in the Fall of 2014. Commissioner

⁷⁸ Megan Slack, "What is ConnectED?" The White House, June 6, 2013, <http://www.whitehouse.gov/blog/2013/06/06/what-connected>.

⁷⁹ "Connect2Compete," August 14, 2013, <http://www.connect2compete.org/about/index.php>.

⁸⁰ "EveryoneOn," August 14, 2013, <http://www.everyoneon.org>.

⁸¹ Jeff Baumgartner, "Comcast: 'Internet Essentials' Connects 220,000 Low-Income Families," Multichannel News, August 12, 2013, <http://www.multichannel.com/distribution/comcast-%E2%80%98internet-essentials%E2%80%99-connects-220000-low-income-families/144922>.

⁸² Testimony of David L. Cohen, Executive Vice President, Comcast Corporation before the U.S. Senate Committee on Commerce, Science, and Transportation Subcommittee on Communications, Technology, and the Internet, "Broadband Adoption: The Next Mile," October 29, 2013, http://www.commerce.senate.gov/public/?a=Files.Serve&File_id=bcc5e2c1-29b6-41cc-a6fd-7ad60abc3dcf.

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Pai called for full public participation in the process, asking to hear from all interested parties including teachers, parents, the telecommunications industry, public policy advocates, and government officials.

MUNICIPAL BROADBAND: POOR SERVICE AND MISMANAGEMENT AT TAXPAYER EXPENSE

As Internet use has grown and spurred on the economy, municipalities across the country are seeking ways to redefine Internet access as a public utility. According to a March 2013 report by the Advanced Communications Law and Policy Institute at New York Law School, there is a wide array of broadband available across the U.S. offering consumers a menu of service options that includes cable modem, fiber, and wireless, with more than 1,600 companies currently providing broadband Internet access, compared to only 130 companies in 2000.⁸³

Municipal broadband networks, also known as government-owned networks (GONs), are funded at taxpayer expense and often compete against private sector broadband investments. The building of municipal broadband in communities across the country is driven by the purported desire to “plug gaps” in broadband access; inject competition into the local and national marketplace; spur local economic development; achieve ubiquitous gigabit connectivity; and, provide local self-reliance and self-determination in the broadband space.⁸⁴ Proponents of these initiatives argue that localities should be allowed to “partner” either “directly or indirectly” with the public or private sector to provide broadband services. However, opening the door to publicly-funded telecommunication services also puts municipalities into competition with existing businesses.

The March 2013 New York Law School study of the rationales for building municipal broadband concluded that those areas which lack adequate access to broadband (the 5 percent of the country that is unserved) are in locations that are either remote, or difficult and expensive to provide service. The establishment of GONs that compete with existing providers stems from a pessimistic view of broadband in the U.S. and contradicts the analysis that the U.S. broadband market is “vibrantly competitive.” The

⁸³ Charles M. Davidson and Michael J. Santorelli, “Evaluating the Rationales for Government-Owned Broadband Networks,” The Advanced Communications Law and Policy Institute at New York Law School, March 2013.

⁸⁴ “Parsing the Debate over Government-Owned Broadband Networks,” The Advanced Communications Law and Policy Institute at New York Law School, April 2013.

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GONs wrongly place municipalities and policymakers as the best judges of whether the U.S. marketplace is effectively competitive.

Another rationale used to promote GONs is that municipal broadband was originally conceived to include critical functions like public safety yet, in order to obtain a better return on their investments, the GON is opened up to compete head-to-head with existing providers. The network is also needed to serve as the foundation for a “smart” community and smarter services, implying that the investments are vital to bolster the local economy, but this rationale does not look at whether the municipality is better equipped to provide the service than the private sector. Finally, there is the local self-reliance rationale, which stipulates that municipalities should have the freedom to do what they want in the broadband space.⁸⁵

Studies have shown that municipal efforts to build their own broadband infrastructure are not always the best solution, as these networks use taxpayer funds and federal grants to build networks in areas already served by high-speed Internet service providers (ISPs); lack a sustainable business plan and long-term resources to invest in maintenance and upgrades as technology evolves; and, compete unfairly with existing providers, putting private firms at a competitive disadvantage as the municipality engages in anticompetitive activities.⁸⁶

Among the most egregious examples of wasteful municipal broadband is the Utah Telecommunications Open Infrastructure Agency (UTOPIA), a consortium made up of 11 municipalities with the objective of building a fiber-optic network as a public utility that would provide broadband connectivity to their communities. UTOPIA began in 2002 with a \$135 million bond; the system was supposed to have been completed in three years and have a positive cash flow in five years.⁸⁷ In 2006, the system received a \$66 million loan from the Rural Utilities Service (RUS). UTOPIA was given \$21 million of that amount, but in 2008 RUS suspended the rest of the funding until UTOPIA “improved its financial condition and developed

⁸⁵ Davidson, Santorelli, “Evaluating the Rationales for Government-Owned Broadband Networks,” March 2013.

⁸⁶ Joseph D. Fuhr, Jr., PhD, “The Hidden Problems with Government-Owned Networks,” Coalition for the New Economy, January 6, 2012, <http://www.coalitionfortheneweconomy.org/wp-content/uploads/2012/01/1-6-12-Coalition-for-a-New-Economy-White-Paper.pdf>.

⁸⁷ Joseph D. Fuhr, Jr., PhD, “UTOPIA, a Failing Government-Owned Network in Utah,” Coalition for the New Economy, December 5, 2012, <http://www.coalitionfortheneweconomy.org/wp-content/uploads/2012/12/12.5.12-UTOPIA-Final1.pdf>.

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a new business plan.”⁸⁸

In April 2012, there were only 9,340 subscribers, less than 20 percent of the anticipated number of 49,350 projected by network administrators to have been on board by September 2007.⁸⁹ Taxpayers in member cities were left with the bill to pay for a failed experiment in the development of a fiber-optic network as a public utility.⁹⁰ In November 2013, residents of Orem voted against a property tax referendum that would have helped pay some of the city’s costs for participation in the UTOPIA consortium.⁹¹ The city must now look for other measures to subsidize its \$2.8 million obligation to fund the project.

Some cities have used public-private partnerships for broadband deployment. A prime example is the Google Fiber broadband deployment in Kansas City, which began in July 2012.⁹² Kansas City was promised Google Fiber at speeds of 1 Gbps and in exchange permitted Google to use city-owned office space and utilities during the build-out at no charge to the company.⁹³

In July 2004, Provo, Utah, began a build-out of its fiber-optic network, known as iProvo, to be operated as a publicly-run utility. The \$39 million debt would be paid for through a \$5.35 tax, known as a “telcom debt charge,” on monthly utility bills of city residents.⁹⁴ On April 18, 2013, Google and the city announced that Google would be bringing Google Fiber to the city as part of an agreement by the local government to sell the existing

⁸⁸ Ibid.

⁸⁹ Ibid.

⁹⁰ “In Our Opinion: Drawing the Line on UTOPIA,” *Deseret News* editorial, February 26, 2013, <http://www.deseretnews.com/article/765623377/Drawing-the-line.html?pg=all>.

⁹¹ Genelle Pugmire, “Residents Speak Out, Property Tax Defeated,” *Daily Herald*, November 6, 2013, http://www.heraldextra.com/news/local/central/orem/residents-speak-out-property-tax-defeated/article_b457ec1e-6334-50d8-b91b-b6e132887d52.html.

⁹² Joanna Stern, “Google Fiber, Fast Broadband/TV Service, Starts in Kansas City,” ABC News, July 26, 2012, <http://abcnews.go.com/Technology/google-fiber-googles-broadband-tv-service-unveiled-kansas/story?id=16863153>.

⁹³ Development Agreement between Google, Inc. and the City of Kansas City, Missouri, Final Execution Version, July 2012, <http://www.netcompetition.org/wp-content/uploads/Google-Kansas-Agreement1.pdf>.

⁹⁴ Brannan Platt, “Lessons learned from iProvo and Google Fiber,” *Daily Herald*, April 27, 2013, http://www.heraldextra.com/news/opinion/editorial/lessons-learned-from-iprovo-and-google-fiber/article_80f1393a-278f-59ce-88a3-7533d5ceb2ca.html.

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municipal fiber deployments for \$1.⁹⁵ While the sale gets Provo out of the business of providing Internet service to its residents, the taxpayers are still paying the bills for the prior debt.

There have been some attempts to restrict a city's ability to build municipal broadband, particularly in areas where ISPs already exist. In March 2013, the Georgia state legislature defeated a bill to ban city-owned broadband services.⁹⁶ The bill sponsor, Rep. Mark Hamilton (R-Cumming), discussed the wasteful spending occurring in these systems, while his colleague, Rep. Jay Powell (R-Camilla), countered that providing ISP broadband service in some areas of his district was very difficult.

A July 16, 2013, article in *Wired* described the difficulties ISPs have to overcome if they wish to build broadband infrastructure in local communities.⁹⁷ These include pole attachment fees and access to publicly owned rights-of-way, which can potentially double the cost of network construction.

Success stories in municipal broadband are few and far between. Chattanooga, Tennessee was the first city to offer speeds of up to one Gbps broadband service, which is 200 times faster than the average speed in the U.S. and 10 times faster than the 2020 goal set by the Obama administration, as well as "smart metering" services for businesses. This municipal broadband project was highlighted by Susan Crawford in her book, *Captive Audience: The Telecom Industry and Monopoly Power in the New Gilded Age*.⁹⁸ But even the supposed success stories have problems. Chattanooga needed a one-time infusion of \$110 million in federal taxpayer dollars in order to build its fiber system, and remains more than \$200 million in debt with repayment not expected until at least 2020.⁹⁹ Crawford highlighted the "success" of the Chattanooga project, and called upon America to move to a "utility model"

⁹⁵ Karl Bode, "Google Fiber Coming to Provo, Utah," Broadband DSL Reports, April 18, 2013, <http://www.dslreports.com/shownews/Google-Fiber-Coming-to-Provo-Utah-123915>.

⁹⁶ Chloe Albanesius, "Georgia House Defeats Bill to Ban Municipal Broadband Networks," *PC Magazine*, March 8, 2013, <http://www.pcmag.com/article2/0,2817,2416399,00.asp>.

⁹⁷ Berin Szoka, Matthew Starr, and Jon Henke, "Don't Blame Big Cable. It's Local Governments That Choke Broadband Competition," *Wired*, July 16, 2013, <http://www.wired.com/opinion/2013/07/we-need-to-stop-focusing-on-just-cable-companies-and-blame-local-government-for-dismal-broadband-competition/>.

⁹⁸ Susan Crawford, *Captive Audience: The Telecom Industry and Monopoly Power in the New Gilded Age*, Yale University Press, 2013, p. 256.

⁹⁹ Joseph D. Fuhr, Jr., PhD, "The Hidden Problems with Government-Owned Networks."

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for broadband services at taxpayer expense.¹⁰⁰

Rather than force municipalities into situations in which they feel they must build out GONs, state and federal officials must work cooperatively to remove any barriers or regulations that may be stifling the private sector from entering this field. It is through working together that local communities across the country will be able to ensure that their citizens will be provided with up-to-date telecommunications technology now and well into the future, without being burdened with the expense of building and maintaining a taxpayer-financed system.

At a time when local governments already face major financial challenges and are struggling to balance their budgets, using scarce resources to fund unnecessary GONs would be an irresponsible use of taxpayer dollars.

THE RURAL UTILITIES SERVICE HAS OUTLIVED ITS USEFULNESS

Pigs, corn, cows, wheat, and broadband. The common thread that ties these items together is the U.S. Department of Agriculture (USDA). It may seem incongruous that the USDA is involved in broadband investments across the country, particularly in light of the FCC's role in promoting broadband deployment as part of the NBP; yet, the USDA plays an active role through the RUS. The agency grew out of the remnants of the Rural Electrification Administration (REA), which was created in the 1930s. The primary goal of the REA was to promote rural electrification to farmers and residents in out-of-the-way communities where the cost of providing electricity was considered too expensive for local utilities to bear alone.

By 1981, 98.7 percent of Americans had electricity and 95 percent had telephone service. Rather than declaring victory and shutting down the REA, the RUS was born, and its mandate was expanded to provide loans and grants for activities including telephone service to underserved areas of the country. That mission was further expanded in 2002 to include broadband services to rural areas of the country unserved or underserved by existing service providers. This sounds much like the mission undertaken by the USE, but without a clear definition of what constitutes an underserved region of the country.

¹⁰⁰ Susan Crawford, "Captive Audience," p. 265.

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A September 2005 USDA Inspector General (IG) report noted:

RUS has not maintained its focus on rural communities without preexisting service. Although the language of the law specifies that these Federal loans and grants are for rural communities, RUS has codified and implemented a definition that cannot reliably distinguish between rural and suburban areas...Furthermore, we question whether the Government should be providing loans to competing rural providers when many small communities might be hard pressed to support even a single company. In these circumstances, RUS may be setting its own loans up to fail by encouraging competitive service; it may also be creating an uneven playing field for preexisting providers operating without Government assistance.¹⁰¹

In 2009, the USDA IG reported that RUS had not fully implemented corrective action in response to eight of the 14 recommendations from the 2005 report and continued to make loans to providers in areas with preexisting service, sometimes in close proximity to large urban areas.¹⁰²

During the open comment period in late 2011 and early 2012 for the restructuring of the USF program, the RUS raised concerns to the FCC about the effect reforms might have on its program.¹⁰³ Positioning itself as an incentive lender, rather than a lender of last resort, RUS suggested that the reorganization could have consequences affecting the qualification of applicants for its loan program, because the RUS includes USF grants, intercarrier compensation, end user revenues, and other funding sources when examining the financial stability and creditworthiness of its loan applicants. A July 9, 2012, article in *Fierce Telecom* reiterated this position when it reported on concerns of the Rural Broadband Alliance that, with caps

¹⁰¹ "Audit Report: Rural Utilities Service Broadband Grant and Loan Programs," U.S. Department of Agriculture Office of the Inspector General, Report No. 09601-4-Te, September 2005, <http://www.usda.gov/oig/webdocs/09601-04-TE.pdf>.

¹⁰² "Audit Report: Rural Utilities Service Broadband Loan and Loan Guarantee Programs," U.S. Department of Agriculture Office of the Inspector General, Report No. 09601-8-Te, March 2009, <http://www.usda.gov/oig/webdocs/09601-8-TE.pdf>.

¹⁰³ "Overview of Telecommunications and Broadband Loan and Grant Programs," Rural Utilities Service, U.S. Department of Agriculture, 2011, <http://apps.fcc.gov/ecfs/document/view?id=7021699801>.

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on payments to rural telecommunications providers, some loan recipients “might not be able to pay back their Rural Utilities Service (RUS) loans.”¹⁰⁴ This wasteful spending in federal broadband programs has the potential to allow double-dipping into multiple federal pots of money.¹⁰⁵

In its 2013 *Prime Cuts* report, CAGW highlighted wasteful spending at RUS and called for its elimination, which would save \$9.6 billion in one year and \$48.1 billion over five years.¹⁰⁶ While RUS provides funding for more than just broadband deployment, those projects are appallingly wasteful. In 2009, Buford Communications of LaGrange, Arkansas, (population 122) received \$667,120 to build a hybrid fiber coaxial network and a new community center. This equates to \$5,468 per resident of LaGrange.¹⁰⁷

The debate over the 2013 Farm Bill provided a golden opportunity to eliminate this outdated, wasteful agency. Some moderate RUS broadband reforms were included in the Senate version of the bill.

The RUS program picks winners and losers in already competitive marketplaces at the taxpayers’ expense. When government competes with the private sector, the taxpayers lose.

Failure to eliminate the antiquated RUS or prevent further expansion of the program results in taxpayers being stuck with this unnecessary, duplicative, and excessively expensive program into the foreseeable future. It is time to unplug the RUS.

STIMULATING EXCESSIVE BROADBAND

When he signed the stimulus bill, President Obama promised that the \$862 billion expenditure of taxpayer dollars would provide jobs and improve the economy.¹⁰⁸ Everyone has heard about the “shovel-ready jobs” and seen signs along the highway touting the use of ARRA funds for

¹⁰⁴ Sean Buckley, “Rural Broadband Alliance: USF Reform Will Do More Harm than Good,” *Fierce Telecom*, July 9, 2012, <http://www.fiercetelecom.com/story/rural-broadband-alliance-usf-reform-will-do-more-harm-good/2012-07-09>.

¹⁰⁵ Joan Engebretson, “Does USF Reform Put RUS Loans at Risk of Default?” *Telecompetitor*, August 3, 2011, <http://www.telecompetitor.com/does-usf-reform-put-rus-loans-at-risk-of-default/>.

¹⁰⁶ *Prime Cuts*, Citizens Against Government Waste, March 4, 2013, http://cagw.org/sites/default/files/users/user1/2013%20Prime%20Cuts%20Final_.pdf.

¹⁰⁷ *Ibid.*

¹⁰⁸ H.R. 1, American Recovery and Reinvestment Act of 2009, <http://www.gpo.gov/fdsys/pkg/BILLS-111hr1enr/pdf/BILLS-111hr1enr.pdf>.

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transportation improvements.

Other programs receiving stimulus dollars may not be as well-known. Two of them were designed to increase national broadband deployment. The RUS received \$2.5 billion in stimulus funding for its Broadband Initiatives Program (BIP), and the National Telecommunications and Information Agency (NTIA) received \$4.7 billion for its Broadband Technology Opportunity Program (BTOP). From FY 2002 to FY 2009, BIP's funding averaged \$13 million annually, and the NTIA's Public Safety Interoperable Communications Program, the predecessor to BTOP, received \$1 billion in its largest funding year, FY 2007.

An October 2009 GAO report pointed out that RUS and NTIA would "face the challenge of monitoring these projects with far fewer staff per project than were available for their legacy grant and loan programs," and that both programs "lack[ed] funding for oversight beyond fiscal year 2010."¹⁰⁹

On December 12, 2011, *The Daily Caller* reported that, as of the third quarter of 2011, projects funded through the BTOP program had a zero completion rate.¹¹⁰ Delays in implementing grant programs persisted; the recovery.gov website showed that in December 2012, of the 844 grant awards and contracts totaling \$4,456,797,171 issued by the NTIA, only 26 had been completed, 192 were less than 50 percent complete, 623 were more than 50 percent complete and three had not yet started.

According to the same website, the RUS had given out 227 loans, grants and contracts under the stimulus program, totaling \$1,151,246,819. From these awards, 15 projects were completed, 110 were less than 50 percent complete, 69 were more than 50 percent complete, and 33 had not yet started. All of the stimulus-funded broadband projects were given a deadline for completion of September 30, 2013.

Among the projects listed as incomplete were seven BTOP public safety network initiatives grantees that were ordered by NTIA in May 2012

¹⁰⁹ Mark L. Goldstein, Director, Physical Infrastructure Issues, "Recovery Act: Preliminary Observations on the Implementation of Broadband Program," United States Government Accountability Office, Testimony Before the Committee on Commerce, Science, and Transportation, U.S. Senate, October 27, 2009, <http://www.gao.gov/assets/130/123616.pdf>.

¹¹⁰ "\$4.7B Later, Feds Broadband Stimulus Program Has Zero Completions," *The Daily Caller*, December 12, 2011, <http://news.yahoo.com/4-7b-later-feds-broadband-stimulus-program-zero-201249780.html>.

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to stop their work.¹¹¹ The NTIA had concerns that the networks being developed under these grants would not be compatible with a new FirstNet national first responder network created by the Middle Class Tax Relief and Job Creation Act of 2012. On February 12, 2013, the FirstNet board members voted to allow these grant recipients to re-engage in building their public safety networks.¹¹²

According to the USDA, the RUS has obligated \$3.5 billion in funding for the BIP program for 320 projects in 44 states and territories.¹¹³ Despite the program's widespread funding reach, the money is not necessarily being spent wisely by grant recipients.

For example, the West Virginia Statewide Broadband Infrastructure Project received \$126 million to expand broadband access to schools, hospitals, libraries, and community centers in underserved or unserved areas.¹¹⁴ The state spent \$24 million of that money to purchase high capacity routers, each of which are capable of providing up to 1,000 connections at a time. These routers cost \$22,600 each, and were distributed to some larger institutions for which they were built, as well as to small community centers and libraries that have between two and six computer connections. According to a May 8, 2012, editorial in *The Charleston Gazette*, it was later determined that, because many West Virginia public facilities already have broadband routers, 366 of the devices worth \$8.27 million in taxpayer funding had not been installed and were sitting in warehouses collecting dust.¹¹⁵

On September 14, 2012, the GAO issued a report that reviewed the data provided by RUS and NTIA on broadband spending under the

¹¹¹ Frequently Asked Questions (FAQ): Broadband Technology Opportunities Program (BTOP) 700 MHz Public Safety Projects: Conforming Existing State and Local BTOP Projects with the Nationwide Public Safety Network Envisioned by the Middle Class Tax Relief and Job Creation Act, BroadbandUSA, National Telecommunication and Information Administration, U.S. Department of Commerce, May 2012, http://www2.ntia.doc.gov/files/btop_public_safety_700_mhz_faqs_05112012.pdf.

¹¹² Donny Jackson, "FirstNet Opens Door to BTOP Projects for Public-Safety LTE," Urgent Communications, February 12, 2013, <http://urgentcomm.com/ntiafirstnet/firstnet-approves-btop-projects-public-safety-lte>.

¹¹³ "Broadband Loan and Grant Program Recovery Goals," U.S. Department of Agriculture Rural Development, <http://www.rurdev.usda.gov/arra/broadband.html>.

¹¹⁴ "Government Waste is Alive and Well in West Virginia," *WasteWatcher*, Citizens Against Government Waste, June 2012, <http://cagw.org/media/wastewatcher/government-waste-alive-and-well-west-virginia>.

¹¹⁵ "Waste: \$22,600 Routers," *The Charleston Gazette*, May 8, 2012, <http://www.wvgazette.com/Opinion/Editorials/201205080082>.

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stimulus.¹¹⁶ The GAO found that while NTIA collected data on its broadband projects and was able to project a 76 percent completion rate, RUS was not so diligent. The RUS' failure to collect data in a timely manner led to its inability to provide a reliable measure for deployment of fiber miles and wireless access points. GAO was informed by RUS officials in June 2012 that they had begun tracking the number of fiber miles and wireless access points deployed by BIP projects, but were uncertain of the quality of the data collected.

In March 2013, the USDA IG reported that "RUS funded BIP projects that sometimes overlapped preexisting RUS-subsidized providers and approved 10 projects, totaling over \$91 million, even though the proposed projects would not be completed within the 3-year timeframe RUS established and published."¹¹⁷ The IG "also found that the agency could have implemented the program so that it would have focused more exclusively on rural residents who do not already have access to broadband."¹¹⁸

On February 7, 2013, KUSA-Channel 9 News in Denver, Colorado, reported on the administration of a BTOP grant in which money was used to build new fiber optic lines alongside those already in existence, directly competing with local telecommunications and broadband providers.¹¹⁹ According to the report, the grant recipient, Eagle-Net, received a BTOP award of \$100.6 million to bring high speed broadband services to all the schools, libraries and anchor institutions in underserved areas of Colorado.

The Eagle-Net project summary on recovery.gov states in part, "The project addresses the lack of affordable high-capacity broadband access at many rural and underserved school districts and educational institutions, many of which currently rely on outdated copper-based telecommunications facilities."¹²⁰ However, KUSA highlighted Eagle-Net's use of grant funding to build these lines to locations already being served by fiber optic

¹¹⁶ "Recovery Act: Broadband Programs Are Ongoing and Agencies' Efforts Would Benefit from Improved Data Quality," U.S. Government Accountability Office, GAO-12-937, September 14, 2012, <http://www.gao.gov/assets/650/648355.pdf>.

¹¹⁷ "American Recovery and Reinvestment Act of 2009—Broadband Initiatives Program—Pre-Approval Controls," U.S. Department of Agriculture Office of the Inspector General, Audit Report 09703-0001-32, March 2013, <http://www.usda.gov/oig/webdocs/09703-0001-32.pdf>.

¹¹⁸ Ibid.

¹¹⁹ "Stimulus Money Going to Waste in Colorado?" KUSA Channel 9 News, Denver, Colorado, February 7, 2013, <http://www.9news.com/video/2149863875001/50629281001/Stimulus-money-going-to-waste-in-Colorado->.

¹²⁰ Grants—Award Summary, Centennial Board of Cooperative Educational Services, Award number NT10BIX5570156, Recovery.gov, June 7, 2013, <http://www.recovery.gov/Transparency/RecoveryData/pages/RecipientProjectSummary508.aspx?AwardIdSur=114176&AwardType=Grant>.

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communication providers, such as a school in Agate, Colorado, which serves 11 students and has three different fiber optic lines to the school, including Eagle-Net.

On February 11, 2013, *The New York Times* reported that the earliest fiber optic connection turned on by Eagle-Net was in a Denver, Colorado, suburb which already had fiber optic service running at 300 Mbps.¹²¹ In September 2012, several members of the Colorado congressional delegation expressed their concern about Eagle-Net being involved in overbuild issues relating to their work in extending fiber optic lines to communities around the state.¹²² On December 7, 2012, NTIA suspended Eagle-Net's construction to resolve environmental issues that had been raised.¹²³ This suspension was lifted on April 29, 2013.¹²⁴

On February 20, 2013, the House Energy and Commerce Subcommittee on Communications and Technology held a hearing on the status of broadband spending under the stimulus. Witnesses stated that much of the stimulus broadband funding has produced overbuild leading to direct competition with incumbent private sector providers of broadband services.

While Connect North Georgia President Bruce Abraham lauded the economic benefits to northern Georgia stemming from the \$33 million broadband stimulus loan it received,¹²⁵ Vermont State President of FairPoint Communications Michael K. Smith described millions in federal dollars being used for overbuild projects throughout New England that “create a publicly financed competitor aimed at putting FairPoint and other private providers at

¹²¹ Edward Wyatt, “Waste Is Seen in Program to Give Internet Access to Rural U.S.,” *The New York Times*, February 11, 2013, <http://www.nytimes.com/2013/02/12/technology/waste-is-seen-in-program-to-give-internet-access-to-rural-us.html?pagewanted=1&r=4&ref=technology>.

¹²² “Letter to Lawrence E. Strickling, Assistant Secretary for Communications and Information, National Telecommunications & Information Agency,” Congressmen Cory Gardner (R-Co.), Scott Tipton (R-Co.), Mike Coffman (R-Co.), and Doug Lamborn (R-Co.), September 17, 2012, <http://gardner.house.gov/sites/gardner.house.gov/files/EAGLE%20Net%20Colorado%20Letter.pdf>.

¹²³ John Eggerton, “NTIA Suspends Eagle-Net Broadband Construction,” *Broadcasting and Cable*, December 7, 2012, http://www.broadcastingcable.com/article/490755-NTIA_Suspends_EAGLE_Net_Broadband_Construction.php.

¹²⁴ Grants—Award Summary, Eagle-Net Alliance, Award number NTIIBIX5570001, June 30, 2013, <http://www.recover.gov/Transparency/RecoveryData/Pages/RecipientProjectSummary508.aspx?AwardIDSUR=126231&2013Q2>.

¹²⁵ Bruce Abraham, “The North Georgia Network Brings Economic and Educational Progress to Rural North Georgia from Broadband Investment,” House Energy and Commerce Subcommittee on Communications and Technology, February 27, 2013, <http://docs.house.gov/meetings/IF/IF16/20130227/100331/HHRG-113-IF16-Wstate-AbrahamB-20130227.pdf>.

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a competitive disadvantage.”¹²⁶ In addition, Colorado Telecommunications Association Executive Vice President Peter Kirchhof raised concerns about the overbuild experienced in the Eastern Plains, South Central Colorado, and the Denver Metropolitan area by Eagle-Net Alliance using broadband stimulus funding.¹²⁷ Kirchhof called upon the committee to “strongly encourage Eagle-Net to negotiate in good faith with local providers to use existing local facilities and to avoid duplication of existing infrastructure. Eagle-Net should redeploy remaining funds to areas of the state (Western Slope) where it is badly needed.”¹²⁸

Increased broadband connectivity is important, and many private sector companies have already stepped up and improved service for both wireline and wireless customers through their own capital investments. However, when taxpayer funds are used through either grant or loan programs, there should be increased accountability for where and how tax dollars are being spent in order to avoid wasteful spending and overbuild of existing infrastructure. Agency program administrators in charge of evaluating and processing federal grant requests should maintain and monitor the spending and progress of each project from start to finish through databases with measurable metrics in order to ensure the best use of taxpayer funds.

¹²⁶ Michael K. Smith, “Testimony before the Subcommittee on Communications and Technology, ‘Is Broadband Stimulus Working?’” House Energy and Commerce Subcommittee on Communications and Technology, February 27, 2013, <https://docs.google.com/viewer?url=http%3A%2F%2Fdocs.house.gov%2Fmeetings%2FIF%2FIF16%2F20130227%2F100331%2FHHRG-113-IF16-Wstate-SmithM-20130227.pdf>.

¹²⁷ “Testimony of Mr. Peter Kirchhof, Executive Vice President, Colorado Telecommunications Association, Subcommittee on Communications and Technology,” House Energy and Commerce Subcommittee on Communications and Technology, February 27, 2013, <http://docs.house.gov/meetings/IF/IF16/20130227/100331/HHRG-113-IF16-Wstate-KirchhofP-20130227.pdf>.

¹²⁸ *Ibid.*

CHAPTER 3: OVER THE AIRWAVES

Broadcast and wireless communications technologies rely on the ability to transmit data through spectrum from one point to another. Since 1994, the FCC has been auctioning spectrum, which has benefitted both taxpayers and the communications industry. However, as mobile communications have expanded, the available spectrum has become increasingly stretched. To help resolve this situation, Congress ordered the FCC to come up with a plan for auctioning spectrum in both a reverse auction from broadcasters and a forward auction for the mobile industry.

Multichannel video programming distributors (MVPDs) through broadcast spectrum, including cable, satellite, and fiber optic, rely on a tiered system of packaging various shows together, from basic to premium. Within the tiered system, MVPDs have been able to deliver a wide variety of programming to viewers, enabling them to discover new networks and shows, and broaden their viewing experience.

Despite the success of this arrangement, there have been efforts to allow viewers to purchase individual programs under à la carte pricing, which would permit consumers to select their programming from a menu, and pay only for the individual channels they want to receive. However, much like choosing each individual component of a dinner as a side order, thereby increasing the ultimate cost of dining out, à la carte programming would increase costs to both MVPDs and consumers.

This chapter addresses spectrum and à la carte.

A PRIMER ON THE SPECTRUM AUCTIONS

It can't be seen, touched, smelled or tasted. Although invisible, spectrum is vital, valuable and limited in availability due to the growing use of mobile technology, digital goods, and mobile Internet.

Spectrum ranges from low at 40 megahertz (MHz) and below, used for such devices as garage door openers, to high at 2300 MHz and above, used on deep-space radio communications among other complex equipment. Different bands of spectrum have different properties. For example, wireless routers operate on a very high frequency, in gigahertz (GHz). This allows a

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lot of data to be packed into transmissions, but within a limited range. Most wireless phones operate on the 800 MHz band because the properties of this part of the spectrum allow transmissions from phones to travel long distances as well as through buildings. The 700 MHz band is also extremely valuable to telecommunications companies because it has similar properties to the 800 MHz band for wireless phones.

In the 1980s, the FCC gave portions of the spectrum away in a lottery system. Participants filled out complicated applications and handed over a \$155 fee for the chance to win the right to broadcast on spectrum. Those who won the spectrum would often resell their winnings for millions of dollars, which could have gone into federal coffers and been used to pay down the debt, lower taxes, or provide additional public services. Instead, it went to people with enough time and legal expertise to complete the complex lottery application.

In 1993, the FCC began to auction off parts of the spectrum instead of simply giving it away. The first auctions of the 800 MHz band brought the government \$15 billion in revenue. The result was a wellspring of innovative products and services such as text messaging and Caller ID.¹²⁹

The strain on available spectrum is evidenced by surveys conducted by the Pew Internet & American Life Project, which evaluated demographic information of wireless phone users and wireless Internet users. According to Pew's September 2012 report, 91 percent of U.S. adults own a cell phone.¹³⁰ Pew's Cell Phone Activities report issued in November 2012 indicated that 56 percent of cell phone owners use their phones to access the Internet.¹³¹

On January 7, 2013, *Wireless Week* reported that nearly 17.4 million mobile devices, including tablets, Smartphones, and cell phones were activated on Christmas Day 2012.¹³² In addition, nearly 1.76 billion applications were downloaded during the holiday week.

As the number of mobile devices and applications increase, so does

¹²⁹ Martha McKay, "Auctioning the Airwaves," <http://www.northjersey.com/page.php?qstr=eXJpcnk3Zjcx-N2Y3dnFIZUVFeXkyJmZnYmVsN2Y3dnFIZUVFeXk2OTY0MTE1>, (October 1, 2007).

¹³⁰ Hayley Tsukayama, "A Majority of All American Adults Own a Smartphone, Poll Says," *The Washington Post*, June 5, 2013, http://www.washingtonpost.com/business/technology/a-majority-of-all-american-adults-own-a-smartphone-poll-says/2013/06/05/49384608-cde2-11e2-8f6b-67f40e176f03_story.html?wpisrc=nl_tech_b.

¹³¹ Mauve Duggan, Lee Rainie, "Cell Phone Activities 2012, Additional Demographic Analysis," Pew Internet & American Life Project, November 25, 2012, <http://pewinternet.org/Reports/2012/Cell-Activites/Additional-Demographic-Analysis/Demographics.aspx>.

¹³² Andrew Berg, "Apple App Store Hits 40 Billion App Downloads," *Wireless Week*, January 7, 2013, <http://www.wirelessweek.com/news/2013/01/apple-app-store-hits-40-billion-app-downloads>.

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the need for additional spectrum. The June 2013 early release report on wireless substitution by the CDC indicated that the percentage of adults and children living in households with wireless only telephone service has been steadily increasing since 2003. The wireless-only population was 36.5 percent and overall household adoption of wireless reached 89 percent of the U.S. population as of the end of 2012.¹³³

A September 2012 Deloitte study found that between 1994 and 2000, spectrum auctions conducted by the FCC tripled the amount of available spectrum for commercial use, prompting a 250 percent increase in investments and a 300 percent increase in jobs in the mobile marketplace.¹³⁴ The study's authors made several recommendations they believe will help the U.S. maintain its lead in mobile broadband.

For example, policymakers should address potential spectrum deficits through spectrum auctions and look for new approaches to spectrum management. Policymakers should also resolve the uncertainties that currently reside in spectrum management; consider commercially available spectrum as an investment toward improving the economy and increasing jobs; combine traditional spectrum auctions with a viable secondary spectrum market; allocate large blocks of spectrum based on technology driven criteria; and, create a principles-based license renewal process, which would align license holders and spectrum policies with changing technology and economic realities.¹³⁵

In a September 16, 2012 op-ed, former FCC Chairman Julius Genachowski explained why additional spectrum is so critical to the economy. He estimated that nearly 1.6 million U.S. jobs had been created over the past five years due to innovations in mobile technology, including nearly 500,000 jobs in mobile apps.¹³⁶

In 2012, worldwide mobile phone sales to end users reached 1.75 billion units, with Smartphone sales reaching 207.7 million units during

¹³³ Stephen J. Blumberg, Ph.D., and Julian V. Luke, "Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, July—December 2012," Centers for Disease Control, Division of Health Interview Statistics, National Center for Health Statistics, June 2013, <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201306.pdf>.

¹³⁴ "Airwave Overload? Addressing Spectrum Strategy Issues that Jeopardize U.S. Mobile Broadband Leadership," Deloitte Development LLC., September 2012, http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/TMT_us_tmt/us_tmt_Spectrum_Thought_Leadership_September_092512.PDF.

¹³⁵ *Ibid.*

¹³⁶ Julius Genachowski, "The Need for Speed," *Tech Crunch*, September 16, 2012, http://techcrunch.com/2012/09/16/the-need-for-speed/?wpisrc=nl_tech.

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the fourth quarter of 2012, a 38.8 percent increase over the same period in 2011.¹³⁷ Worldwide sales of tablets are expected to reach 184.4 million units in 2013, more than 64 million above the number sold in 2012.¹³⁸ With this exponential growth in mobile computing, mobile data traffic has a five-year compounded annual growth rate of 75 percent, with data traffic expected to reach nearly 2 exabytes per month by 2016.¹³⁹

Spectrum also played a part in the 9/11 attacks. As the initial shock from 9/11 receded, the country began to wrestle with more than the questions about what happened and why. On a tactical level, the National Commission on Terrorist Attacks Upon the United States, also known as the 9/11 Commission, showed that the incredible bravery of the first responders to the World Trade Center attack in Manhattan contrasted with inadequate radio communications that made it difficult for personnel from different agencies to communicate and even hampered communications within departments. There were approximately 2,700 people who died that day, including 403 first responders: 343 firefighters and 60 police officers. The 9/11 Commission also found that communications interoperability was a problem during Hurricane Katrina.

The federal government's first attempt to coordinate interoperability of multiple federal initiatives was through Project SAFECOM. In October 2001, SAFECOM was developed to help achieve one of the five priorities in President Bush's Management Agenda to expand electronic government. The goal of SAFECOM, which is administered by DHS, is to "provide research, development, testing and evaluation, guidance, tools, and templates on communications-related issues to local, tribal, state, and Federal emergency response agencies working to improve emergency response through more effective and efficient interoperable wireless communications."¹⁴⁰

In April 2004, GAO said that SAFECOM's "overall objective of achieving communications interoperability among emergency response entities at all levels of government is a challenging task that will take many

¹³⁷ "Gartner Says Worldwide Mobile Phone Sales Declined 1.7 Percent in 2012," Gartner, February 13, 2013, <http://www.gartner.com/newsroom/id/2335616>.

¹³⁸ "Gartner Says Worldwide PC, Tablet and Mobile Phone Shipments to Grow 4.5 Percent in 2013 as Lower-Priced Devices Drive Growth," Gartner, October 21, 2013, <http://www.gartner.com/newsroom/id/2610015>.

¹³⁹ Bret Swanson, "Soft Power: Zero to 60 Billion in Four Years," Entropy Economics, December 5, 2012, <http://entropyeconomics.com/wp-content/uploads/2012/12/Soft-Power-Zero-to-60-Billion-Bret-Swanson-12.05.12.pdf>.

¹⁴⁰ SAFECOM, <http://www.safecomprogram.gov/SAFECOM/about/default.htm>.

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years to fully accomplish. Project SAFECOM, in its 2-year history, has made very limited progress in addressing this objective.”¹⁴¹ In case of a terrorist attack or a natural disaster, first responders from all levels and various jurisdictions need to be able to communicate with one another. However, according to the GAO report, “the wireless communications used today by many police officers, firefighters, emergency medical personnel and other public safety agencies do not provide such capability, which hinders their ability to respond.”¹⁴²

Through the SAFECOM program, DHS identified eight departments and one branch of the military that offered various federal grant programs for state and local first response organizations to fund public safety emergency communications: USDA, Commerce (DOC), Education, HHS, DHS, Interior, DOJ, Transportation, and the U.S. Navy. There are now 25 grant programs available for public safety communications for state and local entities from USDA, DOC, DOJ, DHS, and HHS.¹⁴³

In February 2012, GAO recommended that DHS work with partners to identify and communicate opportunities for joint procurement of public safety land mobile radio (LMR) devices. In addition, GAO reported that despite the investment of significant resources, including billions of dollars in federal grants, the existing LMR systems used by public safety and first responders did not provide data services, such as text and images, and the systems were limited by the channels on which they operated.¹⁴⁴ GAO also found that state and local governments were investing millions of dollars from their own funds to support public safety voice communications. While DHS addressed the problems brought out by GAO’s report, issues with interoperability of first responder systems remained.

In an effort to address the ongoing problems with interoperability, in February 2012, Congress included provisions in the Middle Class Tax Relief and Jobs Act (Jobs Act) to provide for a first responder public safety network (FirstNet). The law also authorized broadcaster spectrum incentive

¹⁴¹ “Project SAFECOM Key Cross-Agency Emergency Communications Effort Requires Stronger Collaboration,” U.S. Government Accountability Office (GAO-04-494), April 2004, p. 2.

¹⁴² *Ibid.*, p. 5.

¹⁴³ “FY 2013 Emergency Communications Financial Assistance Programs,” SAFECOM, Updated May 2013, http://www.safecomprogram.gov/ecg/fy2013_list_of_federal_grants_funding_emergency_comm_may2013.pdf.

¹⁴⁴ “Emergency Communications: Various Challenges Likely to Slow Implementation of a Public Safety Broadband Network,” U.S. Government Accountability Office, GAO-12-343, February 22, 2012, <http://www.gao.gov/assets/590/588795.pdf>.

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auctions to free up more spectrum for mobile use and provide funding from the proceeds to pay for FirstNet. The Jobs Act provides \$7 billion in funding to deploy the FirstNet network, as well as \$135 million for a new State and Local Implementation Grant Program.¹⁴⁵ It is expected that FirstNet will use long-term evolution wireless technology to provide public-safety grade coverage, capacity, connectivity, cybersecurity and resiliency to public safety first responders across the nation. In June 2013, the FirstNet board held its first organizational meetings.¹⁴⁶

The Jobs Act also preserves viewers' access to broadcast signals, prevents the FCC from involuntarily moving stations from the UHF to the VHF band, establishes an incentive auction for broadcast spectrum, reimburses stations for costs associated with relocating to new channels, and safeguards access to television station signals along the borders with Canada and Mexico.¹⁴⁷ Spectrum auctioned from border stations will need a separate set of rules to help manage the cross-border effects of repackaging.¹⁴⁸

On September 28, 2012, the FCC issued a proposed rule (FCC 12-118) for the spectrum auctions. The incentive process will include a voluntary reverse auction for broadcasters to sell spectrum back to the government to be repurposed; the repackaging of spectrum in order to reorganize the spectrum bands into contiguous bands; and the forward auction, under which wireless companies will have the opportunity to bid on the repackaged spectrum. While many smaller broadcasters may be willing to participate in the reverse auction, these licenses will be uneven in size and geographic location, which will require the FCC to repackage spectrum by moving the remaining broadcasters.¹⁴⁹ Repackaging must be closely monitored in order to make certain that it is performed in a fair and equitable manner.

The FCC sought comments on the proposal to further develop several issues key to the final make-up of the voluntary incentive spectrum

¹⁴⁵ "Public Safety," National Telecommunications & Information Administration, U.S. Department of Commerce, viewed October 22, 2013, <http://www.ntia.doc.gov/category/public-safety>.

¹⁴⁶ FirstNet Board Meeting Documents, National Telecommunications & Information Administration, June 4, 2013, <http://www.ntia.doc.gov/other-publication/2013/06042013-firstnet-board-meeting-documents>.

¹⁴⁷ "Promoting Spectrum Policies that Serve the Public," National Association of Broadcasters, viewed June 24, 2013, <http://www.nab.org/advocacy/issue.asp?id=2025&cissueid=1003>.

¹⁴⁸ John Eggerton, "FCC Circulates Spectrum Auctions Model," *Broadcasting and Cable*, September 14, 2012, http://www.broadcastingcable.com/article/489402-FCC_Circulates_Spectrum_Auctions_Model.php.

¹⁴⁹ Cecilia Kang, "FCC Moves Ahead with Airwaves Auction," *The Washington Post*, September 28, 2012, http://www.washingtonpost.com/blogs/post-tech/post/fcc-moves-ahead-with-airwaves-auction/2012/09/28/ed35132c-0988-11e2-858a-5311df86ab04_blog.html?wpisrc=nl_tech.

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auction process.¹⁵⁰ It was expected that the final report and order would be voted on sometime in 2013, with the spectrum auction process slated to begin in 2014.

Already, red flags have been raised over how best to keep the incentive auctions fair and equitable. In the DOJ's April 11, 2013 *Ex Parte* Submission, the agency proposed that the FCC adopt rules that prohibit or discourage larger mobile competitors from bidding on low-frequency spectrum in order to give smaller nationwide carriers the ability to purchase blocks of this spectrum.¹⁵¹ If the FCC uses DOJ's criteria for selecting participants in the auctions, it will do little to spread the amount of available spectrum across all carriers. Incentive auctions can increase the amount of spectrum available for mobile use, but the free market should be allowed to work by permitting all interested bidders to participate. The DOJ's recommendations have been reinforced by at least two competitors in the marketplace, T-Mobile and Sprint/Nextel, which agree that the FCC should limit the amount of spectrum larger companies such as AT&T and Verizon can purchase in the auctions.¹⁵²

The DOJ's submission is not the first time the federal government has tried to choose spectrum winners and losers. In 2003, Northpoint Technology sought \$100 million worth of spectrum directly from Congress to provide wireless and satellite services. The company attempted to subvert the auction process by mounting a large lobbying campaign for the inclusion of language in authorization and appropriations bills. The proposal was called "a \$100 million giveaway to an organization whose only asset was in knowing the right people in Washington."¹⁵³ Ultimately, the company failed to obtain the free spectrum allocation from Congress.

Smaller carrier bids do not always lead to increased competition in the marketplace, particularly if a less experienced company wins a large segment of spectrum in the auctions. In May 2000, Winstar Communications was

¹⁵⁰ "FCC Launches First-In-The-World Incentive Auction to Repurpose Broadcast Television Spectrum for Mobile Broadband; Auction Set to Unleash Wave of Economic & Innovation Opportunities for U.S.," Federal Communications Commission, September 28, 2012, http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0928/DOC-316527A1.pdf.

¹⁵¹ United States Department of Justice, "Ex Parte Submission of the United States Department of Justice," Docket No. 12-269 (filed April 11, 2013), <http://apps.fcc.gov/ecfs/document/view?id=7022269624>.

¹⁵² Mike Montgomery, "FCC Needs to be a Spectrum Hero," *Information Week*, July 2, 2013, <http://www.informationweek.com/telecom/regulation/fcc-needs-to-be-a-spectrum-hero/240157716>.

¹⁵³ Thomas A. Schatz, "Letter to the Senate Regarding S. 1585, the Fiscal 2004 Departments of Commerce, Justice, and State, and the Judiciary (CJS) Appropriations Act," Council for Citizens Against Government Waste, November 7, 2003.

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awarded 931 spectrum licenses in the FCC's closed 39 GHz auction #30 to provide wireless broadband services.¹⁵⁴ However, the company was unable to generate enough sales to cover its large capital infrastructure build-outs and filed for Chapter 11 bankruptcy protection in 2001.¹⁵⁵

While DOJ asserts that its recommendation is meant to provide a level playing field, it is in fact anti-competitive. The FCC would be in the position of determining winners and losers in the spectrum auctions before they even begin. If larger communications companies like Verizon and AT&T are not permitted to bid on prime low-frequency spectrum, they may not even participate in any part of the upcoming auctions.¹⁵⁶ Opening up spectrum auctions only to politically-connected or inexperienced telecommunications companies should be avoided. A truly free market competitive bidding process would require the FCC to reject the DOJ's recommendations.¹⁵⁷

In July 2012, the President's Council of Advisors on Science and Technology (PCAST) issued a report offering recommendations on spectrum management, including spectrum sharing between the federal government and private entities.¹⁵⁸ PCAST envisions a "spectrum super-highway" shared by both government and commercial entities, with the government having the ability to pre-empt the private sector for public safety, emergency medical rescue, or national security purposes. On September 12, 2012, the FCC announced it would begin implementing one of the PCAST recommendations to free up 100 MHz of spectrum in the 3.5 GHz band currently used for radar and allocating it for shared small cell use.¹⁵⁹

However, not every agency may be willing to share spectrum with the private sector. On September 13, 2012, the House Energy and

¹⁵⁴ Federal Communications Commission, "FCC 'Closed' 39 GHz Auction #30," May 8, 2000, <http://wireless.fcc.gov/auctions/30/charts/30cls2.pdf>.

¹⁵⁵ Melanie Austria Farmer, "Winstar Files for Bankruptcy, Sues Lucent," *CNET*, April 5, 2001, http://news.cnet.com/Winstar-files-for-bankruptcy-sues-Lucent/2100-1033_3-256005.html.

¹⁵⁶ Charlie Osborne, "Justice Dept: US Spectrum Sale Must Encourage Competition," *ZDNet*, April 15, 2013, <http://www.zdnet.com/justice-dept-us-spectrum-sale-must-encourage-competition-7000014001/>.

¹⁵⁷ Thomas Schatz, "Letter to Chairman Julius Genachowski regarding WT Docket No. 12-269, Broadcast Incentive Auction Comments," Citizens Against Government Waste, April 26, 2013, <http://cagw.org/legislative-affairs/letters-officials/wt-docket-no-12-269>.

¹⁵⁸ "Realizing the Full Potential of Government-Held Spectrum to Spur Economic Growth," Executive Office of the President, President's Council of Advisors on Science and Technology, July 2012, http://www.whitehouse.gov/sites/default/files/microsites/ostp/pcast_spectrum_report_final_july_20_2012.pdf.

¹⁵⁹ Jon Brodtkin, "FCC to Make Spectrum Sharing Reality, Whether Carriers Want It or Not," *Ars Technica*, September 14, 2012, <http://arstechnica.com/business/2012/09/fcc-to-make-spectrum-sharing-reality-whether-carriers-want-it-or-not/>.

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Commerce Subcommittee on Communications and Technology held a hearing on spectrum management. The GAO detailed existing barriers to sharing spectrum, including risk to an agency's mission, cost to both federal and non-federal users, use of spectrum frequencies by more than one agency or program, limited federal budgets prohibiting investments in new technology that would allow spectrum sharing, and a lengthy approval and enforcement process.¹⁶⁰ GAO also testified that, "While federal spectrum users often share spectrum among themselves, they may have little economic incentive to otherwise use spectrum efficiently, including sharing it with nonfederal users."¹⁶¹ Following the hearing, Committee members called for more detailed analysis of spectrum allocations before moving forward with the PCAST proposals.¹⁶²

On June 26, 2013, the Mercatus Center at George Mason University released a study that examined various proposals for reclaiming federal bandwidth, which would expand the amount of underused mobile bandwidth available for private sector use. According to the study, "reclaiming federal bandwidth has been painfully slow, and each year's delay results in billions of dollars of social cost and forgone auction revenue."¹⁶³

The study proposed creating an agency similar to the Defense Base Closure and Realignment Commission (BRAC) for spectrum reform, which would discover federal and state agencies using spectrum and compel them to vacate the bandwidth. Congress would create an agency similar to the General Services Administration to manage federal spectrum and lease or sell excess bandwidth, as well as liberalize federal allocations and price the bandwidths to provide an incentive to economize.¹⁶⁴

According to the NTIA, the U.S. government currently has exclusive rights to more than 638 MHz of spectrum and shares another 1,030 MHz

¹⁶⁰ Mark L. Goldstein, Testimony before the House Energy and Commerce Subcommittee on Communications and Technology, "Spectrum Management: Federal Government's Use of Spectrum and Preliminary Information on Spectrum Sharing," U.S. Government Accountability Office, GAO-12-1018T, September 13, 2012, <http://www.gao.gov/assets/650/648206.pdf>.

¹⁶¹ *Ibid.*

¹⁶² "Wireless Spectrum Sharing Plans Under Fire by Government Agencies," *RedOrbit*, September 15, 2012, <http://www.redorbit.com/news/technology/1112694553/fcc-wireless-spectrum-sharing-gao-government-091512/>.

¹⁶³ Brent Skorup, "Reclaiming Federal Spectrum: Proposals and Recommendations," Mercatus Center, George Mason University, June 26, 2013, <http://mercatus.org/publication/reclaiming-federal-spectrum-proposals-and-recommendations>.

¹⁶⁴ *Ibid.*

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with commercial users.¹⁶⁵ NTIA is currently developing a plan with the FCC to make a total of 500 MHz of federal and nonfederal spectrum available over the next 10 years. On January 3, 2013, Commissioner Pai discussed the need for the federal government to relinquish some of its unused spectrum for mobile use.¹⁶⁶ According to Pai, almost 60 percent of the spectrum best used for mobile devices is currently held by the federal government, and unavailable for private sector use.

Without additional spectrum for mobile communication and data, wireless networks will be unable to handle increased traffic. While the voluntary spectrum reverse auction is a first step toward providing more spectrums for mobile devices, the additional spectrum is currently held by the federal government.

It remains to be seen how successful the auctions will be in the coming year, or whether federal agencies will be willing to relinquish some of their spectrum for consumer use, share the spectrum with the private sector with preemption authority, or continue to hold tight rein on spectrum ownership.

TAKE À LA CARTE OFF THE MENU

Beginning in the 1950s and 60s respectively, cable and satellite television providers have been successful in delivering a diverse amount of programming to consumers for pennies per channel. This has been done through a pricing system that places every channel in a certain tier, from lower to higher (or basic to premium).

Today, this system is used by all MVPDs. Basic programming typically includes the major broadcast television stations and leased and/or public access networks, while premium packages offer hundreds of networks including sports and movies. This bundling system has provided consumers with many options at competitive prices, yet legislation has been introduced in Congress to eliminate the tiered pricing system and implementing an “à la carte” system.

Currently, MVPDs offer basic service that subscribers must purchase before they can add to the video programming. With the exception of

¹⁶⁵ Rebecca Blank, Acting Secretary, Lawrence E. Strickling, Assistant Secretary for Communications and Information, “Third Interim Progress Report on the Ten-Year Plan and Timetable,” National Telecommunications and Information Administration, U.S. Department of Commerce, November 2012, http://www.ntia.doc.gov/files/ntia/publications/third_interim_progress_report_final.pdf

¹⁶⁶ Ajit Pai, “Too Much Government, Too Little Spectrum,” *Red State*, January 3, 2013, <http://www.redstate.com/ajitpai/2013/01/03/too-much-government-too-little-spectrum/>.

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broadcast channels that elect “must carry” status, all other programming is based on negotiated terms between the cable provider and the entity that owns the channel or programming service.

À la carte pricing would force MVPDs to stop bundling their network programming and sell each individual network separately. This concept is tempting because a consumer would be charged for only the channels that he or she chooses to purchase and watch. However, the current tiered system provides the best service and programming for companies and consumers; à la carte would be detrimental to both. More importantly, if consumers are not making such demands, the government has no business trying to impose à la carte on MVPDs.

In November 2004, then-FCC Chairman Michael Powell issued a report that concluded that à la carte programming would likely increase the monthly cable bill for most households and reduce program diversity.¹⁶⁷ In testimony before the Senate Commerce Committee on November 29, 2005, then-FCC Chairman Kevin Martin said the 2004 report was based on “problematic assumptions and presented incorrect, and at times, biased analysis.”¹⁶⁸ In February 2006, the FCC released a report which advocated à la carte, and declared that companies could sell the system in an economically feasible manner.

While the FCC did not implement à la carte pricing during Martin’s tenure as Chairman, and has not done so to date, efforts have been made in Congress to mandate à la carte. Legislators supporting this effort have pointed to the increase in MVPD prices as the main driver for moving to à la carte.¹⁶⁹

The amount of time and energy required to implement à la carte would be burdensome. À la carte would require an MVPD to provide customers with a checklist to indicate what channels they choose to purchase. Regardless of whether this is done by phone, Internet, or mailings, it would require time to compute. It would also cause delays when the à la carte system is first implemented, as the MVPDs struggle to move customers onto their new service plans.

¹⁶⁷ “The FCC’s ‘à la carte’ Reports,” Library of Congress, Congressional Research Service, Series RL33338, March 2006, <http://www.policyarchive.org/handle/10207/2789>.

¹⁶⁸ Ted Hearn, “Martin: New FCC Study Favors à la carte,” *Multichannel News*, November 29, 2005, <http://www.multichannel.com/index.asp?layout=article&articleid=CA6287703&display=Breaking+News>.

¹⁶⁹ “Here’s John McCain’s Cable-Destroying Legislation,” *Business Insider*, May 9, 2013, <http://www.businessinsider.com/john-mccains-cable-bill-2013-5#ixzz2Z8Pw2rZ>.

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In 2013, GAO found that the average price for expanded basic service in 2011 was \$57.46, an increase of more than 33 percent since 2005, exceeding the 15 percent increase in the Consumer Price Index.¹⁷⁰ However, GAO also found that competition in the market has increased, providing consumers with a number of new video distribution choices including video service through telephone companies, such as Verizon's FiOS service, as well as increased online video distribution using various business models such as free and subscription-based services.

An à la carte pricing system would also require every home to install a set top box. This addressable converter box would ensure that all channels not chosen by the consumer be scrambled and all channels chosen by the consumer be unscrambled. Again, there would be a delay as MVPDs attempted to distribute the new boxes to all of their customers. There would most likely be a number of inconveniences, such as customers receiving channels they did not order and not getting channels they ordered.

In 2002, the FCC estimated that the cost of renting a set top box would be \$4.39 per month.¹⁷¹ In 2013, the rental price for a high definition set-top box is on average around \$10 per month for each television connected.¹⁷² Even with à la carte pricing, the cost of set-top boxes is not expected to decrease. The biggest inconvenience would be the immediate need to modify or replace cable-ready televisions. Under an à la carte pricing system, all televisions would be required to have an addressable converter box, making it impossible for cable-ready televisions to get access by simply plugging in a coaxial cable from a wall into the back of a television.

À la carte pricing would also drastically change television advertising. In 2004, GAO reported that, "Adopting an à la carte approach could alter the current business model of the cable network industry wherein cable networks obtain roughly half of their overall revenues from advertising. A move to an à la carte approach could result in reduced advertising revenues and might result in higher per-channel rates."¹⁷³ Advertising companies sell

¹⁷⁰ "Video Marketplace: Competition is Evolving, and Government Reporting Should Be Reevaluated," U.S. Government Accountability Office, GAO-13-576, June 25, 2013, <http://www.gao.gov/products/GAO-13-576>.

¹⁷¹ U.S. General Accounting Office (GAO-04-262T), "Telecommunications: Subscriber Rates and Competition in the Cable Television Industry," March 25, 2004, p. 14.

¹⁷² Melanie Pinola, "Cable Companies Can Now Force You to Rent Set-Top Boxes. Here Are Your Alternatives," Lifehacker, April 12, 2013, <http://lifehacker.com/5994508/cable-companies-can-now-force-you-to-rent-set-top-boxes-here-are-your-alternatives>.

¹⁷³ GAO-04-262T, p. 3.

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their commercial advertisements hoping to reach a diverse audience, which would no longer be possible under an à la carte pricing system.

For example, a company might run an ad on ESPN hoping to reach primarily sports fans, along with others who might have a casual interest in the channel or those who might be surfing through channels. Reaching such a broad audience would be nearly impossible through à la carte because channels would have reduced take-rates (the percentage of viewers subscribing to one particular channel).

Lower take-rates ultimately mean more cost for consumers. Channels that are featured on basic packages now have a take-rate of 100 percent, but if à la carte pricing is implemented, this will be reduced as not every subscriber will be willing to subscribe to all those channels. Advertisers will be unwilling to pay current prices for their advertising to get on the air if it reaches a smaller audience. With reduced funding from advertisements, in order to maintain a profitable business, MVPDs will have to obtain a larger portion of their funding from consumers by increasing the price of channel subscriptions. A March 29, 2004 report from Bear Stearns projected that with a 25 percent take-rate, for example, a monthly subscription to the Disney Channel would increase from \$1.48 to \$5.90, MTV would jump from \$0.43 to \$2.32, and a subscription to ESPN would skyrocket from \$3.78 to \$15.82.¹⁷⁴

On May 9, 2013, S. 912, the Television Consumer Freedom Act (TCFA), was introduced in the Senate. This legislation would link the availability of the compulsory copyright license to the voluntary offering of à la carte service by the MVPD. If the MVPD does not offer à la carte programming, it cannot rely on compulsory licensing to allow it to carry broadcast stations. This would force the MVPD to rely solely on negotiated retransmission contracts with broadcasters in order to carry the broadcaster's programming. S. 912 would also sanction any broadcaster who "downgrades" the signals provided by taking away the broadcaster's spectrum allocation and turning the spectrum over to the FCC to be auctioned off. Additionally, the bill prohibits sports blackouts when the event takes place in an arena or venue which received any federal, state or local taxpayer subsidies.

This seemingly well-intentioned legislation would backfire on

¹⁷⁴ Raymond Lee Katz, Katie Manglis, and Gloria Radeff, "à La Smart?" Bear Stearns, March 29, 2004, p. 4, <http://www.ncta.com/DocumentBinary.aspx?id=94>.

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consumers by raising prices and reducing choices.¹⁷⁵ While consumers would not be required to buy subscriptions to channels they did not want to view, à la carte would ultimately impair consumer choice.

Ironically, groups such as the Parents Television Council, which endorsed à la carte, also advocate channels and programming that would be compromised if such a system were to be instituted. The ratings of family-oriented programming such as *Cedar Cove* on the Hallmark Channel, *Full House* re-runs on Nickelodeon, *Bubble Guppies* on Nick Junior, and *Jane and the Dragon* on Qubo could diminish, as they may not be popular enough to thrive under an à la carte system. It would be difficult for smaller independent and niche channels to stay afloat financially with an à la carte pricing structure. While large, popular channels such as CNN or ESPN could still be viable in this new business climate, channels like the Food Network or Lifetime could go off the air if they did not get enough subscribers to make them profitable.

In October 2003, GAO reported that, “Subscribers place value in having the opportunity to occasionally watch networks they typically do not watch.”¹⁷⁶ No longer would a consumer be able to channel surf through all the channels a tiered pricing system provides, therefore, losing the chance to discover a new program or channel that he or she might enjoy. Networks would have little incentive to create new and innovative programming because they know the only people that will have access to such programs have already subscribed, and the opportunity to win new subscribers would be extremely limited.

While the sales pitch for à la carte programming is appealing, it is a costly and losing proposition. Consumers would have more trouble getting their programming; the programming they get would be more limited than it is in the current tiered pricing system; and, for many, it would cost more. Coupled with a disincentive for networks to create quality programming, à la carte pricing would be much less desirable for all parties, especially consumers.

MVPDs have thrived and consumers have benefited from the tiered package system. À la carte should not be on the menu for the future of television.

¹⁷⁵ Matthew Yglesias, “À La Carte Won’t Fix Cable,” *Slate*, May 14, 2013, http://www.slate.com/articles/business/moneybox/2013/05/mccain_s_la_carte_cable_bill_is_bad_deal_for_consumers.html.

¹⁷⁶ U.S. Government Accountability Office (GAO-04-8), “Telecommunications: Issues Related to Competition and Subscriber Rates in the Cable Television Industry,” October 2003, p. 37.

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CHAPTER 4: WHO'S IN CHARGE?

Since its inception in the late 1960s,¹⁷⁷ and following its release for use by the Defense Advanced Research Projects Agency (DARPA) to the general public in 1992, the Internet has flourished and expanded around the world.

Formally defined in 1995 as the global information system,¹⁷⁸ the Internet has been governed by a multi-stakeholder approach, meaning that governments, users, academics, and many others provide input into the decisions that create global use standards. This hands-off approach to Internet governance has led to increased communications, the free flow of information, and all the other associated benefits of an open and lightly regulated Internet.

However, attempts are being made to change the flow of information and Internet governance both in the U.S. and abroad, and to increase regulations over ISPs.

THE UNITED NATIONS AND INTERNET GOVERNANCE

Efforts are currently underway to expand the jurisdiction of the UN's International Telecommunications Union (ITU) through a new international treaty that would give that body regulatory authority over the Internet. On December 3-14, 2012, 1,950 delegates from more than 160 nations met in Dubai, United Arab Emirates, at the World Conference on International Telecommunications (WCIT) to discuss the ITU, the International Telecommunications Regulations (ITRs) and other matters.¹⁷⁹ The provisions of the ITRs serve as a binding global treaty that facilitates international

¹⁷⁷ Barry M. Leiner, Vinton G. Cerf, David D. Clark, Robert E. Kahn, Leonard Kleinrock, Daniel C. Lynch, Jon Postel, Dr. Lawrence G. Roberts, and Stephen Wolff, "Brief History of the Internet," The Internet Society, 2013, <http://www.internetsociety.org/internet/what-internet/history-internet/brief-history-internet>.

¹⁷⁸ Ibid.

¹⁷⁹ "Global Technology Community Gathers for World Conference on International Telecommunications," International Telecommunications Union, December 3, 2012, http://www.itu.int/net/pressoffice/press_releases/2012/89.aspx#.UhuAnhvrzlg.

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interconnection and interoperability of communication services.

As a precursor to WCIT, and to address concerns raised by the Internet community and countries like the U.S. which believe the multi-stakeholder approach to Internet governance works, ITU Secretary General Hamadoun Touré assured member states that the treaty negotiations would not include the Internet. A new treaty would be adopted only by “unanimous consent” of the delegates and no votes would be taken during WCIT.¹⁸⁰ However, as the meeting progressed, a vote occurred that provided the ITU with authority over the economics and content of key aspects of the Internet, undermining the multi-stakeholder model of Internet governance.¹⁸¹

Led by China and Russia, 89 countries voted to add a new provision to the ITRs to give the ITU authority over the Internet by instructing the Secretary General to take the necessary steps for the ITU to engage in an active and constructive role in the development of broadband.¹⁸² The U.S. joined 54 other nations, including India, Japan, Kenya, and the United Kingdom in refusing to sign the new treaty provision, instead expressing support for the multi-stakeholder governance model. Some countries that signed the document were lured by the potential to raise revenues through tariffs on the Internet which would fund their own communications and non-communications objectives. Other supportive countries, many of which already censor or limit content, would like more control over the flow of information within their borders.¹⁸³

On February 5, 2013, the House Energy and Commerce Subcommittee on Communications and Technology; the House Foreign Affairs Subcommittee on Terrorism, Nonproliferation, and Trade; and, the Foreign Affairs Subcommittee on Africa, Global Health, Global Human Rights, and International Organizations held a joint hearing to review the

¹⁸⁰ Larry Downes, “Russia Demands Broad UN role in Net Governance, Leak Reveals,” *CNet*, November 16, 2012, http://news.cnet.com/8301-13578_3-57551442-38/russia-demands-broad-un-role-in-net-governance-leak-reveals/.

¹⁸¹ Wayne Rash, “WCIT Treaty Talks End in Dubai with Walkout of U.S., Allies,” *eWeek*, December 15, 2012, <http://www.eweek.com/cloud/wcit-treaty-talks-end-in-dubai-with-walkout-of-us-allies/>.

¹⁸² “Final Acts, World Conference on International Telecommunications,” International Telecommunications Union, Dubai, December 3-14, 2012, <http://www.itu.int/en/wcit-12/Documents/final-acts-wcit-12.pdf>.

¹⁸³ Violet Blue, “WCIT-12 Leak Shows Russia, China, Others Seek to Define ‘Government-Controlled Internet,’” *ZDNet*, December 8, 2012, <http://www.zdnet.com/wcit-12-leak-shows-russia-china-others-seek-to-define-government-controlled-internet-7000008509/>.

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outcome of the WCIT conference.¹⁸⁴ The hearing included a discussion of draft legislation that later became H.R. 1580, which reaffirms America's commitment to a global Internet free from government control and calls for the preservation and advancement of the successful multi-stakeholder model under which the Internet is currently governed. On May 14, 2013, the House of Representatives approved H.R. 1580 by a vote of 413-0.

Eli Dourado, a research fellow at the Mercatus Center, offered five reasons why government entities such as the United Nations should refrain from controlling the Internet: concerns about censorship; the lack of technical expertise within government bureaucracies; the stifling of innovation; a unified global Internet that would charge not only content seekers for access, but also content providers for offering information; and the current success of the multi-stakeholder approach.¹⁸⁵

The U.S. must remain vigilant in any future ITU proceedings, and maintain its place at the forefront of promoting a free and open Internet. The changes to the ITRs agreed to by ITU members would radically alter Internet governance and adversely affect every aspect of the IT industry around the world.

THE STATUS OF NET NEUTRALITY

Network neutrality, a.k.a. net neutrality, is generally defined as a system that allows information on the Internet to move freely without regard to content, destination or source. In other words, every ISP would provide everything it makes available on the Internet without making any determination that one type of content is either more important or more expensive than any other content. Net neutrality has been a hot topic of debate among those interested in telecommunications policy since the Internet was opened up for public use in 1992.

The notion of equality on the Internet may sound reasonable, but net neutrality is instead an attack on private-sector business models. Proponents of net neutrality want the online world to be forced “open” at

¹⁸⁴ Grant Gross, “After WCIT, US Lawmakers Look for Ways to Advance Internet Freedom,” IDG News Service, *IT World*, February 5, 2013, <http://www.itworld.com/internet/340504/after-wcit-us-lawmakers-look-ways-advance-internet-freedom>.

¹⁸⁵ Eli Dourado, “Keep Your Government Hands Off the Internet,” *U.S. News and World Report*, May 13, 2013, <http://www.usnews.com/opinion/blogs/economic-intelligence/2013/05/13/5-reasons-to-keep-governments-out-of-internet-governance>.

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the expense of successful Internet providers, but fail to recognize the many tradeoffs to “openness,” such as increased spam, fewer privacy controls, slower service, and, perhaps most importantly, decreased incentives for investment and innovation.

Section 706 of the Telecommunications Act of 1996 included principles to encourage the deployment of telecommunications capability to all Americans, including the ability of an individual to access lawful Internet content, run applications, use desired services, and connect legal devices to the network; and promoting competition among network, application and service, and content providers.¹⁸⁶ Because these were guiding principles and not regulations, the Internet was able to continue in an open environment, free of government intervention, which permitted providers to grow and expand their offerings.

Several agencies of the federal government play a role in monitoring and regulating various aspects of the Internet, including the FCC, the Federal Trade Commission (FTC), and the DOJ. On September 6, 2007, the DOJ filed comments to the FCC on net neutrality, stating “Whether or not the same type of differentiated products and services will develop on the Internet should be determined by market forces, not regulatory intervention.” Furthermore, DOJ made it clear that it would continue to oversee and enforce any anticompetitive conduct to ensure a competitive marketplace.¹⁸⁷

However, the FCC ignored DOJ’s recommendations on regulating the Internet. Searching for a problem to make the case for net neutrality, the FCC determined that an ISP’s past attempt to combat network congestion by managing peer-to-peer traffic required the agency’s intervention.¹⁸⁸ In this instance, when the provider noticed that network demand by heavy users was impeding the ability of other subscribers to use its broadband service, the company’s engineers devised a way to intermittently hold traffic from peer-to-peer applications, preventing the vast majority of subscribers from suffering performance issues. In April 2010, the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit Court) vacated the FCC’s

¹⁸⁶ “S. 652, Enrolled, The Telecommunications Act of 1996, Section 706,” Federal Communications Commission, <http://transition.fcc.gov/Reports/tcom1996.pdf>.

¹⁸⁷ United States Department of Justice, “Department of Justice Comments On ‘Network Neutrality’ in Federal Communications Commission Proceeding,” September 6, 2007, http://www.justice.gov/att/public/press_releases/2007/225782.htm.

¹⁸⁸ Erika Morphy, “The FCC vs. Comcast: Who’s Got the Most Marbles?” *E-Commerce Times*, August 22, 2008, <http://www.ecommercetimes.com/story/64253.html>.

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attempt to sanction the provider.¹⁸⁹ Ultimately, the provider and the peer-to-peer community resolved the issue by developing alternative solutions that advanced traffic management techniques to everyone's benefit.¹⁹⁰ This agreement is a prime example of how conflicts on the Internet should be resolved.

Following its court defeat, the FCC began the process of promulgating new rules for net neutrality. First, the FCC determined that it could act without congressional authority and take control of the Internet by determining that broadband Internet access services should be considered a common carrier. Using Title II of the 1996 Communications Act, the FCC tried broadening its authority to regulate the Internet by deeming it the same as old-fashioned wireline telephone services. When Congress objected to this determination, the FCC backed away.

On December 21, 2010, the FCC voted along party lines to institute net neutrality rules in the Report and Order on Preserving the Open Internet without including any reference to Title II.¹⁹¹ The Democratic commissioners voted in favor and the Republican commissioners voted against the Report and Order.

The Report and Order included three rules for an open Internet: transparency, no blocking, and no unreasonable discrimination. According to the FCC,

The first rule requires transparency by broadband providers, who must disclose information regarding their network management practices, performance, and commercial terms of their broadband services so that their subscribers can make informed choices regarding those services, and so that edge providers can continue to develop content, applications, and services. The second rule provides that fixed broadband providers (such as DSL, cable modem,

¹⁸⁹ Comcast Corporation, Petitioner v. Federal Communications Commission and United States of America, Respondents, NBC Universal, et al., Intervenors, On Petition for Review of an Order of the Federal Communications Commission, Argued January 8, 2010, Decided April 6, 2010, United States Court of Appeals for the District of Columbia Circuit, [http://www.cadc.uscourts.gov/internet/opinions.nsf/EA10373FA9C20DEA85257807005BD63F/\\$file/08-1291-1238302.pdf](http://www.cadc.uscourts.gov/internet/opinions.nsf/EA10373FA9C20DEA85257807005BD63F/$file/08-1291-1238302.pdf).

¹⁹⁰ Cecilia Kang, "Court Rules for Comcast over FCC in 'Net Neutrality' Case," *The Washington Post*, April 7, 2010, <http://www.washingtonpost.com/wp-dyn/content/article/2010/04/06/AR2010040600742.html>.

¹⁹¹ Preserving the Open Internet; Broadband Industry Practices, Report and Order, 25 FCC red 17905, 17943, Section 66 (2010) [hereinafter "Open Internet Order"], Federal Communications Commission, December 21, 2010, <http://www.fcc.gov/openinternet#rules>.

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or fixed wireless providers) may not block lawful content, applications, services or non-harmful devices. Mobile broadband providers may not block lawful websites, or applications that compete with their voice or video telephony services. The third rule establishes that fixed broadband providers may not unreasonably discriminate in transmitting lawful network traffic over a consumer's broadband Internet access service. The Open Internet Rule and Order provides that consumers and edge providers may file a complaint regarding any perceived violation of the open Internet rules pursuant to Section 1.41 of the Commission's Rules.¹⁹²

While on the surface, these rules may sound reasonable, they only apply to the provision of broadband Internet access service. The FCC specifically exempted coffee shops, bookstores, airlines, and other entities offering Internet cafes from the Report and Order in order to allow them to better manage the network traffic on their premises. Yet, it bars ISPs from performing similar activities in order to provide improved service to their customers. The Report and Order is written in an open-ended manner, which could permit further restrictions over ISPs, including mobile broadband providers and wireless providers who are currently exempt, leading to uncertainty in the marketplace. The Report and Order also places pricing restrictions on ISPs by not allowing them to charge different prices to different types of users.

On September 30, 2011, Verizon Communications filed an appeal in the D.C. Circuit Court against the Report and Order. Verizon Senior Vice President and Deputy General Counsel Michael E. Glover stated, "Verizon is fully committed to an open Internet. We are deeply concerned by the FCC's assertion of broad authority to impose potentially sweeping and unneeded regulations on broadband networks and services and on the Internet itself. We believe this assertion of authority is inconsistent with the statute and will create uncertainty for the communications industry, innovators, investors and consumers."¹⁹³ On November 20, 2011, the Open Internet Order became final.

¹⁹² Ibid.

¹⁹³ Chloe Albanesius, "Verizon Appeals FCC Net Neutrality Suit," *PC Magazine*, September 30, 2011, <http://www.pcmag.com/article2/0,2817,2393956,00.asp>.

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On April 19, 2013, in a speech at George Mason University School of Law in Arlington, Virginia, Federal Trade Commissioner Joshua D. Wright provided reasons why he believed that the FTC's antitrust mandate is particularly well-suited to addressing the concerns that have been raised over the years in the debate surrounding net neutrality.¹⁹⁴ He said that the FCC's Open Internet order does a disservice to consumers by "employing an overly rigid, one size fits all, categorical ban on broadband providers' ability to enter into vertical contractual arrangements that are potentially—if not probably—efficiency enhancing." He further expounded on the FTC's experience in other areas that touch on net neutrality, including vertical arrangements similar to those falling under the net neutrality umbrella, and the FTC's consumer welfare mission.

The D.C. Circuit Court began hearing oral arguments in the case against the FCC's Open Internet Order on September 9, 2013, and on January 14, 2014, the court issued its ruling on the case.¹⁹⁵ The court's decision provides clarity to the scope of the FCC's authority over the Internet. While affirming that the FCC has some authority to regulate broadband services under certain sections of the Communications Act, the court found that the FCC overstepped its bounds when it subjected Internet providers to treatment as common carriers under the Open Internet Order through the anti-discrimination and anti-blocking rules on Internet services.

Prior to the Open Internet Order, the FCC had classified Internet access as an information service as opposed to a telecommunications service, the latter of which is regulated under the common carrier provisions of the Communications Act of 1934. The court affirmed that broadband is not subject to common carrier rules, and remanded the case back to the FCC for further proceedings. As FCC Commissioner Ajit Pai stated in response to the court's ruling, "Unless Congress acts, we should stay our hand and refrain from any further attempt to micromanage how broadband providers run their networks. We should focus on removing regulatory barriers to broadband deployment, not imposing unnecessary rules that chill

¹⁹⁴ Joshua D. Wright, "Broadband Policy & Consumer Welfare: The Case for an Antitrust Approach to Net Neutrality Issues," Speech at George Mason University School of Law, Arlington, Virginia, Federal Trade Commission, April 19, 2013, http://www.ftc.gov/speeches/wright/130423wright_nn_posting_final.pdf.

¹⁹⁵ *Verizon, Appellant v. Federal Communications Commission, Appellee, Independent Telephone & Telecommunications Alliance, et al., Intervenor*, Consolidated with 11-1356, On Petition for Review and Notice of Appeal of an Order of the Federal Communications Commission, United States Court of Appeals for the District of Columbia Circuit, decided January 14, 2014, [http://www.cadc.uscourts.gov/internet/opinions.nsf/3AF8B4D938CDEEA685257C6000532062/\\$file/11-1355-1474943.pdf](http://www.cadc.uscourts.gov/internet/opinions.nsf/3AF8B4D938CDEEA685257C6000532062/$file/11-1355-1474943.pdf).

infrastructure investment.”¹⁹⁶

In spite of Commissioner Pai’s cautionary comments, other commissioners remain dedicated to placing regulatory burdens over the Internet. FCC Chairman Tom Wheeler noted that the FCC “will consider all available options, including those for appeal, to ensure that these networks on which the Internet depends continue to provide a free and open platform for innovation and expression, and operate in the interest of all Americans.”¹⁹⁷

In addition to the actions cited in Chairman Wheeler’s remarks, there is the potential for legislation to be introduced to allow the FCC to redefine the Internet as a Title II telecommunications service regulated by common carrier rules under the Communications Act. If enacted, the bill would result in even stricter controls over Internet providers than would have been imposed by the Open Internet Order. All of these efforts should be opposed by those who support a truly free and open Internet.

Finally, consumers will continue to have all of the access to the World Wide Web that they need regardless of any future regulatory or legislative activity. AT&T, Comcast, Time Warner Cable, and Verizon all responded to the court’s decision restating their commitment to continuing to maintain an open Internet.¹⁹⁸

¹⁹⁶ “Statement of Commissioner Ajit Pai on D.C. Circuit’s Decision Striking Down Net Neutrality Rules,” Federal Communications Commission, January 14, 2014, http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0114/DOC-325111A1.pdf.

¹⁹⁷ “Statement by FCC Chairman Tom Wheeler Regarding DC Circuit Opinion on the FCC’s Open Internet Rules,” Federal Communications Commission, January 14, 2014, http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0114/DOC-325106A1.pdf.

¹⁹⁸ Zach Epstein, “Net Neutrality’s Death Won’t Sting, ISPs argue,” Fox News, January 15, 2014, <http://www.foxnews.com/tech/2014/01/15/net-neutralitys-death-wont-sting-isps-argue/?intcmp=obnetwork>.

**CHAPTER 5:
UPDATING TELECOMMUNICATIONS LAW AND
REMOVING REGULATORY BURDENS**

The telecommunications industry generates approximately \$347 billion annually or 2.4 percent of the GDP as measured by output, labor, input, investment and international trade; while providing 2 million direct and indirect jobs.¹⁹⁹ This success has occurred despite the fact that the FCC imposes nearly \$142 billion in annual regulatory costs on the communications industry, which is the third largest regulatory impact in the federal government behind the Environmental Protection Agency (\$353 billion) and the Department of Health and Human Services (\$184.8 billion).²⁰⁰ Compliance with wireless spectrum regulations and broadband regulations constitute the two largest costs. However, the total compliance cost could be higher, as gathering data on the more than 25,000 specific regulatory restrictions within the FCC’s jurisdiction is difficult due to a lack of transparency.²⁰¹

On June 12, 2013, former FCC Commissioner Robert McDowell delivered an address in Rome entitled *The Siren Call of “Please Regulate My Rival”: A Recipe for Regulatory Failure*.²⁰² Commissioner McDowell stated in his speech, “repeating the same government actions of regulating more and spending more of the public’s money will only produce the same results: shrinking economies and growing debt. It is time to reverse these trends, but doing so will require tremendous courage.”²⁰³ The communications industry has been subject to so much excessive regulation for so long that individual

¹⁹⁹ OECD (2013), “STAN Industry Rev. 4”, STAN: OECD Structural Analysis Statistics (database). Doi: 10.1787/3151-00649-en (Accessed on 15 October 2013), http://www.oecd-ilibrary.org/industry-and-services/data/stan-oecd-structural-analysis-statistics/stan-industry-rev-4_data-00649-en;jsessionid=h5cd4n3j3vr9.x-oecd-live-01?isPartOf=/content/datacollection/stan-data-en, and “Industry Data,” National Cable and Telecommunications Association, viewed September 16, 2013, <https://www.ncta.com/industry-data>.

²⁰⁰ Ryan Young, “Regulatory Report Card: FCC,” Competitive Enterprise Institute, February 21, 2013, <http://cei.org/sites/default/files/Ryan%20Young%20-%20FCC%20Regulatory%20Report%20Card.pdf>.

²⁰¹ Ibid.

²⁰² Robert M. McDowell, “The Siren Call of ‘Please Regulate My Rival’: A Recipe for Regulatory Failure,” Federal Communications Commission, Remarks before the Associazione Ego and Puntotit Italian Parliament, Rome, Italy, June 28, 2012, <http://www.fcc.gov/document/commr-mcdowells-speech-possible-itu-regulation-internet>.

²⁰³ Ibid.

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companies have resorted to using regulations as a tool to promote their own interests.²⁰⁴

In September 2013, AT&T Senior Executive Vice President James Cicconi called upon the FCC to update its historic mission to reflect the fundamental evolution in communications.²⁰⁵

On December 3, 2013, House Committee on Energy and Commerce Chairman Fred Upton (R-Mich.) announced that the committee would be undertaking a multi-year process to review the regulatory burdens imposed on the telecommunications industry under the Communications Act of 1934, and amendments to the Act, with the intent to revise and update the law and bring it into conformity with twenty-first century innovations. To begin this process, the committee released a white paper outlining issues it plans to address in the coming year, posing questions to stakeholders on the eventual structure of communications law; what provisions of the law should be either retained, adapted or eliminated; whether the jurisdiction of the FCC should be changed; how to build into a new communications environment the flexibility to adapt to a rapidly changing technological environment; and, whether information and telecommunications services should remain separate, and if not how the two services should be rationalized.²⁰⁶

This chapter reviews ongoing reform efforts.

OLD LAWS, NEW TECHNOLOGIES

The Telecommunications Act of 1996 amended the Communications Act of 1934. The 1996 Act was enacted 12 years after the breakup of the Baby Bell companies in order to promote competition in the local exchange carrier (LECs) markets by requiring incumbent local exchange carriers (ILECs) to lease parts of their networks to competitors at cost; provide wholesale discounts to competitors for any service provided by the ILEC; and, charge reciprocal rates in termination of calls to their networks and the networks of

²⁰⁴ Adam Thierer, "FCC Commish Robert McDowell on Regulatory Failure & Regulate My Rival Politics," *The Technology Liberation Front*, June 28, 2012, <http://techliberation.com/2012/06/28/fcc-commish-robert-mcdowell-on-regulatory-failure-regulate-my-rival-politics/>.

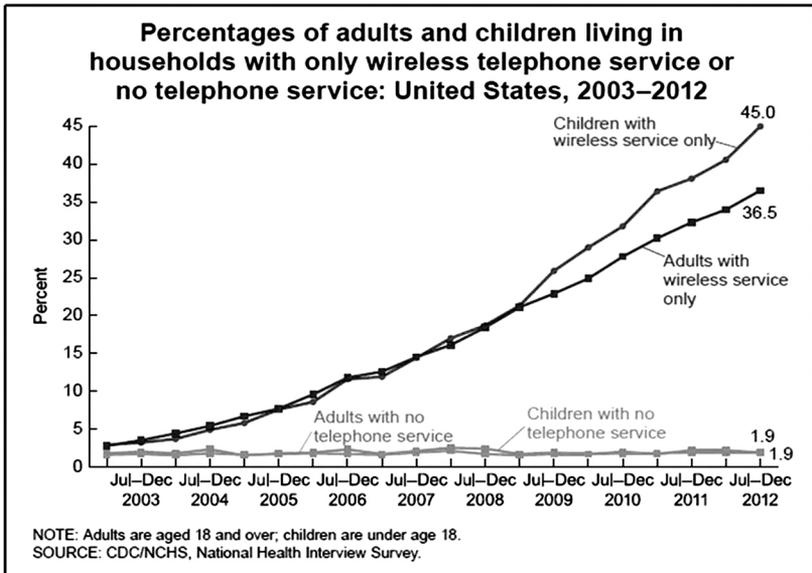
²⁰⁵ John Eggerton, "AT&T's Cicconi to FCC: Change or Be Irrelevant," *Broadcasting and Cable*, September 10, 2013, http://www.broadcastingcable.com/article/495399-AT_T_s_Cicconi_to_FCC_Change_or_Be_Irrelevant.php.

²⁰⁶ "Modernizing the Communications Act," House Committee on Energy and Commerce, January 8, 2014, <http://energycommerce.house.gov/sites/republicans.energycommerce.house.gov/files/analysis/CommActUpdate/20140108WhitePaper.pdf>.

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local competitors.

While the law addressed the state of communications at the time of enactment and included the Internet in broadcasting and spectrum allotments, it did not anticipate the dramatic changes that have occurred in the marketplace over the past 17 years. The convergence of voice, data, and video has created a new ecosystem that existing law is ill-equipped to regulate. Outdated ideas such as retransmission consent, must carry rules, compulsory licensing agreements, and non-duplication schemes must all be reevaluated.



For example, cloud computing has changed how information is stored and shared, and how video viewing in the future will be accomplished. Cable companies and other content providers will soon begin rolling out new platforms that will make streaming video content faster, smarter, easier, and more personalized. Some of these new platforms were on display at the 2013 Cable Show, such as TV Everywhere which allows viewing of cable programming anywhere the subscriber can access a Wi-Fi connection.

In June 2013, the CDC released a report showing the number of households using only wireless telephone services has risen from less than

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5 percent in 2003 to 36.5 percent in 2012.²⁰⁷ This trend reinforces the need to update existing telecommunications law to reflect the current state of the marketplace. Americans are no longer reliant on only one form of communications service; they are using innovative tools and devices that rely on wireless services, broadband Internet, and fiber optic lines.

Sadly, the federal government appears incapable of keeping up with technological changes. This is one of the reasons that reforming laws such as the Telecommunications Act of 1996 and the Cable Act of 1992 should be done in a technology and vendor-neutral manner, with a light touch on regulatory mandates that inhibit free market growth and innovation.

THE TIME IS RIGHT TO UPDATE RETRANSMISSION RULES

In 1950, the cable industry was still in its infancy, serving approximately 14,000 homes in 70 communities.²⁰⁸ Congress passed the Cable Television Consumer Protection and Competition Act of 1992 (Cable Act of 1992) in response to cable television rate increases following deregulation, a lack of competition in the cable marketplace and the concern of broadcasters that their local stations would not be carried by cable companies. This law amended the 1934 Communications Act by prohibiting cable operators and other MVPDs, which now include satellite and fiber optic networks, from rebroadcasting or “retransmitting” commercial television, low power television and radio broadcast signals without first obtaining the originating broadcaster’s permission.

The Cable Act of 1992 provided broadcasters with a choice every three years to either demand that an MVPD carry their local commercial and noncommercial television broadcast signals under “must carry” rules, or negotiate a price with the MVPD to give permission to “retransmit” their signal. If the broadcaster decides that the MVPD must carry its signal, the broadcaster cannot demand compensation from the MVPD for retransmission of the signal. MVPDs are also restricted to dealing with a single local station under “non-duplication” rules, despite the fact that other external markets

²⁰⁷ Stephen J. Blumberg, Ph.D., and Julian V. Luke, “Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, July-December 2012,” Centers for Disease Control, Division of Health Interview Statistics, National Center for Health Statistics, June 2013, <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201306.pdf>.

²⁰⁸ “Evolution of Cable Television,” Federal Communications Commission, <http://www.fcc.gov/encyclopedia/evolution-cable-television>.

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might carry the same programming and are willing to negotiate a lower price.

For example, a cable or satellite distributor serving metropolitan Washington, D.C. must carry WUSA Channel 9, the area's CBS affiliate, and cannot currently negotiate for a lower price with WJZ Channel 13, the local CBS affiliate in nearby Baltimore, Maryland. By inserting "must carry," "retransmission," and "non-duplication" provisions into the law, Congress sought to protect broadcasters with a choice in how their broadcast signals would be carried, and open up the cable marketplace to more competition by placing subscriber rates in non-competitive markets under the authority of either a franchising authority or the FCC and prohibiting exclusive franchises within a local market.

Television has changed vastly since the days analog signals carried only three major networks and one or two other channels over the airwaves. Today, there is a wide range of viewing options available to consumers, ranging from cable and fiber optic networks on the ground, to satellite feeds and online distribution of programming. In the second quarter of 2013, television programming was distributed as follows: wired cable (56.621 million households); satellite (35.243 million households); broadcast only (10.947 million households); and, telephone fiber networks (10.857 million households).²⁰⁹ Broadcasters no longer deal with a single cable monopoly; on the contrary, broadcasters choose among multiple providers ranging from cable to satellite to fiber optic networks. As a result, broadcasters now hold enormous negotiating power under old retransmission consent rules. This re-balancing of power has led to service disruptions and increases in the cost of service for consumers.

Current law does not adequately address the problem of programming blackouts experienced by millions of consumers who have fallen victim to tense negotiations between broadcasters and MVPDs, as broadcasters have used their upper hand to "hold hostage" programs in an effort to force MVPDs to pay exorbitant fees or carry extra channels on basic tiers. As a result, consumers not only sometimes experience a programming blackout until a deal has been reached, but also see an increase in their bills as broadcasters' ransoms are passed off in the form of higher rates. Those who are against ending the retransmission provisions in the Cable Act have indicated that for years MVPDs have attracted subscribers using broadcast programming which, according to the National Association of Broadcasters, receives higher

²⁰⁹ "Viewing on Demand: The Cross-Platform Report," The Nielson Company, September 2013, p. 14, Table 6, <http://www.nielsen.com/us/en/reports/2013/q2-2013-cross-platform-report.html>.

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ratings than other programming offered on pay-TV channels.²¹⁰

In March 2011, the FCC adopted a notice of proposed rulemaking on potential changes to the retransmission consent rules.²¹¹ Specifically, the FCC asked for comment on proposals that would provide more guidance on good faith negotiation requirements, improve notice to consumers of possible service disruptions caused by impasses in negotiations, and eliminate the FCC's network non-duplication and syndicated exclusivity rules.²¹² The proposals would also allow disputing parties to enforce certain exclusive contracted rights to network or syndicated programming through the commission rather than the courts. However, further action on this proposed rulemaking has not yet occurred.

One of the reasons for the FCC's proposed rulemaking was the impact of blackouts that occur during retransmission negotiations. For example, in 2010, viewers lost access to events such as portions of the Oscars and New York Knicks games.²¹³ While the broadcast industry claims that retransmission consent contracts generally span three to five-year periods and are calendar based, not tied to content or programming, it is interesting that these particular negotiations occurred during major television events.

Other examples of retransmission blackouts include the loss of local Fox stations by Midcontinent Communications subscribers in Minnesota and North Dakota in April 2012.²¹⁴ Subscribers in North Dakota were unable to access their local CBS and NBC programming when disagreements occurred during negotiations in May 2012 between Dish Network and Hoak Media Corporation.²¹⁵

During a July 24, 2012 hearing before the Senate Commerce, Science and Transportation Committee, Time Warner Cable Executive Vice President

²¹⁰ "Protect TV Viewers and Allow Broadcasters to Continue Negotiating in the Free Market," National Association of Broadcasters, May 2013, <http://www.nab.org/documents/advocacy/retransmissionConsent/RetransIssueSheet.pdf>.

²¹¹ Amendment of the Commission's Rules Related to Retransmission Consent, Federal Communications Commission, 10-70, Notice of Proposed Rulemaking, March 2011, <http://www.fcc.gov/rulemaking/10-71>.

²¹² Media Bureau Announces Notice of Proposed Rulemaking in the Matter of Amendment of the Commission's Rules Related to Retransmission Consent, Published in the Federal Register March 28, 2011, Federal Communications Commission, March 28, 2011, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-11-564A1.pdf.

²¹³ "Television Blackouts in U.S. Reach Decade-High Over Fee Fights," *Newsmax*, October 11, 2010, <http://www.newsmax.com/SciTech/tvblackoutsdecadeshigh/2010/10/11/id/373202>.

²¹⁴ Kenneth Artz, "Retransmission Dispute Results in ND, MN Blackouts," *Heartland*, viewed September 13, 2013, <http://news.heartland.org/newspaper-article/retransmission-dispute-results-nd-mn-blackouts>.

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and Chief Video and Content Officer Melinda Witmer testified that the number of blackouts that have occurred during retransmission negotiations had risen from 12 in 2010 to 51 in 2011.²¹⁶ By the end of 2012, subscribers experienced 91 separate programming blackouts due to disagreements over retransmission consent.²¹⁷

The summer 2013 retransmission battle between CBS and Time Warner Cable was one of the most publicized disputes since the passage of the Cable Act of 1992. CBS even disrupted online broadcaster content for Time Warner Cable subscribers during the breakdown in negotiations between the two parties. The negotiations were finally completed on September 3, 2013. As noted by *Variety's* TV columnist Brian Lowry, "...don't be surprised if this latest let's-see-who-blinks-first-skirmish is just the first of several bigger battles to come, leaving consumers caught in the middle. In fact, it might just be a preview of coming attractions."²¹⁸

Broadcasters have argued that the free market for broadcast television programming would be threatened if retransmission was ended. However, it appears from past negotiation history that the existing system is failing to protect consumers. In retransmission consent negotiations, consumers lose viewing time and pay increased costs.

Consumers should not have to be victims of a system that allows broadcasters to pit one MVPD against another, threatening to withhold consent for its signal if agreements are not reached. Old government policies have inhibited the free market by dictating the rules which govern these negotiations and no longer reflect the vibrant content and cable provider marketplace. Today's competitive video distributor marketplace offers consumers choices among fiber, cable, and satellite. Yet the rules that govern broadcast signal carriage still operate as if working within a monopolistic single-provider structure.

The House Energy and Commerce Committee held hearings on

²¹⁵ "Two Local Dish Network Channels Blacked Out, Negotiations Continue," *Grand Forks Herald*, June 13, 2012, https://secure.forumcomm.com/?publisher_ID=40&article_id=238615&CFID=535543954&CFTOKEN=36766645.

²¹⁶ Melinda Witmer, "The Cable Act at 20," Testimony before the Committee on Commerce, Science and Transportation, United States Senate, July 24, 2012, http://www.commerce.senate.gov/public/?a=Files.Serve&File_id=bd33c7e9-bd4d-43c0-93d5-091e1fd3328b.

²¹⁷ Michael Calabrese, "The CBS-Time Warner Cable Blackout Battle: Time for Congress to Rescue the Hostages," *Slate*, August 9, 2013, http://www.slate.com/blogs/future_tense/2013/08/09/cbs_time_warner_cable_blackout_battle_congress_should_rescue_hostages.html.

²¹⁸ Brian Lowry, "CBS vs. Time Warner Cable, Big Companies, Bigger Battles," *Variety*, August 2, 2013, <http://variety.com/2013/voices/columns/cbs-vs-time-warner-cable-big-companies-bigger-battles-1200573148/>.

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February 13, 2013, June 12, 2013, and September 11, 2013 on the Satellite Television Extension and Localism Act (STELA). Authorization for STELA expires on December 31, 2014. STELA provides for a compulsory license that allows satellite operators to import distant network-affiliate TV station signals into a market without negotiating for that retransmission. The debate over STELA's reauthorization has opened an opportunity to Congress to reevaluate retransmission rules.

As part of the hearing process, members and witnesses have begun evaluating retransmission and other reforms to the video licensing and copyright provisions of the Cable Act of 1992. In September 2013, Rep. Anna Eshoo (D-Calif.) introduced draft legislation to reform retransmission consent rules and prohibit blackouts when retransmission disputes occur. However, the provisions in the draft legislation would increase government interference into the video marketplace, further inhibiting a free-market approach to negotiations that are already saddled with existing unbalanced regulatory burdens.

On December 13, 2013, Reps. Steve Scalise (R-La.) and Cory Gardner (R-Colo.) introduced H.R. 3720, the Next Generation Television Marketplace Act. This comprehensive reform legislation will repeal provisions of the Cable Act of 1992 that require MVPDs to set aside portions of their channel capacity for mandatory carriage of local commercial broadcast stations, and directed the FCC to repeal network non-duplication, along with other burdensome regulations including syndicated exclusivity and sports blackout rules.

The bill also repeals media ownership caps, which limit the number of broadcast stations a single company can own in a given media market, and lifted the ban on broadcasters owning a newspaper in the same market. Additionally, the legislation eliminates the compulsory copyright license, in which the government dictates the royalties MVPDs pay to broadcasters for their content instead of allowing these royalties to be determined by a free market.

The existing television regulatory regime inhibits the free market, reduces competition by undercutting smaller providers' ability to compete on price, increases costs for consumers, and frustrates millions of Americans by shutting off popular programming at peak viewing periods.

Government rules and regulations should drive businesses into the twenty-first century, not hold them back. In retransmission consent negotiations, consumers lose viewing time and pay increased costs. It is time

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to repeal antiquated regulatory schemes, including retransmission consent, and provide a new regulatory structure that reflects the current competitive marketplace.

THE IP TRANSITION: THE NEXT STEP IN COMMUNICATIONS TECHNOLOGY

In December 2009, the FCC began the process of evaluating the transition from a circuit-switched communications network to an all-Internet Protocol (IP) network.²¹⁹ This technology opens the doorway to new methods of communications using the infrastructure created for the Internet.

On November 7, 2012, AT&T requested that the FCC initiate IP transition testing for those who remain on copper wireline plain old telephone service (POTS) and have yet to adopt new technologies such as fiber or cable.²²⁰ In its petition, AT&T asked the FCC to keep these tests free of legacy regulations that are currently imposed on ILECs and to declare that ILECs would no longer be the dominant provider for POTS.²²¹ This request for a study to evaluate transitioning subscribers of POTS to the all-IP system comes as 36.5 percent of U.S. homes use wireless service only.²²²

A January 8, 2013 article in *Ars Technica* noted that copper-wire POTS connections will begin to fade from existence by 2018. AT&T Vice President for Federal Regulatory Division Hank Hultquist explained that the telephone networks the U.S. has relied upon for service are rapidly becoming obsolete and difficult to repair due to a lack of spare parts. Because of the number of different services offered by POTS systems, transitioning to an

²¹⁹ Public Notice: Comment Sought on Transition from Circuit-Switched Networks to All-IP Network, National Broadband Plan Public Notice #25, Pleading Cycle Established, GN Docket Nos. 09-47, 09-51, 09-137, Federal Communications Commission, December 1, 2009, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-09-2517A1.pdf.

²²⁰ Bob Quinn, "Beta Testing the Final Transition to IP Broadband," AT&T Public Policy Blog, January 28, 2013, <http://www.attpublicpolicy.com/broadband-policy/beta-testing-the-final-transition-to-ip-broadband/>.

²²¹ Elise Ackerman, "FCC Calls for More Feedback On Switch To New, National IP-Based Phone Network; Punts on AT&T Request," *Forbes*, May 12, 2013, <http://www.forbes.com/sites/eliseackerman/2013/05/12/fcc-calls-for-more-feedback-on-switch-to-new-national-ip-based-phone-network-punts-on-att-request/>.

²²² Stephen J. Blumberg and Julian V. Luke, "Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, January - June 2012," Division of Health Interview Statistics, National Center for Health Statistics, Centers for Disease Control, December 2012, <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201212.pdf>.

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all-IP network will be challenging. Merging different services configurations, such as voicemail with or without caller ID and various kinds of dialing capabilities, creates complications in moving from existing legacy POTS systems to the new all-IP networks.²²³

On February 25, 2013, the Phoenix Center for Advanced Legal and Economic Public Policy Studies released its analysis of AT&T's petition for wire center trials.²²⁴ Citing the benefits of real world testing of the transition to an all-IP network, the report stated that while legacy communications rules remain in place, the testing itself will be conducted with a "regulatory blank slate" on which the FCC can build its new model and determine which existing legacy regulations remain appropriate once the all-IP transition is completed. The report also highlighted the economic benefits for companies participating in the testing to be on their best behavior, thereby setting a precedent for reasonable behavior within the new all-IP regulatory structure. Finally, the analysis offered that the FCC would continue to have its enforcement charge within the new all-IP regime consistent with its existing regulatory mission.²²⁵

On October 8, 2013, the Internet Innovation Alliance released a report on the all-IP transition. The report stated that legacy switched communications traffic amounts to less than 1 percent of IP traffic today, and the new platforms that transport IP, including fiber, cable, satellite and mobile broadband, have provided consumers with multiple choices in an increasingly competitive marketplace. By 2017, use of ILEC-maintained copper-wire POTS systems will diminish to less than a fraction of a percent. Those platforms (including Internet, cable, and wireless) that are the least regulated have been the most successful, while the most regulated platforms, such as ILECs, have been forced to waste capital and operating funds maintaining obsolete copper-wire POTS connections.²²⁶

Between 2006 and 2011, ILECs invested \$81 billion on legacy copper-wire POTS and \$73 billion on modern broadband infrastructure.

²²³ Jon Brodtkin, "The Telephone Network Is Obsolete: Get Ready for the all-IP Telco," *Ars Technica*, January 7, 2013, <http://arstechnica.com/information-technology/2013/01/the-telephone-network-is-obsolete-get-ready-for-the-all-ip-telco/>.

²²⁴ George S. Ford, Ph.D., Lawrence J. Spiwak, Esq., "Searching for a New Regulatory Paradigm: A Comment on AT&T's Petition for Wire Center Trials," Phoenix Center for Advanced Legal & Economic Public Policy Studies, February 25, 2013, <http://www.phoenix-center.org/perspectives/Perspective13-01Final.pdf>.

²²⁵ *Ibid.*

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ILECs are losing circuit-switched voice and low-speed DSL subscribers. Yet, when they have deployed broadband fiber infrastructure, they gained Internet access and video subscribers. However, the ILECs remain encumbered by a regulatory framework that lags behind marketplace realities. For example, ILECs must ask the FCC for permission to stop using obsolete technologies such as POTS in a given geographic area.²²⁷

On May 13, 2013, the FCC's Technology Transitions Policy Task Force,²²⁸ which was created to address issues surrounding IP interconnection, network resiliency, business broadband competition and consumer protection for voice services, requested public comment on potential trials for new technologies, including all-IP networks.²²⁹ The FCC also asked for more details from stakeholders on AT&T's proposed geographic trials.

The all-IP trials create an opportunity to review outdated rules governing the communications industry and permit changes to the existing regulatory structure to meet the needs of the modern innovative paradigm. However, the FCC should move cautiously in promulgating rules for the all-IP networks to ensure that they can move forward with limited government interference.

PROCESS IMPROVEMENT AT THE FEDERAL COMMUNICATIONS COMMISSION

Free State Foundation President Randolph J. May wrote in his book, *Communications Law and Policy in the Digital Age: The Next Five Years*, that “marketplace and technological changes that have occurred since the last major revision of the Communications Act in 1996 have rendered existing law and policy woefully outdated, if not obsolete.”²³⁰ Citing industry changes such as the switch from analog to digital services and equipment,

²²⁶ Anna-Maria Kovacs, Ph.D., CFA, “Telecommunications Competition: The Infrastructure-Investment Race,” Internet Innovation Alliance, October 8, 2013, http://internetinnovation.org/images/misc_content/study-telecommunications-competition-09072013.pdf.

²²⁷ Ibid.

²²⁸ Sean Buckley, “FCC Unveils Technology Transition Task Force,” *Fierce Telecom*, December 11, 2012, <http://www.fiercetelecom.com/story/fcc-unveils-technology-transition-task-force/2012-12-11>.

²²⁹ Technology Transitions Policy Task Force Seeks Comment on Potential Trials, GN Docket No. 13-5, Federal Communications Commission Public Notice, May 13, 2013, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-13-1016A1.pdf.

²³⁰ Randolph J. May, *Communications Law and Policy in the Digital Age: The Next Five Years*, Carolina Academic Press, 2012, p. xiv.

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from narrowband to broadband network facilities, and from monopolistic to a generally competitive marketplace environment, May argued that these fundamental changes “call for a radical new communications law.”²³¹

On July 11, 2013, the House Energy and Commerce Subcommittee on Communications and Technology held a hearing on the FCC Process Reform Act and the FCC Consolidated Reporting Act.²³² During the hearing, panelists discussed two draft bills similar to bills that were passed on a bipartisan basis by the House in the 112th Congress but died in the Senate. Former FCC Commissioner Robert McDowell told the subcommittee that all of Title 47, which regulates the communications industry, should be reformed.²³³ Stating that “a comprehensive rewrite has not occurred since 1996, and even that left in place legacy ‘stovepipes’ that regulate technologies rather than market conditions,” McDowell called for “a fundamental rewrite of the nation’s laws regulating the information, communications and technology sector.”²³⁴

In his testimony before the subcommittee, May reiterated the need for FCC reform, stating that “the Federal Communications Commission needs to change in a way that, in today’s generally dynamic, competitive communications marketplace environment, it will be less prone to continue on its course of too often defaulting to regulatory solutions, even when there is no clear and convincing evidence of market failure or consumer harm.”²³⁵

On September 9, 2013, H.R. 2844, the FCC Consolidated Reporting Act of 2013, passed the House by a vote of 415-0. The bill consolidates the FCC’s reporting obligations in order to improve congressional oversight and reduce the reporting burdens on the commission. The new consolidated

²³¹ Ibid.

²³² “Improving FCC Process,” Hearing before the House Energy and Commerce Subcommittee on Communications and Technology, July 11, 2013, <http://energycommerce.house.gov/hearing/improving-fcc-process>.

²³³ “Statement of The Hon. Robert M. McDowell, Visiting Fellow, Hudson Institute, Center for the Economics of the Internet, ‘Improving FCC Process,’” Testimony before the House Committee on Energy and Commerce, Subcommittee on Communications and Technology, July 11, 2013, <http://docs.house.gov/meetings/IF/IF16/20130711/101107/HHRG-113-IF16-Wstate-McDowellR-20130711.pdf>.

²³⁴ Ibid.

²³⁵ “Testimony of Randolph J. May, President, The Free State Foundation, Hearing on ‘Improving FCC Process,’” Testimony before the House Energy and Commerce Subcommittee on Communications and Technology, July 11, 2013, <http://docs.house.gov/meetings/IF/IF16/20130711/101107/HHRG-113-IF16-Wstate-MayR-20130711.pdf>.

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report, known as the “Communications Marketplace Report,” will detail the state of competition in the communications marketplace; review the deployment of communications capabilities (formerly the Section 706 Report); explain whether laws, regulations, or regulatory practices pose a barrier to competitive entry into the communications marketplace or to the competitive expansion of existing providers; provide the FCC’s agenda for the next two-year period; and describe the actions the FCC has taken in pursuit of that agenda.²³⁶ The bill had not been considered by the Senate as of January 10, 2014.

On December 13, 2013, H.R. 3675, the Federal Communications Process Reform Act of 2013, was ordered reported by the House Energy and Commerce Committee for consideration by the full House. This legislation would require the FCC to identify a market failure or consumer harm before proposing new rules; conduct a cost-benefit analysis before adopting major rules that will cost more than \$100 million and establish performance measures to evaluate the effectiveness of these major rules; publish the full text of proposed rules that are under consideration; provide adequate time for the public to provide comments; and, set specific schedules to issue decisions and report back to Congress. The legislation also contains a requirement that sets in place a “shot-clock” that would force the FCC to make timelier decisions on licensing and authorizations of transfer agreements and prohibit the FCC from conditioning a merger on a party’s acceptance of certain policies or rules unrelated to the specifics of a transaction.

Continuing to apply twentieth century rules and regulations to twenty-first century disruptive technologies and services will stymie innovation in a competitive marketplace. Passage of H.R. 2844 and moving H.R. 3675 forward are both positive developments, but a comprehensive review of Title 47 and how it applies to today’s changing technology is also warranted.

²³⁶ H.R. 2844, to amend the Communications Act of 1934 to consolidate the reporting obligations of the Federal Communications Commission in order to improve congressional oversight and reduce reporting burdens, An Act, passed by the House of Representatives on September 9, 2013, <http://beta.congress.gov/113/bills/hr2844/BILLS-113hr2844rfs.pdf>.

CONCLUSION

The telecommunications industry is one of the most dynamic, innovative sectors of the U.S. economy, providing \$347 billion annually to the GDP and two million direct and indirect jobs. Common carrier regulations instituted for the railroad industry in the 1880s and the regulatory framework devised by the Communications Act of 1934, the Cable Act of 1992, and the Telecommunications Act of 1996 certainly do not apply to the dynamic communications industry of today.

Taxpayers are overburdened by taxes on communications services that can reach as much as 24 percent of a monthly telephone, cable or wireless bill. On the other hand, fortunately, since 1998 there has been a moratorium on taxes on Internet access and discriminatory or duplicative taxes on Internet services. Prior to the November 1, 2014 expiration of the Internet tax moratorium, the ban should be made permanent, and other communications taxes, such as the Universal Service Fund fee, should either be eliminated or substantially reduced. Such a decision would allow the telecommunications industry to truly thrive and grow.

The private sector has made large capital investments in building the network infrastructure upon which the Internet travels. Governments should curb the desire to invest scarce taxpayer resources to overbuild broadband networks as public utilities in direct competition with private industry.

Selling federal spectrum is an opportunity for the federal government to cash in on existing resources as well as help first responders. However, the federal government should avoid picking winners and losers in the auction process and allow the free-market system to work.

À la carte pricing for television viewing would permit consumers to select their programming from a menu and only pay for the individual channels they want to receive. However, much like choosing each individual component of a dinner as a side order, thereby increasing the ultimate cost of dining out, à la carte programming would increase costs to both video providers and consumers.

Internet governance is coming under increased scrutiny both in the U.S. and abroad. The current rules should be maintained and not turned over to a new regime that could undermine the Internet.

Following the January 14, 2014 D.C. Circuit Court's decision on the FCC's net neutrality rules, all of the major ISPs have pledged to continue to keep the Internet open. In the interim, both proponents and opponents of these onerous rules should be discussing what the next steps will be in determining how content will be accessed on the Internet.

TELECOM UNPLUGGED: USHERING IN A NEW DIGITAL ERA

The communications industry is in a constant, rapidly evolving, disruptive state, yet the rules and regulations governing this industry have failed to keep pace. It is time to move forward with commonsense reform measures to ensure that this vital industry continues to grow and innovate.

ABOUT THE AUTHORS



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During his 28 years with CAGW, Mr. Schatz has helped make CAGW a “leading government watchdog on fiscally conservative issues, like taxes and earmarks,” according to *National Journal*. CAGW was cited by The Hill for its leading role in successfully pushing for the congressional earmark moratorium, which was identified as one of the “top 10 lobbying victories” of 2010.

His previous books include “End the Income Tax,” co-authored with Jack Anderson in 1997.

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